Usenet Newsgroup Archive: rec.radio.amateur.space

1997

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 1997-01-01 through 1997-12-31

Source text: rec.radio.amateur.space.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 3,148

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Mode S info

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bbf79a$6d63c560$21bc92ce@bjarts.uslink.net>
Source record: 20455

I'm looking at buying the Bob Myers mode S system for P3D. It has a nice dish and downconverter for around $400(U.S). I am wondering if anyone has tried one of these systems or looked at it. I seems like just what I want to P3D, but is it a good system. Let me know via e-mail or on the amsat-bb. Others might want to know the same thing, 73 and Happy New Year de Bj.
BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2. Undeliverable mail

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: mailer-daemon@n3baf.COM
Message-ID: <290958363331120544@n3baf.com>
Source record: 20456

```
This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id ja000217 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
23:31:59 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id TAA10994 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 19:52:07 -0800
(PST)
Received: by mail.ucsd.edu; id SAA16302
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 18:57:27 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id SAA16275
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 18:57:22 -0800 (PST)
Message-Id: <199701010257.SAA16275@mail.ucsd.edu>
Date: Tue, 31 Dec 96 18:57:19 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #464
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 464

Today's Topics:
ARLK097 Keplerian data
frq reverse
Happy New Year
ICOM CT-17 (CI-V) Interface programs out there?
New Mir frequencies
NORAD Two-Line Orbital Element Set Format
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
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```

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 31 Dec 1996 13:21:31 -0500
From: w1aw@arrl.org
Subject: ARLK097 Keplerian data

SB KEP @ ARL $ARLK097
ARLK097 Keplerian data

ZCZC SK97
QST de W1AW
Keplerian Bulletin 97 ARLK097

Date: (null)
From: (null)
Subject: frq reverse

dhend@cyberportal.net
http://www.cyberportal.net/dhend/dave1.html

Date: (null)
From: (null)
Subject: Happy New Year

Happy New Year and successfull 1997 to all people
around the World.
73 de Mir crew Valeri Alexander John
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
Stat : PR
Posted : 12/30/96 21:31
To : ALL

Date: Tue, 31 Dec 1996 18:37:30 GMT
From: Tom Valenti <valenti@eskimo.com>
Subject: ICOM CT-17 (CI-V) Interface programs out there?

Happy New Year from Seattle,

I am looking for bare bones, or better, shareware programs used by us to
tie our rigs to the PC. My shack will be automating an IC-R7000, IC-735,
IC-275H, and a IC-475H. If you have a program (BOTH binary and source
code) I would love to download it. Just let me know where to get it.
Anybody really close by, I'll buy lunch for the first few! I work near
Boeing Field. 73

--
Tom "Wunski" Valenti
KB7RSK
http://www.eskimo.com/~valenti/

Date: Tue, 31 Dec 1996 20:28:02 GMT
From: dhend@cyberportal.net (Dave Hendrick)
Subject: New Mir frequencies

There is a reversal of the freqs on mir these messages were on the PMS
today, it implies that packet will now be duplex.
r 349
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
Stat : PR
Posted : 12/30/96 21:36
To : ALL

Date: 31 Dec 1996 21:05:12 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set Format

As a service to the satellite user community, the following description of the
NORAD two-line orbital element set format is uploaded to sci.space.news and
rec.radio.amateur.space on a monthly basis. The most current orbital elements
from the NORAD two-line element sets are carried on the *NEW* Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. In addition, element sets (updated daily) and
some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==

Data for each satellite consists of three lines in the following format:

AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNNN

Line 0 is a twenty-two-character name (this change is being made to be
consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical
to that used by NORAD and NASA. The format description is:

Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 31 Dec 96 17:14:25 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id oa000196 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
12:14:09 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id HAA02864 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 07:35:13 -0800
(PST)
Received: by mail.ucsd.edu; id HAA13846
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 07:23:21 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id HAA13818
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 07:23:15 -0800 (PST)
Message-Id: <199612311523.HAA13818@mail.ucsd.edu>
Date: Tue, 31 Dec 96 07:23:13 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #463
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 463

Today's Topics:
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 31 Dec 96 15:21:39 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com

(NTMail 3.02.12) with ESMTP id ga000188 for <ham.space@n3baf.com>; Tue, 31 Dec 1996 10:21:05 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with ESMTP id EAA28620 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 04:55:44 -0800 (PST)
Received: by mail.ucsd.edu; id EAA25520
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 04:13:31 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id EAA25498
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 04:13:26 -0800 (PST)
Message-Id: <199612311213.EAA25498@mail.ucsd.edu>
Date: Tue, 31 Dec 96 04:13:25 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #462
To: Ham-Space@UCSD.EDU
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 462

Today's Topics:
Kenwood TM-401B below 440 MHz?
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
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Date: 31 Dec 1996 11:13:41 GMT
From: cathryn@junglevision.junglevision.com (cathryn)
Subject: Kenwood TM-401B below 440 MHz?

In article <01bbf548$3ad971c0$a01865ce@SNeedha.3lefties.com>, "Earl Needham" wrote:
>
> Having recently discovered FM activity through sattelites, I'd like to try
>my hand at getting through the FM repeater on the Mir space station.
>Unfortunately, my UHF rig (a Kenwood TM-401B) only covers 440-450 MHz. Is
>there a mod available to allow this rig to operate below 440 MHz?

Yeah, I have the same problem with my IC-T7a. I can receive below 440, but
there's no way to transmit below 440Mhz. Arrgh.

Date: 31 Dec 96 12:11:49 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id fa000187 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
07:10:48 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id CAA24878 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 02:03:08 -0800
(PST)
Received: by mail.ucsd.edu; id BAA12481
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 01:42:21 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id BAA12459
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 01:42:14 -0800 (PST)
Message-Id: <199612310942.BAA12459@mail.ucsd.edu>
Date: Tue, 31 Dec 96 01:42:12 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #461
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 461

Today's Topics:
Please Read!
Undeliverable mail

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Date: Mon, 30 Dec 1996 21:01:00 (PST)
From: george.tamayo@infosoftpub.com (George Tamayo)
Subject: Please Read!

Fellow Amateurs: Please read the first two paragraphs!

CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to ALL in comp.bbs.misc:

Boardwatch may have abandoned the BBS sysop, but TeleGrafix is still standing strong with them. However, we think that BBS systems must become Internet-connected if they are to survive in a Webbed world.

First, we need to quit calling these online systems by the moniker "BBS." The term has come to reflect something on the order of ham radio -- low-rent communications run by amateurs. That may accurately reflect some BBS systems, but we've found that many sysops run very professional online businesses.

Second, we need to start emphasizing the Power of Telnet and talk about Telnet Sites, not BBS systems. A telnettable BBS or legacy system can do many things the Web can't. Most of the computer industry and public has been Web-washed (brainwashed) by all the press hype. They think the Web is all there is to the Internet/online experience. Just a couple of days ago, I was talking to the Internet reporter for one of America's most prestigious newspapers. He had never even heard of Telnet, didn't have a clue what it was -- and his news reports influence literally millions of Americans. BBS sysops and BBS system manufacturers need to refocus their efforts, and begin producing tools and content that take advantage of the Power of Telnet.

Third, Telnet Site operators (such as BBS sysops) must professionalize the look and feel of their systems. Most sysops make little investment in quality graphics for their systems. In a glitzy Web world, it is little wonder that the public is turned off by ANSI BBS systems no matter how if the content on them is of high quality. We constantly hear BBS sysops complain about having to pay what are very modest sums of money for RIPscrip graphics -- but the people running Web sites don't think twice about investing thousands of dollars for a fabulous look.

Despite all the flack we take from BBS sysops, we continue to support their efforts -- and we always will. But BBS sysops have to change with the times, and they have to be willing to invest to upgrade their systems to compete with (or complement) the Web.

On Christmas, TeleGrafix released the first multimedia Telnet browsers. RIPtel Visual Telnet is available now from our Web site at www.telegrafix.com. This is a huge step forward for the Internet, and it represents a salvation for BBS sysops by placing Telnet graphically on a higher level than the Web.

The serious professional operators will get on board the Visual Telnet
train, and they will live to see a brighter day.

Pat Clawson
TeleGrafix Communications Inc.
Winchester, VA

Web: www.telegrafix.com

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 A flashlight is a case in which to carry dead batteries.

Date: 31 Dec 96 09:40:50 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
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----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id aa000182 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
04:37:47 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id AAA23003 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 00:04:25 -0800
(PST)
Received: by mail.ucsd.edu; id XAA28829
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 23:44:13 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id XAA28795
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 23:44:06 -0800 (PST)
Message-Id: <199612310744.XAA28795@mail.ucsd.edu>
Date: Mon, 30 Dec 96 23:44:04 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #460
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 460

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Please Read!
Undeliverable mail (2 msgs)

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Pat Clawson
TeleGrafix Communications Inc.
Winchester, VA

Web: www.telegrafix.com

George M. Tamayo - WD6EJO
South Mountain Online
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Date: 30 Dec 96 14:05:29 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id ma000168 for <ham.space@n3baf.com>; Mon, 30 Dec 1996
09:04:46 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id EAA10137 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 04:38:29 -0800
(PST)
Received: by mail.ucsd.edu; id EAA03627
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 04:30:53 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id EAA03609
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 04:30:49 -0800 (PST)
Message-Id: <199612301230.EAA03609@mail.ucsd.edu>

Date: Mon, 30 Dec 96 04:30:47 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #457
To: Ham-Space@UCSD.EDU
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 457

Today's Topics:
comunicato stampa
HAM TOOLKIT CD ROM..AWSOME!!!!
LOW LOW PRICE HAM RADIO
MIR
WinTrak Pro Release

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 30 Dec 96 10:24:20 GMT
From: mose@tv.shineline.IT (Mose' Battocchio)
Subject: comunicato stampa

<encoded_portion_removed>
aW9uZWQgcXVhbGl0aWVzIHJlbmRlciBpdCBoaWdobHk=

Date: Sun, 29 Dec 1996 14:36:53 GMT
From: aidan@ThePentagon.com
Subject: HAM TOOLKIT CD ROM..AWSOME!!!!

Check out our Awsome CD ROM.."HAM TOOL KIT"..Its jam packed with over
600MEGS of Amateur Radio Related Software..its all here on one
disk..buy no other !!!.

Surf to us at http://sphynx.com/murphy

Owned by Hams..for Hams!!!
M U R P H Y E L E C T R O N I C S
GSM Mobile Phones & Accessories. Satellite TV and Decoding Systems
CD Rom Multimedia Computer Accessories
http://sphynx.com/murphy Email: murphy@sphynx.com

Why not send us an SMS to our GSM phone..Simply surf to
http://home.sn.no/~ahaltbak/engsms.htm and type in the number
+35387527182, write your message and fill in your Email address.all for FREE !!!

Date: 29 Dec 1996 18:42:49 GMT
From: hiway@delta1.deltanet.com ()
Subject: LOW LOW PRICE HAM RADIO

LOW LOW PRICE -- HAM RADIO STUFFS ON SALE!!!!!!!!!!

Please contact at 818-454-3333 10:00am to 4:00pm western time Mon
through Fri or e-mail hiway@pacificnet.net

Totally brand new:

1. c168a (VHF) $188.33 unit: 3 *full pack*
2. c528a (VHF & UHF) $236.25 unit: 5 *full pack*

3. c558a (VHF & UHF) $320.63 unit: 10 *full pack*
4. c5608da (VHF & UHF) $550.00 unit: 4 full *pack*

5. c5718da (VHF & UHF) $599.99 unit: 2

6. cbt160 battery case $2.50 unit: 8
telephone interconnects

1. cs-800 $169.50 unit: 2

2. cs-900 $169.50 unit: 4

antennas for base station

1. bsa 150 144mhz to 174mhz 2.5db $29.00 unit: 5

2. bsa 440 440mhz to 460mhz 4.5db $29.00 unit: 5

antennas for mobile

kg 2/70 144 - 148 mhz & 442 - 448 mhz 2.4db $33.96 unit: 3

charger

csa181a $58.50 unit: 1

Date: Sun, 29 Dec 1996 18:07:37 GMT
From: dwittich@concentric.net (Doug Wittich)
Subject: MIR

>Well Amsat Journal is RIGHT but the MIR station decided
>after the fact to change.
>
>We have two large repeaters in Dallas on 145.190 and 145.210
>and that makes it a problem to catch the voice downlink.

And with nationwide APRS activity on 145.79, that's a problem for
many, as well. Folks in Indianapolis want APRS to move from it's
coordinated frequency. Seems like MIR could have researched a bit
and tried to coordinate before they moved.

73

Doug

Date: 29 Dec 1996 23:37:56 GMT
From: "Paul E. Traufler" <wintrak@traveller.com>
Subject: WinTrak Pro Release

WinTrak Pro New Release!

WinTrak Pro Version 4.5 has added and improved many areas in the program.
The Rendered views have been improved along with several new views
available also. This is just a small list of the many improvements made to
the program. Remember this program is a full 32-bit version, do not accept
any substitutions! Do not let those other programs fool you with the old,
"It works under Win95", but in reality it is a Windows 3.1 16-bit program.
Its your money, demand the best!

New Items:

Visible now satellites can be any of the 4 satellite groups.
Satellite elements statistics, such as oldest, newest and average age of
elements.
Zoom in on the Render views.
Added plot the next 2 passes option to render views.
Automatic LF to CR-LF text file detection and correction. (UNIX to DOS
Text conversion)
Mercator map added to the Rendered maps options.
Added Multi-Satellite 3D and Mercator maps Rendered views.
Added satellite labels to Rendered views.
Added option to set Sun terminator on the Render views.
Added satellite Rise/Set alarms, can play user recorded Wave files or
provided Wave files.
Greatly improved help file with printed manual options included in help
file.
Lowered the minimum satellite altitude to 90 km from the past 160 km.
This version works with Windows NT 4.0 now also.

--
WinTrak Pro
Satellite Tracking Program For Win95/NT

http://www.hsv.tis.net/~wintrak
wintrak@traveller.com

End of Ham-Space Digest V96 #457
****

Date: 31 Dec 96 07:43:21 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id za000181 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
02:42:35 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id VAA07983 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 21:33:13 -0800
(PST)
Received: by mail.ucsd.edu; id VAA10772
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 21:12:41 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id VAA10732
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 21:12:36 -0800 (PST)
Message-Id: <199612310512.VAA10732@mail.ucsd.edu>
Date: Mon, 30 Dec 96 21:12:33 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #459
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 459

Today's Topics:
mir comms problems
Undeliverable mail

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policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 31 Dec 1996 02:18:00 GMT
From: perkiert@nildram.co.uk (Paul Erkiert)
Subject: mir comms problems

I see on Hearsat mail list that there have been problems on the mir
communications, Has that effected Amateur Radio activities I wonder?

Date: 31 Dec 96 01:20:02 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id sa000174 for <ham.space@n3baf.com>; Mon, 30 Dec 1996
20:19:34 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id QAA12915 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 16:22:24 -0800
(PST)
Received: by mail.ucsd.edu; id PAA00997
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 15:52:27 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id PAA00961
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 15:52:23 -0800 (PST)
Message-Id: <199612302352.PAA00961@mail.ucsd.edu>
Date: Mon, 30 Dec 96 15:52:19 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #458
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 458

Today's Topics:
MIR
MIR info..

new mir freq for 1997
NORAD Two-Line Orbital Element Sets (TLE922)
Total Newbie Looking for help

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
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Date: Mon, 30 Dec 1996 11:50:47 GMT
From: dhend@cyberportal.net (Dave Hendrick)
Subject: MIR

On Sun, 29 Dec 1996 18:07:37 GMT, dwittich@concentric.net (Doug
Wittich) wrote:

>>Well Amsat Journal is RIGHT but the MIR station decided
>>after the fact to change.
>>
>>We have two large repeaters in Dallas on 145.190 and 145.210
>>and that makes it a problem to catch the voice downlink.
>
>And with nationwide APRS activity on 145.79, that's a problem for
>many, as well. Folks in Indianapolis want APRS to move from it's
>coordinated frequency. Seems like MIR could have researched a bit
>and tried to coordinate before they moved.
>
>
>73
>
>
>Doug
The "players" ie Dave Larson N6JLH alias N6CO alias K6MIR and Miles
Mann WF1F were told well in advance that this was going to be a
problem with not only APRS, but also the Repeaters, they in turn I
would assume notified their contacts at AMSAT and ARRL and NASA and
SOUP, at any rate G3BGM also was told that especially here in the
states that pair would be a problem, and it was taken to the European
Amateur radio conference where the frequencies were decided upon. I
realized long ago that the doppler shift would bring it into
interference with both, and it does.. there is little hope. there is a
possibility they may try another pair, but slim. 73 DAVE
dhend@cyberportal.net
http://www.cyberportal.net/dhend/dave1.html

Date: 30 Dec 1996 18:21:52 GMT
From: Jeff Griffin <griffinj@admin.tc.faa.gov>
Subject: MIR info..

Dave, try 145.200 + 600 voice, 145.800 simplex paket,
437950 - 2200 pl 141.3 repeater, and 437.925 for a recorded
greeting from Mir. Good luck, and have fun.
Jeff kb2wqm

Date: Mon, 30 Dec 1996 16:46:00 +0000
From: jim ryan <sigma4@iol.ie>
Subject: new mir freq for 1997

Hello all ,
Just had a nice short contact with John KC5TZQ at 16:07 30-12-96
. It must be said that John is a very good operator as he worked several
stations over Europe , He also informed us that as of the first of
January 1997 they will change freq on 2meters as follows .

mir tx 145.800
mir rx 145.200

ie the reverse of now !!.
73 de Dave EI4HT and Jim EI3DP .

Date: 30 Dec 1996 23:38:21 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE922)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system.

Element sets (also updated daily) and some documentation and software are
available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the
directory pub/space.

As a service to the satellite user community, the most current of these
elements are uploaded weekly to sci.space.news and rec.radio.amateur.space.
This week's elements are provided below.

****

- Current Two-Line Element Sets #922 -
Alouette 1
1 00424U 62049A 96363.78572947 .00000066 00000-0 67354-4 0 2564

```
2 00424 80.4660 91.7389 0022417 253.6086 106.2595 13.67884496708941
ATS 1
1 02608U 66110A 96357.28522603 -.00000164 00000-0 10000-3 0 9949
2 02608 14.5714 350.8002 0007178 101.9620 258.1137 1.00290646 26755
ATS 3
1 03029U 67111A 96362.07148111 -.00000114 00000-0 10000-3 0 5963
2 03029 14.9162 357.7182 0010717 267.6711 110.9249 1.00272778106702
Starlette
1 07646U 75010A 96364.68927694 -.00000160 00000-0 -13129-4 0 232
2 07646 49.8278 97.2277 0206484 156.2068 204.8538 13.82191883106000
LAGEOS
1 08820U 76039A 96364.65645091 .00000001 00000-0 00000+0 0 2530
2 08820 109.8486 92.9883 0043657 86.3716 274.2047 6.38664617226318
ETS-2
1 09852U 77014A 96353.26952944 .00000093 00000-0 10000-3 0 919
2 09852 13.4494 30.8201 0006106 154.2971 205.7133 1.00010627 19487
GOES 2
1 10061U 77048A 96364.22238557 .00000053 00000-0 10000-3 0 7817
2 10061 12.6258 34.8946 0010672 138.9117 187.3079 1.00280835 16395
IUE
1 10637U 78012A 96364.28727948 .00000003 00000-0 10000-3 0 3362
2 10637 35.7747 80.4409 1340818 62.9212 289.9138 1.00059083 21889
GOES 3
1 10953U 78062A 96365.20103067 -.00000105 00000-0 10000-3 0 7561
2 10953 11.6275 37.8052 0003665 201.9592 187.1536 1.00264354 21026
SeaSat 1
1 10967U 78064A 96363.22373529 -.00000007 00000-0 42170-4 0 5417
2 10967 107.9910 216.2497 0001408 265.3142 94.7858 14.38142886969346
Nimbus 7
1 11080U 78098A 96363.57409109 -.00000104 00000-0 -56881-4 0 6383
2 11080 98.9195 216.0866 0008715 159.2997 200.8515 13.83687496918054
GOES 5
1 12472U 81049A 96364.24976996 .00000094 00000-0 10000-3 0 9759
2 12472 8.5030 48.2212 0003965 81.6505 278.3897 1.00294831 15054
Cosmos 1383
1 13301U 82066A 96363.57590090 .00000056 00000-0 48128-4 0 5547
2 13301 82.9279 351.2643 0029188 64.3427 296.0732 13.68080598723958
LandSat 4
1 13367U 82072A 96362.18712399 -.00000385 00000-0 -75471-4 0 329
2 13367 98.0520 46.9771 0005707 258.2528 101.8030 14.57193310768649
DMSP B5D2-1
1 13736U 82118A 96364.10444308 .00000016 00000-0 25193-4 0 1467
2 13736 98.6217 189.3462 0008219 175.7884 184.3364 14.25816177728848
IRAS
1 13777U 83004A 96364.57126230 -.00000073 00000-0 -20508-4 0 5340
2 13777 98.9658 185.9459 0012059 276.6224 83.3571 13.99258083380690
Cosmos 1447
1 13916U 83021A 96363.53020204 .00000049 00000-0 35561-4 0 6463
2 13916 82.9458 47.3042 0037763 332.9624 26.9565 13.74350267690436
TDRS 1
```

```
1 13969U 83026B 96364.15731586 -.00000290 00000-0 00000+0 0 6832
2 13969 9.2613 41.7680 0002640 234.4276 189.4390 1.00275538 23344
GOES 6
1 14050U 83041A 96365.21196740 -.00000070 00000-0 10000-3 0 5960
2 14050 7.3525 51.7970 0004375 99.4148 276.4706 1.00217134108164
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 96364.72915709 -.00000085 00000-0 -84923-5 0 5793
2 14780 98.3092 62.2871 0003620 47.9968 312.1539 14.57059843682436
UO-11
1 14781U 84021B 96362.92357629 .00000134 00000-0 30439-4 0 9390
2 14781 97.8157 345.2080 0010693 187.1445 172.9616 14.69512287686109
Cosmos 1574
1 15055U 84062A 96359.36516985 .00000040 00000-0 26573-4 0 8452
2 15055 82.9572 105.6921 0027417 169.3659 190.8079 13.73642742627092
Cosmos 1602
1 15331U 84105A 96363.20595500 .00000245 00000-0 25921-4 0 5286
2 15331 82.5351 291.2403 0021626 30.1527 330.0929 14.84823756661765
ERBS
1 15354U 84108B 96363.11441142 -.00000176 00000-0 56619-5 0 2455
2 15354 56.9960 323.2320 0006200 148.3952 211.7448 14.95005960665845
NOAA 9
1 15427U 84123A 96365.10146020 .00000049 00000-0 49179-4 0 9762
2 15427 98.9261 69.9091 0015689 116.3620 243.9169 14.13827248621315
Mir
1 16609U 86017A 96365.14494780 .00003246 00000-0 42561-4 0 9223
2 16609 51.6516 216.0106 0013862 182.3095 177.7859 15.61887847620638
SPOT 1
1 16613U 86019A 96362.56676891 -.00000045 00000-0 00000+0 0 186
2 16613 98.8164 70.0392 0001767 78.5562 281.5815 14.19993548247758
Cosmos 1766
1 16881U 86055A 96364.82796576 .00000307 00000-0 34043-4 0 4438
2 16881 82.5172 347.3768 0021355 52.5515 307.7640 14.83795833562852
EGP
1 16908U 86061A 96363.53126835 -.00000083 00000-0 10000-3 0 1421
2 16908 50.0072 119.5025 0011580 148.9779 211.1737 12.44415813140609
NOAA 10
1 16969U 86073A 96365.10064932 .00000017 00000-0 25459-4 0 9064
2 16969 98.5322 356.6512 0013497 137.6163 222.6060 14.25015191534505
MOS-1
1 17527U 87018A 96363.55901250 -.00000043 00000-0 00000+0 0 4981
2 17527 98.9127 61.0906 0018874 144.1448 216.0936 14.00445298502197
GOES 7
1 17561U 87022A 96365.20220328 -.00000155 00000-0 10000-3 0 2097
2 17561 3.4509 68.0603 0002260 280.4002 89.0115 1.00276435 19273
Kvant-1
1 17845U 87030A 96364.95300168 .00011431 00000-0 13426-3 0 8553
2 17845 51.6512 216.9850 0013702 180.7851 179.3123 15.61894366554718
```

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DMSP B5D2-3
1 18123U 87053A 96365.11340088 .00000029 00000-0 37000-4 0 7412
2 18123 98.7652 192.1641 0015131 56.3728 303.8884 14.15463012492219
RS-10/11
1 18129U 87054A 96365.09931830 .00000010 00000-0 -51941-5 0 3044
2 18129 82.9241 3.7231 0011802 339.6863 20.3788 13.72372947477040
Meteor 2-16
1 18312U 87068A 96363.85445239 .00000049 00000-0 30546-4 0 5330
2 18312 82.5560 197.6730 0013795 36.7786 323.4325 13.84089832473101
Meteor 2-17
1 18820U 88005A 96364.78092156 .00000053 00000-0 33306-4 0 1377
2 18820 82.5413 251.4971 0017909 94.2828 266.0379 13.84767346450597
DMSP B5D2-4
1 18822U 88006A 96365.12323716 .00000002 00000-0 18919-4 0 4266
2 18822 98.3794 187.8258 0006384 145.4369 214.7224 14.23212204462448
Glonass 34
1 19163U 88043A 96363.33104624 -.00000021 00000-0 10000-3 0 1432
2 19163 65.3437 79.3008 0008646 135.4984 224.6222 2.13102347 66370
Glonass 36
1 19165U 88043C 96363.38814308 -.00000021 00000-0 10000-3 0 5531
2 19165 65.3098 79.2469 0004492 347.1980 12.8388 2.13102099 66990
METEOSAT 3
1 19215U 88051A 96363.47599704 -.00000156 00000-0 10000-3 0 2981
2 19215 3.6520 66.6866 0006016 131.0881 228.7236 0.96948920 19062
OKEAN 1
1 19274U 88056A 96363.77415021 .00000257 00000-0 28905-4 0 1437
2 19274 82.5137 89.4539 0018869 199.4246 160.6251 14.82557792458206
Meteor 3-2
1 19336U 88064A 96362.51067307 .00000051 00000-0 10000-3 0 5382
2 19336 82.5396 29.6282 0017796 109.8282 250.4766 13.16980248404927
Glonass 39
1 19503U 88085C 96361.07248165 -.00000059 00000-0 10000-3 0 4359
2 19503 65.5099 318.2393 0004884 147.4365 212.5800 2.13101717 64435
NOAA 11
1 19531U 88089A 96365.08038894 .00000014 00000-0 32287-4 0 7989
2 19531 99.1711 28.1601 0012634 52.5870 307.6449 14.13116440426112
TDRS 3
1 19548U 88091B 96354.80270913 -.00000193 00000-0 10000-3 0 2621
2 19548 2.8661 71.0055 0008644 207.0461 184.3786 1.00273888 17396
Glonass 40
1 19749U 89001A 96361.10984472 -.00000026 00000-0 10000-3 0 6482
2 19749 65.2923 78.8836 0007432 252.6009 107.3695 2.13101465 61943
Glonass 41
1 19750U 89001B 96364.44947528 -.00000023 00000-0 10000-3 0 5537
2 19750 65.3021 78.8464 0009003 221.7135 138.2707 2.13101768 62039
GPS BII-01
1 19802U 89013A 96360.60087025 -.00000037 00000-0 00000+0 0 3379
2 19802 55.4254 103.0067 0027109 174.0254 185.9915 2.00558921 57558
Akebono
1 19822U 89016A 96364.05953145 .00010693 00000-0 54727-3 0 8374
```

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2 19822 75.1011 10.4477 3729681 318.7863 18.3635 7.95405797182150
Meteor 2-18
1 19851U 89018A 96363.83969211 .00000042 00000-0 23778-4 0 5326
2 19851 82.5199 125.8799 0014634 145.2401 214.9722 13.84422712395767
MOP-1
1 19876U 89020B 96358.95576504 -.00000145 00000-0 00000+0 0 2388
2 19876 2.3752 71.1746 0017119 279.8433 79.4077 0.97110789 8467
TDRS 4
1 19883U 89021B 96362.37574638 -.00000263 00000-0 00000+0 0 2914
2 19883 0.2647 87.5514 0005178 181.9706 280.9482 1.00274318201049
GPS BII-02
1 20061U 89044A 96363.93153361 -.00000037 00000-0 10000-3 0 3328
2 20061 54.0718 278.3517 0164605 223.6030 135.1352 2.00563013 55366
Nadezhda 1
1 20103U 89050A 96364.97334781 .00000009 00000-0 -65224-5 0 195
2 20103 82.9596 324.2786 0036059 227.5373 132.2732 13.73871989375563
GPS BII-03
1 20185U 89064A 96354.16391793 -.00000029 00000-0 10000-3 0 3764
2 20185 55.0462 103.5488 0181881 305.6068 52.6953 2.00807546 53745
GMS 4
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2 20261 82.5911 147.0235 1241378 321.3001 30.5150 12.47372156330050
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AO-16
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2 20978 98.5785 74.4694 0078727 312.4931 46.9623 14.32707786317778
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1 21930U 92019A 96364.29233537 -.00000069 00000-0 10000-3 0 8346
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2 22076 66.0401 168.3126 0007458 269.0203 90.9958 12.80930679205056
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Meteor 2-21
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Nadezhda 4
1 23179U 94041A 96362.79882475 .00000026 00000-0 11427-4 0 2457
2 23179 82.9457 93.1115 0035603 304.7246 55.0559 13.75688129123412
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1 23203U 94050A 96364.01507534 .00000069 00000-0 00000+0 0 3797
2 23203 64.7665 197.5802 0007897 135.7873 224.3167 2.13102032 18551
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1 23204U 94050B 96363.31006116 .00000065 00000-0 00000+0 0 3987
2 23204 64.7546 197.6291 0014650 354.6035 5.4273 2.13102235 18539
Glonass 67
1 23205U 94050C 96362.25385156 .00000063 00000-0 00000+0 0 3836
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2 23233 98.8024 60.7851 0012507 348.6711 11.4181 14.12766022120491
OKEAN 1-7
1 23317U 94066A 96361.20963927 .00000223 00000-0 30292-4 0 2084
2 23317 82.5432 242.3641 0025341 172.9993 187.1576 14.74067238118826
ELEKTRO (GOMS)
1 23327U 94069A 96360.78938466 -.00000103 00000-0 00000+0 0 2346
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1 23342U 94074A 96363.09154481 .00000099 00000-0 24429-4 0 6346
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1 23396U 94076A 96364.44428970 -.00000024 00000-0 00000+0 0 3625
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Glonass 70
1 23398U 94076C 96364.50453212 -.00000024 00000-0 00000+0 0 3654
2 23398 65.1464 77.6283 0003888 271.9224 88.0939 2.13101938 16417
LUCH (Altair-2)
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Glonass 72
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Helios 1A
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2 23605 98.1397 296.7506 0001503 55.3005 304.8364 14.63833937 79019
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1 23606U 95033B 96362.23778593 .00000230 00000-0 49320-4 0 2403
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1 23607U 95033C 96364.25472764 .00000141 00000-0 33773-4 0 1437
2 23607 98.1207 298.8029 0005521 298.2746 61.7920 14.66989512 79334
TDRS 7
1 23613U 95035B 96363.79409425 .00000102 00000-0 00000+0 0 2764
2 23613 1.0856 82.0409 0001962 192.9172 297.3340 1.00266553 5336
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1 23620U 95037A 96362.78051941 .00000063 00000-0 00000+0 0 2270
2 23620 64.8138 197.4969 0018665 162.8800 197.2305 2.13102985 11135
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2 23621 64.8284 197.4642 0018004 173.2234 186.8434 2.13102165 11159
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1 23622U 95037C 96363.48565102 .00000066 00000-0 00000+0 0 2429
2 23622 64.8148 197.4823 0037159 163.2409 196.9279 2.13102499 11143
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2 23632 71.1630 248.1760 7732851 326.9610 350.0030 0.26346200 1368
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2 23657 82.5329 22.5977 0028510 138.5995 221.7392 14.73520703 71301
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2 23710 98.5810 8.8123 0001126 58.5629 301.5664 14.29988672 60213
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1 23734U 95068A 96364.07296375 .00000070 00000-0 00000+0 0 2151
2 23734 64.8260 197.3781 0017305 328.5125 31.4272 2.13102099 8122
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1 23735U 95068B 96363.32628408 .00000065 00000-0 00000+0 0 2070
2 23735 64.8236 197.3855 0005378 200.8843 159.1443 2.13125057 8109
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2 23736 64.8141 197.4133 0007068 185.0879 174.9509 2.13102117 8094
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2 23757 22.9799 187.0114 0013801 192.1341 167.8812 14.97749861 54233
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2 23833 54.6478 340.1903 0028404 145.6441 214.5433 2.00564915 5535
Priroda
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2 23848 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 39125
MSX
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MSTI 3
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TOMS-EP
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2 23940 97.4336 266.8297 0014273 27.5212 332.6756 15.21760654 27220
GPS BIIA-26
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2 23953 55.1057 100.6566 0020598 358.5109 1.4602 2.00562484 3283
ADEOS
1 24277U 96046A 96363.80540922 -.00000044 00000-0 00000+0 0 1264
2 24277 98.6118 77.9459 0000790 163.0215 197.0111 14.27634832 19057
FO-29
1 24278U 96046B 96364.23223921 -.00000011 00000-0 28523-4 0 471
2 24278 98.5633 62.4492 0350774 266.6338 89.4603 13.52627680 18140
Soyuz TM-24
1 24280U 96047A 96364.95302371 .00011432 00000-0 13426-3 0 1240
2 24280 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 21026
FAST
1 24285U 96049A 96365.25881303 .00000756 00000-0 77998-4 0 485
2 24285 82.9917 117.5809 2206325 291.1706 46.8382 10.81673477 14152
Microsat
1 24291U 96050A 96364.23712763 .00026766 61402-5 18405-3 0 994
2 24291 62.7960 336.2075 0605290 125.1255 240.8108 14.68407669 17854
MO-30
1 24305U 96052B 96361.59304391 .00000204 00000-0 20364-3 0 552
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2 24320 54.6895 280.8441 0052349 108.6207 252.0932 2.00570173 1902
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2 24645 37.9775 167.7622 0049501 2.1347 357.9618 15.14812993 8020
Progress M-33
1 24663U 96066A 96364.95302371 .00011432 00000-0 13426-3 0 379
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2 24674 2.6748 286.8762 0021193 122.5138 283.0068 1.00265982 100
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1 24675U 96070B 96361.84055799 -.00000150 00000-0 00000+0 0 119
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Cosmos 2336
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2 24678 82.9307 211.7845 0020332 214.1160 145.8785 13.72692567 1198
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2 24702 62.7923 230.3309 0108469 106.3946 254.9172 15.94977757 857
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

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Date: Mon, 30 Dec 1996 18:37:00 -0500
From: Susan Driggers <Insight@cris.com>
Subject: Total Newbie Looking for help

I am totally new to satellite communications and am looking for some
advice on the bare minimum needed to get started. I am operating on a very
restricted budget so anything that could be homebrewed would be
appreciated.
I currently have a HT 202 that I am dedicating to sattelite. Everything
else I will need advice on. THanks !
--- 73
Susan Driggers
KF4OBL
Real Radios Glow in the Dark !

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End of Ham-Space Digest V96 #458
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End of Ham-Space Digest V96 #459
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End of Ham-Space Digest V96 #460
****

End of Ham-Space Digest V96 #461
****

End of Ham-Space Digest V96 #462
****

End of Ham-Space Digest V96 #463
****

Date: (null)
From: (null)

SB KEP ARL ARLK097
ARLK097 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 96365.09931830 .00000010 00000-0 -51941-5 0 3044
2 18129 82.9241 3.7231 0011802 339.6863 20.3788 13.72372947477040
UO-11
1 14781U 84021B 96364.96630783 .00000071 00000-0 19851-4 0 09543
2 14781 97.8156 347.1626 0011035 179.2324 180.8903 14.69512489686408
RS-12/13
1 21089U 91007A 96365.13763955 .00000050 00000-0 36428-4 0 09649
2 21089 82.9221 44.0290 0030751 49.3645 311.0179 13.74076005295946
UO-14
1 20437U 90005B 96365.18520891 .00000032 00000-0 29375-4 0 02395
2 20437 98.5334 84.4194 0011276 349.9522 10.1438 14.29944235362068
RS-15
1 23439U 94085A 96365.11165315 -.00000039 00000-0 10000-3 0 01910

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1 20439U 90005D 96365.13576490 .00000017 00000-0 23318-4 0 00435
2 20439 98.5489 86.9487 0011689 351.1810 8.9221 14.29994548362074
DO-17
1 20440U 90005E 96364.78872888 .00000031 00000-0 28831-4 0 00450
2 20440 98.5505 87.3563 0012745 350.1639 9.9293 14.30137315362058
WO-18
1 20441U 90005F 96364.99269554 -.00000009 00000-0 13420-4 0 00458
2 20441 98.5520 87.4786 0012378 351.6212 8.4762 14.30105019362083
LO-19
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2 20442 98.5548 88.2505 0013064 351.3288 8.7673 14.30217279362137
FO-20
1 20480U 90013C 96365.00249566 -.00000013 00000-0 39482-4 0 09409
2 20480 99.0225 352.5895 0541267 40.6829 323.3421 12.83236086323009
AO-21
1 21087U 91006A 96364.96224735 .00000094 00000-0 82657-4 0 07836
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1 21575U 91050B 96365.12250587 .00000039 00000-0 27277-4 0 07465
2 21575 98.3277 65.4337 0008628 41.6780 318.5064 14.37051083286203
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1 22077U 92052B 96364.87138801 -.00000037 00000-0 10000-3 0 06363
2 22077 66.0774 139.7421 0014843 254.5295 105.4083 12.86300142205970
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2 22828 98.5610 77.2690 0011076 5.2480 354.8818 14.28163818138087
IO-26
1 22826U 93061D 96365.21853299 -.00000004 00000-0 15822-4 0 5248
2 22826 98.5658 77.2633 0010225 19.7179 340.4390 14.27822670169979
AO-27
1 22825U 93061C 96365.16708120 .00000006 00000-0 20046-4 0 05282
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MO-30
1 24305U 96052B 96364.87216783 .00000204 00000-0 20364-3 0 00812
2 24305 82.9347 119.7055 0030776 320.2559 39.6340 13.73088514015827
Mir
1 16609U 86017A 96365.46485841 .00003355 00000-0 43775-4 0 9236
2 16609 51.6544 214.4000 0013679 182.2114 177.8729 15.61890800620686

Keplerian bulletins are transmitted twice weekly from W1AW. The
next scheduled transmission of these data will be Saturday, January
4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

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End of Ham-Space Digest V96 #464
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3. Failed mail: exceeded hop count

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: dbonamo@n3baf.COM
Message-ID: <06570182600122@n3baf.com>
Source record: 20457

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This is a MIME-encapsulated message

--==06570182600123==
Content-Type: text/plain; charset=us-ascii

This mail message has exceeded the maximum number of hops.
The requested destination was:
ham.space@N3BAF.COM

The text of the message follows:

--==06570182600123==
Content-Type: message/rfc822

Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id da000237 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:56:31
-0500
Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id ca000236 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:56:09
-0500
Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id ba000235 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:55:45
-0500
Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id aa000234 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:55:11
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(NTMail 3.02.12) with ESMTP id za000233 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:54:49
-0500
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(NTMail 3.02.12) with ESMTP id ya000232 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:54:13
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Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id va000229 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:52:23
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(NTMail 3.02.12) with ESMTP id ta000227 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:51:13
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-0500
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(NTMail 3.02.12) with ESMTP id sa000226 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:50:17
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(NTMail 3.02.12) with ESMTP id ra000225 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:49:29
-0500
Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id qa000224 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:48:45
-0500
Received: from n3baf3.n3baf.com (n3baf3.n3baf.com [44.38.124.4]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id pa000223 for <ham.space@N3BAF.COM>; Wed, 1 Jan 1997 01:48:25
-0500
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id na000221 for <ham.space@n3baf.com>; Wed, 1 Jan 1997 00:47:18
-0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id VAA13029 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 21:03:08 -0800
(PST)
Received: by mail.ucsd.edu; id UAA26321
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 20:33:30 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id UAA26286
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 20:33:23 -0800 (PST)
Message-Id: <199701010433.UAA26286@mail.ucsd.edu>
Date: Tue, 31 Dec 96 20:33:20 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #465
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 465

Today's Topics:
Mode S info
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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policies or positions of any party. Your mileage may vary. So there.

Date: 1 Jan 1997 04:15:22 GMT
From: "BJ Arts" <bjarts@uslink.net>
Subject: Mode S info

I'm looking at buying the Bob Myers mode S system for P3D. It has a nice
dish and downconverter for around $400(U.S). I am wondering if anyone has
tried one of these systems or looked at it. I seems like just what I want
to P3D, but is it a good system. Let me know via e-mail or on the amsat-bb.
Others might want to know the same thing, 73 and Happy New Year de Bj.
BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

Date: 1 Jan 97 04:32:20 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id ja000217 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
23:31:59 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id TAA10994 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 19:52:07 -0800
(PST)
Received: by mail.ucsd.edu; id SAA16302
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 18:57:27 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id SAA16275
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 18:57:22 -0800 (PST)
Message-Id: <199701010257.SAA16275@mail.ucsd.edu>
Date: Tue, 31 Dec 96 18:57:19 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List

Subject: Ham-Space Digest V96 #464
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 464

Today's Topics:
ARLK097 Keplerian data
frq reverse
Happy New Year
ICOM CT-17 (CI-V) Interface programs out there?
New Mir frequencies
NORAD Two-Line Orbital Element Set Format
Undeliverable mail

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Date: 31 Dec 1996 13:21:31 -0500
From: w1aw@arrl.org
Subject: ARLK097 Keplerian data

SB KEP @ ARL $ARLK097
ARLK097 Keplerian data

ZCZC SK97
QST de W1AW
Keplerian Bulletin 97 ARLK097

Date: (null)
From: (null)
Subject: frq reverse

dhend@cyberportal.net
http://www.cyberportal.net/dhend/dave1.html

Date: (null)
From: (null)
Subject: Happy New Year

Happy New Year and successfull 1997 to all people
around the World.

73 de Mir crew Valeri Alexander John
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
Stat : PR
Posted : 12/30/96 21:31
To : ALL

Date: Tue, 31 Dec 1996 18:37:30 GMT
From: Tom Valenti <valenti@eskimo.com>
Subject: ICOM CT-17 (CI-V) Interface programs out there?

Happy New Year from Seattle,

I am looking for bare bones, or better, shareware programs used by us to
tie our rigs to the PC. My shack will be automating an IC-R7000, IC-735,
IC-275H, and a IC-475H. If you have a program (BOTH binary and source
code) I would love to download it. Just let me know where to get it.
Anybody really close by, I'll buy lunch for the first few! I work near
Boeing Field. 73
--
Tom "Wunski" Valenti
KB7RSK
http://www.eskimo.com/~valenti/

Date: Tue, 31 Dec 1996 20:28:02 GMT
From: dhend@cyberportal.net (Dave Hendrick)
Subject: New Mir frequencies

There is a reversal of the freqs on mir these messages were on the PMS
today, it implies that packet will now be duplex.
r 349
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
Stat : PR
Posted : 12/30/96 21:36
To : ALL

Date: 31 Dec 1996 21:05:12 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set Format

As a service to the satellite user community, the following description of the
NORAD two-line orbital element set format is uploaded to sci.space.news and
rec.radio.amateur.space on a monthly basis. The most current orbital elements
from the NORAD two-line element sets are carried on the *NEW* Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. In addition, element sets (updated daily) and

some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 31 Dec 96 17:14:25 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id oa000196 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
12:14:09 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id HAA02864 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 07:35:13 -0800
(PST)
Received: by mail.ucsd.edu; id HAA13846
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 07:23:21 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id HAA13818
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 07:23:15 -0800 (PST)
Message-Id: <199612311523.HAA13818@mail.ucsd.edu>
Date: Tue, 31 Dec 96 07:23:13 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #463
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 463

Today's Topics:
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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policies or positions of any party. Your mileage may vary. So there.

Date: 31 Dec 96 15:21:39 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id ga000188 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
10:21:05 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id EAA28620 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 04:55:44 -0800
(PST)
Received: by mail.ucsd.edu; id EAA25520
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 04:13:31 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id EAA25498
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 04:13:26 -0800 (PST)
Message-Id: <199612311213.EAA25498@mail.ucsd.edu>
Date: Tue, 31 Dec 96 04:13:25 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #462
To: Ham-Space@UCSD.EDU
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 462

Today's Topics:
Kenwood TM-401B below 440 MHz?
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
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Date: 31 Dec 1996 11:13:41 GMT
From: cathryn@junglevision.junglevision.com (cathryn)
Subject: Kenwood TM-401B below 440 MHz?

In article <01bbf548$3ad971c0$a01865ce@SNeedha.3lefties.com>, "Earl Needham" wrote:
>
> Having recently discovered FM activity through sattelites, I'd like to try
>my hand at getting through the FM repeater on the Mir space station.
>Unfortunately, my UHF rig (a Kenwood TM-401B) only covers 440-450 MHz. Is
>there a mod available to allow this rig to operate below 440 MHz?

Yeah, I have the same problem with my IC-T7a. I can receive below 440, but
there's no way to transmit below 440Mhz. Arrgh.

Date: 31 Dec 96 12:11:49 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id fa000187 for <ham.space@n3baf.com>; Tue, 31 Dec 1996
07:10:48 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id CAA24878 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 02:03:08 -0800
(PST)
Received: by mail.ucsd.edu; id BAA12481
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 01:42:21 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id BAA12459
sendmail 8.8.3/UCSD8.2.2
Tue, 31 Dec 1996 01:42:14 -0800 (PST)
Message-Id: <199612310942.BAA12459@mail.ucsd.edu>

Date: Tue, 31 Dec 96 01:42:12 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #461
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Tue, 31 Dec 96 Volume 96 : Issue 461

Today's Topics:
Please Read!
Undeliverable mail

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policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 30 Dec 1996 21:01:00 (PST)
From: george.tamayo@infosoftpub.com (George Tamayo)
Subject: Please Read!

Fellow Amateurs: Please read the first two paragraphs!

CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to ALL in comp.bbs.misc:

Boardwatch may have abandoned the BBS sysop, but TeleGrafix is still standing
strong with them. However, we think that BBS systems must become
Internet-connected if they are to survive in a Webbed world.

First, we need to quit calling these online systems by the moniker "BBS."
The term has come to reflect something on the order of ham radio -- low-rent
communications run by amateurs. That may accurately reflect some BBS
systems, but we've found that many sysops run very professional online
businesses.

Second, we need to start emphasizing the Power of Telnet and talk about
Telnet Sites, not BBS systems. A telnettable BBS or legacy system can do
many things the Web can't. Most of the computer industry and public has
been Web-washed (brainwashed) by all the press hype. They think the Web
is all there is to the Internet/online experience. Just a couple of days
ago, I was talking to the Internet reporter for one of America's most
prestigious newspapers. He had never even heard of Telnet, didn't have a
clue what it was -- and his news reports influence literally millions of
Americans. BBS sysops and BBS system manufacturers need to refocus their

efforts, and begin producing tools and content that take advantage of the Power of Telnet.

Third, Telnet Site operators (such as BBS sysops) must professionalize the look and feel of their systems. Most sysops make little investment in quality graphics for their systems. In a glitzy Web world, it is little wonder that the public is turned off by ANSI BBS systems no matter how if the content on them is of high quality. We constantly hear BBS sysops complain about having to pay what are very modest sums of money for RIPscrip graphics -- but the people running Web sites don't think twice about investing thousands of dollars for a fabulous look.

Despite all the flack we take from BBS sysops, we continue to support their efforts -- and we always will. But BBS sysops have to change with the times, and they have to be willing to invest to upgrade their systems to compete with (or complement) the Web.

On Christmas, TeleGrafix released the first multimedia Telnet browsers. RIPtel Visual Telnet is available now from our Web site at www.telegrafix.com. This is a huge step forward for the Internet, and it represents a salvation for BBS sysops by placing Telnet graphically on a higher level than the Web.

The serious professional operators will get on board the Visual Telnet train, and they will live to see a brighter day.

Pat Clawson
TeleGrafix Communications Inc.
Winchester, VA

Web: www.telegrafix.com

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 A flashlight is a case in which to carry dead batteries.

Date: 31 Dec 96 09:40:50 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
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----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com (NTMail 3.02.10) with ESMTP id aa000182 for <ham.space@n3baf.com>; Tue, 31 Dec 1996 04:37:47 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with ESMTP id AAA23003 for <ham-space-list@mailbox.ucsd.edu>; Tue, 31 Dec 1996 00:04:25 -0800

(PST)
Received: by mail.ucsd.edu; id XAA28829
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 23:44:13 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id XAA28795
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 23:44:06 -0800 (PST)
Message-Id: <199612310744.XAA28795@mail.ucsd.edu>
Date: Mon, 30 Dec 96 23:44:04 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #460
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 460

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Please Read!
Undeliverable mail (2 msgs)

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TeleGrafix Communications Inc.
Winchester, VA

Web: www.telegrafix.com

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 A flashlight is a case in which to carry dead batteries.

Date: 30 Dec 96 14:05:29 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id ma000168 for <ham.space@n3baf.com>; Mon, 30 Dec 1996
09:04:46 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id EAA10137 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 04:38:29 -0800
(PST)
Received: by mail.ucsd.edu; id EAA03627
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 04:30:53 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id EAA03609
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 04:30:49 -0800 (PST)
Message-Id: <199612301230.EAA03609@mail.ucsd.edu>
Date: Mon, 30 Dec 96 04:30:47 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #457
To: Ham-Space@UCSD.EDU
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 457

Today's Topics:
comunicato stampa
HAM TOOLKIT CD ROM..AWSOME!!!!
LOW LOW PRICE HAM RADIO
MIR
WinTrak Pro Release

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

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herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.

Date: 30 Dec 96 10:24:20 GMT
From: mose@tv.shineline.IT (Mose' Battocchio)
Subject: comunicato stampa

<encoded_portion_removed>
aW9uZWQgcXVhbGl0aWVzIHJlbmRlciBpdCBoaWdobHk=

Date: Sun, 29 Dec 1996 14:36:53 GMT
From: aidan@ThePentagon.com
Subject: HAM TOOLKIT CD ROM..AWSOME!!!!

Check out our Awsome CD ROM.."HAM TOOL KIT"..Its jam packed with over
600MEGS of Amateur Radio Related Software..its all here on one
disk..buy no other !!!.

Surf to us at http://sphynx.com/murphy

Owned by Hams..for Hams!!!
M U R P H Y E L E C T R O N I C S
GSM Mobile Phones & Accessories. Satellite TV and Decoding Systems
CD Rom Multimedia Computer Accessories
http://sphynx.com/murphy Email: murphy@sphynx.com

Why not send us an SMS to our GSM phone..Simply surf to
http://home.sn.no/~ahaltbak/engsms.htm and type in the number
+35387527182, write your message and fill in your Email address.all for FREE !!!

Date: 29 Dec 1996 18:42:49 GMT
From: hiway@delta1.deltanet.com ()
Subject: LOW LOW PRICE HAM RADIO

LOW LOW PRICE -- HAM RADIO STUFFS ON SALE!!!!!!!!!!

Please contact at 818-454-3333 10:00am to 4:00pm western time Mon
through Fri or e-mail hiway@pacificnet.net

Totally brand new:

1. c168a (VHF) $188.33 unit: 3 *full pack*
2. c528a (VHF & UHF) $236.25 unit: 5 *full pack*

3. c558a (VHF & UHF) $320.63 unit: 10 *full pack*
4. c5608da (VHF & UHF) $550.00 unit: 4 full *pack*

5. c5718da (VHF & UHF) $599.99 unit: 2

6. cbt160 battery case $2.50 unit: 8
telephone interconnects

1. cs-800 $169.50 unit: 2

2. cs-900 $169.50 unit: 4

antennas for base station

1. bsa 150 144mhz to 174mhz 2.5db $29.00 unit: 5

2. bsa 440 440mhz to 460mhz 4.5db $29.00 unit: 5

antennas for mobile

kg 2/70 144 - 148 mhz & 442 - 448 mhz 2.4db $33.96 unit: 3

charger

csa181a $58.50 unit: 1

Date: Sun, 29 Dec 1996 18:07:37 GMT
From: dwittich@concentric.net (Doug Wittich)
Subject: MIR

>Well Amsat Journal is RIGHT but the MIR station decided
>after the fact to change.
>
>We have two large repeaters in Dallas on 145.190 and 145.210
>and that makes it a problem to catch the voice downlink.

And with nationwide APRS activity on 145.79, that's a problem for many, as well. Folks in Indianapolis want APRS to move from it's coordinated frequency. Seems like MIR could have researched a bit and tried to coordinate before they moved.

73

Doug

Date: 29 Dec 1996 23:37:56 GMT
From: "Paul E. Traufler" <wintrak@traveller.com>
Subject: WinTrak Pro Release

WinTrak Pro New Release!

WinTrak Pro Version 4.5 has added and improved many areas in the program. The Rendered views have been improved along with several new views available also. This is just a small list of the many improvements made to the program. Remember this program is a full 32-bit version, do not accept any substitutions! Do not let those other programs fool you with the old, "It works under Win95", but in reality it is a Windows 3.1 16-bit program. Its your money, demand the best!

New Items:

Visible now satellites can be any of the 4 satellite groups.
Satellite elements statistics, such as oldest, newest and average age of elements.
Zoom in on the Render views.
Added plot the next 2 passes option to render views.
Automatic LF to CR-LF text file detection and correction. (UNIX to DOS Text conversion)
Mercator map added to the Rendered maps options.
Added Multi-Satellite 3D and Mercator maps Rendered views.
Added satellite labels to Rendered views.
Added option to set Sun terminator on the Render views.
Added satellite Rise/Set alarms, can play user recorded Wave files or provided Wave files.
Greatly improved help file with printed manual options included in help file.
Lowered the minimum satellite altitude to 90 km from the past 160 km.
This version works with Windows NT 4.0 now also.

--
WinTrak Pro
Satellite Tracking Program For Win95/NT

http://www.hsv.tis.net/~wintrak
wintrak@traveller.com

End of Ham-Space Digest V96 #457
****

Date: 31 Dec 96 07:43:21 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by n3baf1.n3baf.com (NTMail 3.02.10) with ESMTP id za000181 for <ham.space@n3baf.com>; Tue, 31 Dec 1996 02:42:35 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with ESMTP id VAA07983 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 21:33:13 -0800 (PST)
Received: by mail.ucsd.edu; id VAA10772
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 21:12:41 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU

Received: by mail.ucsd.edu; id VAA10732
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 21:12:36 -0800 (PST)
Message-Id: <199612310512.VAA10732@mail.ucsd.edu>
Date: Mon, 30 Dec 96 21:12:33 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #459
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 459

Today's Topics:
mir comms problems
Undeliverable mail

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 31 Dec 1996 02:18:00 GMT
From: perkiert@nildram.co.uk (Paul Erkiert)
Subject: mir comms problems

I see on Hearsat mail list that there have been problems on the mir
communications, Has that effected Amateur Radio activities I wonder?

Date: 31 Dec 96 01:20:02 GMT
From: mailer-daemon@n3baf.COM
Subject: Undeliverable mail

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.10) with ESMTP id sa000174 for <ham.space@n3baf.com>; Mon, 30 Dec 1996
20:19:34 -0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id QAA12915 for <ham-space-list@mailbox.ucsd.edu>; Mon, 30 Dec 1996 16:22:24 -0800

(PST)
Received: by mail.ucsd.edu; id PAA00997
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 15:52:27 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id PAA00961
sendmail 8.8.3/UCSD8.2.2
Mon, 30 Dec 1996 15:52:23 -0800 (PST)
Message-Id: <199612302352.PAA00961@mail.ucsd.edu>
Date: Mon, 30 Dec 96 15:52:19 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #458
To: Ham-Space@ucsd.edu
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Mon, 30 Dec 96 Volume 96 : Issue 458

Today's Topics:
MIR
MIR info..
new mir freq for 1997
NORAD Two-Line Orbital Element Sets (TLE922)
Total Newbie Looking for help

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 30 Dec 1996 11:50:47 GMT
From: dhend@cyberportal.net (Dave Hendrick)
Subject: MIR

On Sun, 29 Dec 1996 18:07:37 GMT, dwittich@concentric.net (Doug
Wittich) wrote:

>>Well Amsat Journal is RIGHT but the MIR station decided
>>after the fact to change.
>>
>>We have two large repeaters in Dallas on 145.190 and 145.210
>>and that makes it a problem to catch the voice downlink.

>
>And with nationwide APRS activity on 145.79, that's a problem for
>many, as well. Folks in Indianapolis want APRS to move from it's
>coordinated frequency. Seems like MIR could have researched a bit
>and tried to coordinate before they moved.
>
>
>73
>
>
>Doug
The "players" ie Dave Larson N6JLH alias N6CO alias K6MIR and Miles
Mann WF1F were told well in advance that this was going to be a
problem with not only APRS, but also the Repeaters, they in turn I
would assume notified their contacts at AMSAT and ARRL and NASA and
SOUP, at any rate G3BGM also was told that especially here in the
states that pair would be a problem, and it was taken to the European
Amateur radio conference where the frequencies were decided upon. I
realized long ago that the doppler shift would bring it into
interference with both, and it does.. there is little hope. there is a
possibility they may try another pair, but slim. 73 DAVE
dhend@cyberportal.net
http://www.cyberportal.net/dhend/dave1.html

Date: 30 Dec 1996 18:21:52 GMT
From: Jeff Griffin <griffinj@admin.tc.faa.gov>
Subject: MIR info..

Dave, try 145.200 + 600 voice, 145.800 simplex paket,
437950 - 2200 pl 141.3 repeater, and 437.925 for a recorded
greeting from Mir. Good luck, and have fun.
Jeff kb2wqm

Date: Mon, 30 Dec 1996 16:46:00 +0000
From: jim ryan <sigma4@iol.ie>
Subject: new mir freq for 1997

Hello all ,
Just had a nice short contact with John KC5TZQ at 16:07 30-12-96
. It must be said that John is a very good operator as he worked several
stations over Europe , He also informed us that as of the first of
January 1997 they will change freq on 2meters as follows .

mir tx 145.800
mir rx 145.200

ie the reverse of now !!.
73 de Dave EI4HT and Jim EI3DP .

Date: 30 Dec 1996 23:38:21 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE922)

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #922 -
Alouette 1
1 00424U 62049A 96363.78572947 .00000066 00000-0 67354-4 0 2564
2 00424 80.4660 91.7389 0022417 253.6086 106.2595 13.67884496708941
ATS 1
1 02608U 66110A 96357.28522603 -.00000164 00000-0 10000-3 0 9949
2 02608 14.5714 350.8002 0007178 101.9620 258.1137 1.00290646 26755
ATS 3
1 03029U 67111A 96362.07148111 -.00000114 00000-0 10000-3 0 5963
2 03029 14.9162 357.7182 0010717 267.6711 110.9249 1.00272778106702
Starlette
1 07646U 75010A 96364.68927694 -.00000160 00000-0 -13129-4 0 232
2 07646 49.8278 97.2277 0206484 156.2068 204.8538 13.82191883106000
LAGEOS
1 08820U 76039A 96364.65645091 .00000001 00000-0 00000+0 0 2530
2 08820 109.8486 92.9883 0043657 86.3716 274.2047 6.38664617226318
ETS-2
1 09852U 77014A 96353.26952944 .00000093 00000-0 10000-3 0 919
2 09852 13.4494 30.8201 0006106 154.2971 205.7133 1.00010627 19487
GOES 2
1 10061U 77048A 96364.22238557 .00000053 00000-0 10000-3 0 7817
2 10061 12.6258 34.8946 0010672 138.9117 187.3079 1.00280835 16395
IUE
1 10637U 78012A 96364.28727948 .00000003 00000-0 10000-3 0 3362
2 10637 35.7747 80.4409 1340818 62.9212 289.9138 1.00059083 21889
GOES 3
1 10953U 78062A 96365.20103067 -.00000105 00000-0 10000-3 0 7561
2 10953 11.6275 37.8052 0003665 201.9592 187.1536 1.00264354 21026
SeaSat 1
1 10967U 78064A 96363.22373529 -.00000007 00000-0 42170-4 0 5417

```
2 10967 107.9910 216.2497 0001408 265.3142 94.7858 14.38142886969346
Nimbus 7
1 11080U 78098A 96363.57409109 -.00000104 00000-0 -56881-4 0 6383
2 11080 98.9195 216.0866 0008715 159.2997 200.8515 13.83687496918054
GOES 5
1 12472U 81049A 96364.24976996 .00000094 00000-0 10000-3 0 9759
2 12472 8.5030 48.2212 0003965 81.6505 278.3897 1.00294831 15054
Cosmos 1383
1 13301U 82066A 96363.57590090 .00000056 00000-0 48128-4 0 5547
2 13301 82.9279 351.2643 0029188 64.3427 296.0732 13.68080598723958
LandSat 4
1 13367U 82072A 96362.18712399 -.00000385 00000-0 -75471-4 0 329
2 13367 98.0520 46.9771 0005707 258.2528 101.8030 14.57193310768649
DMSP B5D2-1
1 13736U 82118A 96364.10444308 .00000016 00000-0 25193-4 0 1467
2 13736 98.6217 189.3462 0008219 175.7884 184.3364 14.25816177728848
IRAS
1 13777U 83004A 96364.57126230 -.00000073 00000-0 -20508-4 0 5340
2 13777 98.9658 185.9459 0012059 276.6224 83.3571 13.99258083380690
Cosmos 1447
1 13916U 83021A 96363.53020204 .00000049 00000-0 35561-4 0 6463
2 13916 82.9458 47.3042 0037763 332.9624 26.9565 13.74350267690436
TDRS 1
1 13969U 83026B 96364.15731586 -.00000290 00000-0 00000+0 0 6832
2 13969 9.2613 41.7680 0002640 234.4276 189.4390 1.00275538 23344
GOES 6
1 14050U 83041A 96365.21196740 -.00000070 00000-0 10000-3 0 5960
2 14050 7.3525 51.7970 0004375 99.4148 276.4706 1.00217134108164
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 96364.72915709 -.00000085 00000-0 -84923-5 0 5793
2 14780 98.3092 62.2871 0003620 47.9968 312.1539 14.57059843682436
UO-11
1 14781U 84021B 96362.92357629 .00000134 00000-0 30439-4 0 9390
2 14781 97.8157 345.2080 0010693 187.1445 172.9616 14.69512287686109
Cosmos 1574
1 15055U 84062A 96359.36516985 .00000040 00000-0 26573-4 0 8452
2 15055 82.9572 105.6921 0027417 169.3659 190.8079 13.73642742627092
Cosmos 1602
1 15331U 84105A 96363.20595500 .00000245 00000-0 25921-4 0 5286
2 15331 82.5351 291.2403 0021626 30.1527 330.0929 14.84823756661765
ERBS
1 15354U 84108B 96363.11441142 -.00000176 00000-0 56619-5 0 2455
2 15354 56.9960 323.2320 0006200 148.3952 211.7448 14.95005960665845
NOAA 9
1 15427U 84123A 96365.10146020 .00000049 00000-0 49179-4 0 9762
2 15427 98.9261 69.9091 0015689 116.3620 243.9169 14.13827248621315
Mir
```

```
1 16609U 86017A 96365.14494780 .00003246 00000-0 42561-4 0 9223
2 16609 51.6516 216.0106 0013862 182.3095 177.7859 15.61887847620638
SPOT 1
1 16613U 86019A 96362.56676891 -.00000045 00000-0 00000+0 0 186
2 16613 98.8164 70.0392 0001767 78.5562 281.5815 14.19993548247758
Cosmos 1766
1 16881U 86055A 96364.82796576 .00000307 00000-0 34043-4 0 4438
2 16881 82.5172 347.3768 0021355 52.5515 307.7640 14.83795833562852
EGP
1 16908U 86061A 96363.53126835 -.00000083 00000-0 10000-3 0 1421
2 16908 50.0072 119.5025 0011580 148.9779 211.1737 12.44415813140609
NOAA 10
1 16969U 86073A 96365.10064932 .00000017 00000-0 25459-4 0 9064
2 16969 98.5322 356.6512 0013497 137.6163 222.6060 14.25015191534505
MOS-1
1 17527U 87018A 96363.55901250 -.00000043 00000-0 00000+0 0 4981
2 17527 98.9127 61.0906 0018874 144.1448 216.0936 14.00445298502197
GOES 7
1 17561U 87022A 96365.20220328 -.00000155 00000-0 10000-3 0 2097
2 17561 3.4509 68.0603 0002260 280.4002 89.0115 1.00276435 19273
Kvant-1
1 17845U 87030A 96364.95300168 .00011431 00000-0 13426-3 0 8553
2 17845 51.6512 216.9850 0013702 180.7851 179.3123 15.61894366554718
DMSP B5D2-3
1 18123U 87053A 96365.11340088 .00000029 00000-0 37000-4 0 7412
2 18123 98.7652 192.1641 0015131 56.3728 303.8884 14.15463012492219
RS-10/11
1 18129U 87054A 96365.09931830 .00000010 00000-0 -51941-5 0 3044
2 18129 82.9241 3.7231 0011802 339.6863 20.3788 13.72372947477040
Meteor 2-16
1 18312U 87068A 96363.85445239 .00000049 00000-0 30546-4 0 5330
2 18312 82.5560 197.6730 0013795 36.7786 323.4325 13.84089832473101
Meteor 2-17
1 18820U 88005A 96364.78092156 .00000053 00000-0 33306-4 0 1377
2 18820 82.5413 251.4971 0017909 94.2828 266.0379 13.84767346450597
DMSP B5D2-4
1 18822U 88006A 96365.12323716 .00000002 00000-0 18919-4 0 4266
2 18822 98.3794 187.8258 0006384 145.4369 214.7224 14.23212204462448
Glonass 34
1 19163U 88043A 96363.33104624 -.00000021 00000-0 10000-3 0 1432
2 19163 65.3437 79.3008 0008646 135.4984 224.6222 2.13102347 66370
Glonass 36
1 19165U 88043C 96363.38814308 -.00000021 00000-0 10000-3 0 5531
2 19165 65.3098 79.2469 0004492 347.1980 12.8388 2.13102099 66990
METEOSAT 3
1 19215U 88051A 96363.47599704 -.00000156 00000-0 10000-3 0 2981
2 19215 3.6520 66.6866 0006016 131.0881 228.7236 0.96948920 19062
OKEAN 1
1 19274U 88056A 96363.77415021 .00000257 00000-0 28905-4 0 1437
2 19274 82.5137 89.4539 0018869 199.4246 160.6251 14.82557792458206
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Meteor 3-2
1 19336U 88064A 96362.51067307 .00000051 00000-0 10000-3 0 5382
2 19336 82.5396 29.6282 0017796 109.8282 250.4766 13.16980248404927
Glonass 39
1 19503U 88085C 96361.07248165 -.00000059 00000-0 10000-3 0 4359
2 19503 65.5099 318.2393 0004884 147.4365 212.5800 2.13101717 64435
NOAA 11
1 19531U 88089A 96365.08038894 .00000014 00000-0 32287-4 0 7989
2 19531 99.1711 28.1601 0012634 52.5870 307.6449 14.13116440426112
TDRS 3
1 19548U 88091B 96354.80270913 -.00000193 00000-0 10000-3 0 2621
2 19548 2.8661 71.0055 0008644 207.0461 184.3786 1.00273888 17396
Glonass 40
1 19749U 89001A 96361.10984472 -.00000026 00000-0 10000-3 0 6482
2 19749 65.2923 78.8836 0007432 252.6009 107.3695 2.13101465 61943
Glonass 41
1 19750U 89001B 96364.44947528 -.00000023 00000-0 10000-3 0 5537
2 19750 65.3021 78.8464 0009003 221.7135 138.2707 2.13101768 62039
GPS BII-01
1 19802U 89013A 96360.60087025 -.00000037 00000-0 00000+0 0 3379
2 19802 55.4254 103.0067 0027109 174.0254 185.9915 2.00558921 57558
Akebono
1 19822U 89016A 96364.05953145 .00010693 00000-0 54727-3 0 8374
2 19822 75.1011 10.4477 3729681 318.7863 18.3635 7.95405797182150
Meteor 2-18
1 19851U 89018A 96363.83969211 .00000042 00000-0 23778-4 0 5326
2 19851 82.5199 125.8799 0014634 145.2401 214.9722 13.84422712395767
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1 19876U 89020B 96358.95576504 -.00000145 00000-0 00000+0 0 2388
2 19876 2.3752 71.1746 0017119 279.8433 79.4077 0.97110789 8467
TDRS 4
1 19883U 89021B 96362.37574638 -.00000263 00000-0 00000+0 0 2914
2 19883 0.2647 87.5514 0005178 181.9706 280.9482 1.00274318201049
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1 20061U 89044A 96363.93153361 -.00000037 00000-0 10000-3 0 3328
2 20061 54.0718 278.3517 0164605 223.6030 135.1352 2.00563013 55366
Nadezhda 1
1 20103U 89050A 96364.97334781 .00000009 00000-0 -65224-5 0 195
2 20103 82.9596 324.2786 0036059 227.5373 132.2732 13.73871989375563
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2 20185 55.0462 103.5488 0181881 305.6068 52.6953 2.00807546 53745
GMS 4
1 20217U 89070A 96364.28277778 -.00000361 00000-0 10000-3 0 5117
2 20217 2.1848 73.9935 0000457 334.2922 271.5433 1.00268849 27376
INTERCOSMOS 24
1 20261U 89080A 96362.87110769 .00000100 00000-0 29502-4 0 5541
2 20261 82.5911 147.0235 1241378 321.3001 30.5150 12.47372156330050
GPS BII-04
1 20302U 89085A 96360.80780733 .00000044 00000-0 10000-3 0 3566
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Meteor 3-3
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2 20305 82.5311 350.5327 0004158 201.0222 159.0695 13.04419759343473
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2 20322 98.9340 16.3974 0008115 209.8648 150.2056 14.03461035364320
Kvant-2
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2 20335 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366403724
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SPOT 2
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2 20436 98.7463 74.6767 0001619 93.0931 267.0415 14.20017908359456
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2 20437 98.5335 83.5280 0011265 352.6013 7.4998 14.29944025361931
AO-16
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2 20440 98.5506 85.9814 0012894 354.0834 6.0290 14.30137389361850
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2 20441 98.5520 86.2408 0012432 355.3509 4.7561 14.30104776361907
LO-19
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2 20452 54.0425 159.0066 0069939 90.3808 270.6229 2.00551999 50638
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2 20619 65.1039 317.3905 0024872 211.2145 148.6271 2.13102456 51392
Glonass 45
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Glonass 46
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2 20621 65.1150 317.3253 0012712 197.7144 162.2598 2.13102530 51490
Kristall
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2 20635 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366374555
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Meteor 2-19
1 20670U 90057A 96364.80604045 .00000037 00000-0 19504-4 0 1693
2 20670 82.5466 192.5008 0017109 66.2168 294.0783 13.84131356328809
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2 20712 17.6849 170.1675 7175535 166.1367 236.1363 2.35819812 47733
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2 20724 55.0610 100.8114 0132520 187.1050 172.7224 2.00564435 45366
Feng Yun1-2
1 20788U 90081A 96364.86770033 .00000262 00000-0 20170-3 0 2126
2 20788 98.8100 3.6070 0014589 318.2048 41.8004 14.01382899323507
Meteor 2-20
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GPS BIIA-10
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2 20959 55.2477 102.9210 0113475 237.5904 121.3248 2.00556597 44595
DMSP B5D2-5
1 20978U 90105A 96365.13694532 .00000098 00000-0 50717-4 0 9006
2 20978 98.5785 74.4694 0078727 312.4931 46.9623 14.32707786317778
Glonass 47
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Glonass 49
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2 21008 65.2693 78.1216 0008910 268.4666 91.4863 2.13098724 47159
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Nadezhda 3
1 21152U 91019A 96365.04354541 .00000031 00000-0 16411-4 0 7052
2 21152 82.9224 0.7158 0041952 155.5192 204.7966 13.73541449290635
Glonass 50
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2 21216 64.8515 316.8697 0011734 204.5844 155.3476 2.13103225 44600
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2 21217 64.8372 316.8396 0011084 237.1383 122.8049 2.13102200 44614
Glonass 52
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2 21218 64.8369 316.8348 0008221 295.0496 64.9181 2.13102545 44609
GRO
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2 21225 28.4619 268.6944 0002353 256.7832 103.2456 15.44740203200002
Meteor 3-4
1 21232U 91030A 96363.70838067 .00000051 00000-0 10000-3 0 9461
2 21232 82.5390 235.2570 0014433 39.6677 320.5498 13.16474029273130
NOAA 12
1 21263U 91032A 96365.08079934 .00000099 00000-0 63176-4 0 2143
2 21263 98.5462 18.4645 0013886 65.9126 294.3504 14.22680978292314
OKEAN 3
1 21397U 91039A 96364.42341041 .00000253 00000-0 32851-4 0 2447
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2 21552 56.3360 41.3281 0077813 262.3916 96.7738 2.00573156 40209
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UO-22
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2 21575 98.3278 64.5579 0008582 44.5211 315.6664 14.37050794286079
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1 21577U 91050D 96364.56745674 .00000030 00000-0 24585-4 0 7358
2 21577 98.3220 63.2026 0007506 45.4303 314.7507 14.36536893286038
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1 21578U 91050E 96363.20405853 .00000470 00000-0 16514-3 0 9364
2 21578 98.3581 71.5226 0005988 48.9859 311.1846 14.39303547286240
TDRS 5
1 21639U 91054B 96358.00000000 .00000082 00000-0 10000-3 0 1290
2 21639 0.0522 87.3137 0003639 187.5814 2.7647 1.00277859 19753
Meteor 3-5
1 21655U 91056A 96362.57404162 .00000051 00000-0 10000-3 0 9445
2 21655 82.5531 183.8790 0014601 46.7297 313.5038 13.16850118258123
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1 21701U 91063B 96361.26138373 -.00000218 00000-0 19934-5 0 8147
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DMSP B5D2-6
1 21798U 91082A 96365.11202960 .00000022 00000-0 34971-4 0 5704
2 21798 98.9339 22.4389 0013463 36.2985 323.9096 14.14013186262616
Glonass 53
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Glonass 54
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Glonass 55
1 21855U 92005C 96365.26845033 -.00000026 00000-0 00000+0 0 3720
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1 21890U 92009A 96364.12945550 .00000037 00000-0 00000+0 0 9190
2 21890 53.7347 218.5999 0057060 202.0907 157.7161 2.00560361 35551
GPS BIIA-13
1 21930U 92019A 96364.29233537 -.00000069 00000-0 10000-3 0 8346
2 21930 55.6662 340.8358 0030151 195.2412 164.5791 2.00556033 34488
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1 21987U 92031A 96363.25099247 .00001138 00000-0 42029-4 0 5964
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1 22012U 92038A 96362.18171266 .00000655 00000-0 55004-4 0 7719
2 22012 81.6712 275.4428 0115728 261.1292 97.6809 14.91829190244006
GPS BIIA-14
1 22014U 92039A 96364.37666844 .00000057 00000-0 00000+0 0 8231
2 22014 54.8456 160.7686 0133445 328.7796 30.3921 2.00565342 26327
Glonass 56
1 22056U 92047A 96363.28833707 -.00000045 00000-0 00000+0 0 3007
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Glonass 57
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2 22057 64.6963 316.8030 0009438 316.1152 43.8074 2.13102883 34300
Glonass 58
1 22058U 92047C 96363.99404139 -.00000041 00000-0 10000-3 0 1694
2 22058 64.6926 316.7910 0009678 281.5419 78.3474 2.13102644 34361
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2 22076 66.0401 168.3126 0007458 269.0203 90.9958 12.80930679205056
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1 22108U 92058A 96364.84091800 .00000040 00000-0 10000-3 0 8408
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1 22195U 92070B 96363.04441015 -.00000009 00000-0 10000-3 0 5522
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1 22231U 92079A 96364.52480056 .00000059 00000-0 00000+0 0 8537
2 22231 54.6884 161.9077 0030084 274.0820 85.5540 2.00562541 30089
GPS BIIA-17
1 22275U 92089A 96364.63698533 .00000058 00000-0 00000+0 0 8415
2 22275 54.6278 159.3998 0050357 245.7309 113.7046 2.00587702 29493
TDRS 6
1 22314U 93003B 96363.57846990 -.00000276 00000-0 10000-3 0 6809
2 22314 0.0573 139.0797 0003200 150.4614 329.0535 1.00270257 14524
GPS BIIA-18
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Glonass 59
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2 22512 65.2421 77.7803 0008773 183.0042 177.0197 2.13102123 29759
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ASTRO-D
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2 22581 55.1536 340.2391 0059420 38.7026 321.6988 2.00572136 27487
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1 22698U 93041A 96364.17241516 .00000081 00000-0 29621-4 0 5437
2 22698 89.5464 261.2518 0093535 51.4641 309.4894 14.21387465182128
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1 22700U 93042A 96364.98760781 .00000041 00000-0 10000-3 0 6292
2 22700 54.1627 220.3368 0063101 29.0995 331.2522 2.00562917 25677
NOAA 13
1 22739U 93050A 96364.91956873 .00000026 00000-0 39973-4 0 2307
2 22739 99.0674 321.7192 0010657 37.4602 322.7304 14.10981094174657
GPS BIIA-22
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2 22779 54.2461 279.2862 0013775 284.7108 75.1881 2.00554319 24409
Meteor 2-21
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2 22782 82.5504 192.3249 0022162 147.4477 212.8062 13.83065958168132
UFO F2
1 22787U 93056A 96358.74031733 -.00000062 00000-0 00000+0 0 7006
2 22787 3.9733 328.1413 0005072 296.7235 165.7906 1.00274628 10738
SPOT 3
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2 22824 98.5629 75.3188 0007123 27.5846 332.5713 14.27106650169750
AO-27
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IO-26
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2 22826 98.5658 77.2633 0010225 19.7179 340.4390 14.27822670169979
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1 22827U 93061E 96364.20666869 .00000016 00000-0 24059-4 0 5875
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2 22829 98.5629 76.9507 0010490 8.2821 351.8531 14.28146126169943
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2 22877 55.7699 41.3502 0042132 305.9534 53.6985 2.00561459 23323
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2 22912 0.3342 69.2572 0003900 166.5354 232.7612 1.00272995 9730
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2 22920 28.4717 288.3416 0002202 74.0956 285.9691 15.06679113168942
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TUBSAT-B
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Glonass 62
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2 23043 64.5755 317.1211 0005910 211.2684 148.6919 2.13102937 21145
Glonass 63
1 23044U 94021B 96364.16902437 -.00000041 00000-0 00000+0 0 4179
2 23044 64.5660 317.0798 0030414 207.8273 152.0104 2.13103072 21160
Glonass 64
1 23045U 94021C 96363.40837910 -.00000045 00000-0 00000+0 0 4184
2 23045 64.5497 317.1203 0010497 26.9530 333.0989 2.13102494 21143
GOES 8
1 23051U 94022A 96365.17376422 -.00000246 00000-0 10000-3 0 6274
2 23051 0.4304 85.3851 0004129 168.8241 192.6102 1.00270929 17335
MSTI 2
1 23101U 94028A 96364.54723821 .00005642 00000-0 82398-4 0 3906
2 23101 97.0689 195.9617 0010202 325.7987 34.2608 15.55996188149657
STRV-1A
1 23125U 94034B 96364.48346959 -.00000103 00000-0 53131-4 0 3726
2 23125 7.0065 153.3928 7234775 228.0958 42.2754 2.32967308 20672
STRV-1B
1 23126U 94034C 96343.93981000 .00009011 00000-0 34973-2 0 3240
2 23126 7.0541 162.0454 7232131 211.1422 69.7200 2.33257268 20236
Nadezhda 4
1 23179U 94041A 96362.79882475 .00000026 00000-0 11427-4 0 2457
2 23179 82.9457 93.1115 0035603 304.7246 55.0559 13.75688129123412
Glonass 65
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1 23203U 94050A 96364.01507534 .00000069 00000-0 00000+0 0 3797
2 23203 64.7665 197.5802 0007897 135.7873 224.3167 2.13102032 18551
Glonass 66
1 23204U 94050B 96363.31006116 .00000065 00000-0 00000+0 0 3987
2 23204 64.7546 197.6291 0014650 354.6035 5.4273 2.13102235 18539
Glonass 67
1 23205U 94050C 96362.25385156 .00000063 00000-0 00000+0 0 3836
2 23205 64.7614 197.6534 0001085 22.2993 337.7561 2.13102629 18511
DMSP B5D2-7
1 23233U 94057A 96365.12129137 .00000172 00000-0 11605-3 0 552
2 23233 98.8024 60.7851 0012507 348.6711 11.4181 14.12766022120491
OKEAN 1-7
1 23317U 94066A 96361.20963927 .00000223 00000-0 30292-4 0 2084
2 23317 82.5432 242.3641 0025341 172.9993 187.1576 14.74067238118826
ELEKTRO (GOMS)
1 23327U 94069A 96360.78938466 -.00000103 00000-0 00000+0 0 2346
2 23327 0.4246 99.5817 0001314 112.6584 242.8720 1.00272001 7926
RESURS 1-3
1 23342U 94074A 96363.09154481 .00000099 00000-0 24429-4 0 6346
2 23342 97.9423 55.2676 0001831 74.4905 285.6521 14.69889598115297
Glonass 68
1 23396U 94076A 96364.44428970 -.00000024 00000-0 00000+0 0 3625
2 23396 65.1698 77.6543 0030084 192.4726 167.5068 2.13102555 16406
Glonass 69
1 23397U 94076B 96363.68222596 -.00000023 00000-0 00000+0 0 3503
2 23397 65.1534 77.6860 0012504 314.0194 45.9276 2.13102016 16385
Glonass 70
1 23398U 94076C 96364.50453212 -.00000024 00000-0 00000+0 0 3654
2 23398 65.1464 77.6283 0003888 271.9224 88.0939 2.13101938 16417
LUCH (Altair-2)
1 23426U 94082A 96362.55866303 -.00000268 00000-0 00000+0 0 4476
2 23426 1.0421 263.4498 0002921 19.9893 109.0292 1.00264838 7446
RS-15
1 23439U 94085A 96364.31340970 -.00000039 00000-0 10000-3 0 1878
2 23439 64.8169 67.5354 0154811 164.3258 196.2532 11.27528037 82785
NOAA 14
1 23455U 94089A 96365.05574856 .00000054 00000-0 54268-4 0 8805
2 23455 98.9698 310.1613 0010552 50.0437 310.1661 14.11635757103087
Glonass 71
1 23511U 95009A 96362.58492256 -.00000050 00000-0 00000+0 0 2798
2 23511 64.6009 317.4156 0007080 231.8928 128.0369 2.13104375 14093
Glonass 72
1 23512U 95009B 96363.64416953 -.00000044 00000-0 00000+0 0 2868
2 23512 64.5778 317.3877 0007947 313.5278 46.3975 2.13101422 14111
Glonass 73
1 23513U 95009C 96364.40447342 -.00000040 00000-0 00000+0 0 3069
2 23513 64.5860 317.3770 0013388 210.4613 149.4625 2.13102914 14136
GMS 5
1 23522U 95011B 96361.58284086 -.00000283 00000-0 10000-3 0 1907
2 23522 0.4857 28.8889 0000605 186.3669 229.8386 1.00278062 6384
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DMSP B5D2-8
1 23533U 95015A 96365.04987224 .00000075 00000-0 64210-4 0 8067
2 23533 98.8432 5.0289 0006523 217.3964 142.6755 14.12769233 91282
OSC 1
1 23545U 95017A 96364.25067438 .00000249 00000-0 87713-4 0 1890
2 23545 69.9706 77.4734 0016088 270.3363 89.5939 14.45460166 91849
OSC 2
1 23546U 95017B 96364.21559829 .00000271 00000-0 93790-4 0 2233
2 23546 69.9777 77.7595 0015867 261.3516 98.5818 14.45472111 91849
Microlab 1
1 23547U 95017C 96364.22069507 .00000122 00000-0 51572-4 0 1612
2 23547 69.9781 77.4325 0016213 263.4963 96.4310 14.45632485 91855
OFEQ 3
1 23549U 95018A 96364.87699976 .00017495 00000-0 40718-3 0 4089
2 23549 143.3636 344.8168 0208722 351.1132 8.5979 15.20338130 96090
GFZ-1
1 23558U 86017JE 96363.80532495 .00002124 00000-0 28255-4 0 1917
2 23558 51.6533 210.6935 0005565 223.1698 136.8872 15.63499278620441
ERS-2
1 23560U 95021A 96363.21264826 -.00000031 00000-0 46224-5 0 3151
2 23560 98.5512 74.4710 0000829 81.1463 278.9818 14.32247049 88345
Spektr
1 23579U 95024A 96364.95302371 .00011432 00000-0 13426-3 0 5327
2 23579 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 92035
GOES 9
1 23581U 95025A 96362.40889671 .00000089 00000-0 10000-3 0 2982
2 23581 0.0165 254.8857 0003991 28.0801 184.9833 1.00276324 5863
Helios 1A
1 23605U 95033A 96363.68180125 .00000104 00000-0 28907-4 0 3791
2 23605 98.1397 296.7506 0001503 55.3005 304.8364 14.63833937 79019
UPM SAT 1
1 23606U 95033B 96362.23778593 .00000230 00000-0 49320-4 0 2403
2 23606 98.1201 297.0105 0007274 305.4662 54.5866 14.67332614 79029
CERISE
1 23607U 95033C 96364.25472764 .00000141 00000-0 33773-4 0 1437
2 23607 98.1207 298.8029 0005521 298.2746 61.7920 14.66989512 79334
TDRS 7
1 23613U 95035B 96363.79409425 .00000102 00000-0 00000+0 0 2764
2 23613 1.0856 82.0409 0001962 192.9172 297.3340 1.00266553 5336
Glonass 74
1 23620U 95037A 96362.78051941 .00000063 00000-0 00000+0 0 2270
2 23620 64.8138 197.4969 0018665 162.8800 197.2305 2.13102985 11135
Glonass 75
1 23621U 95037B 96363.89689661 .00000069 00000-0 00000+0 0 2388
2 23621 64.8284 197.4642 0018004 173.2234 186.8434 2.13102165 11159
Glonass 76
1 23622U 95037C 96363.48565102 .00000066 00000-0 00000+0 0 2429
2 23622 64.8148 197.4823 0037159 163.2409 196.9279 2.13102499 11143
Prognoz-M2
1 23632U 95039A 96362.51482150 -.00000471 00000-0 00000+0 0 1000
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2 23632 71.1630 248.1760 7732851 326.9610 350.0030 0.26346200 1368
SICH-1
1 23657U 95046A 96362.53152501 .00000192 00000-0 25968-4 0 1342
2 23657 82.5329 22.5977 0028510 138.5995 221.7392 14.73520703 71301
RADARSAT
1 23710U 95059A 96364.90818249 .00000142 00000-0 72025-4 0 2226
2 23710 98.5810 8.8123 0001126 58.5629 301.5664 14.29988672 60213
Glonass 79
1 23734U 95068A 96364.07296375 .00000070 00000-0 00000+0 0 2151
2 23734 64.8260 197.3781 0017305 328.5125 31.4272 2.13102099 8122
Glonass 78
1 23735U 95068B 96363.32628408 .00000065 00000-0 00000+0 0 2070
2 23735 64.8236 197.3855 0005378 200.8843 159.1443 2.13125057 8109
Glonass 77
1 23736U 95068C 96362.89961877 .00000064 00000-0 00000+0 0 1889
2 23736 64.8141 197.4133 0007068 185.0879 174.9509 2.13102117 8094
XTE
1 23757U 95074A 96360.85345406 .00000716 00000-0 30691-4 0 1100
2 23757 22.9799 187.0114 0013801 192.1341 167.8812 14.97749861 54233
Polar
1 23802U 96013A 96360.95384396 .00000049 00000-0 00000+0 0 921
2 23802 86.3323 23.9889 6527806 276.7308 18.1855 1.36264148 4173
1996010E
1 23824U 96010E 96359.52765300 .00444128 00000-0 53211-1 0 1522
2 23824 47.4289 199.9140 7145591 76.0524 349.6752 2.47145198 6894
GPS BIIA-25
1 23833U 96019A 96361.35001648 -.00000087 00000-0 00000+0 0 1241
2 23833 54.6478 340.1903 0028404 145.6441 214.5433 2.00564915 5535
Priroda
1 23848U 96023A 96364.95302371 .00011432 00000-0 13426-3 0 2200
2 23848 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 39125
MSX
1 23851U 96024A 96364.47653378 -.00000047 00000-0 00000+0 0 1589
2 23851 99.3986 348.0132 0006781 347.8720 12.2256 13.97475511 34771
SAX
1 23857U 96027A 96362.74155285 .00000922 00000-0 16503-4 0 467
2 23857 3.9543 142.6384 0013239 275.8350 85.0812 14.91685898 36098
MSTI 3
1 23868U 96031A 96363.24119229 -.00000386 00000-0 -60197-5 0 979
2 23868 97.1175 190.3413 0009463 182.3452 177.7758 15.46682235 34806
TOMS-EP
1 23940U 96037A 96363.78939788 .00002502 00000-0 11318-3 0 716
2 23940 97.4336 266.8297 0014273 27.5212 332.6756 15.21760654 27220
GPS BIIA-26
1 23953U 96041A 96359.27090176 -.00000050 00000-0 00000+0 0 958
2 23953 55.1057 100.6566 0020598 358.5109 1.4602 2.00562484 3283
ADEOS
1 24277U 96046A 96363.80540922 -.00000044 00000-0 00000+0 0 1264
2 24277 98.6118 77.9459 0000790 163.0215 197.0111 14.27634832 19057
FO-29
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1 24278U 96046B 96364.23223921 -.00000011 00000-0 28523-4 0 471
2 24278 98.5633 62.4492 0350774 266.6338 89.4603 13.52627680 18140
Soyuz TM-24
1 24280U 96047A 96364.95302371 .00011432 00000-0 13426-3 0 1240
2 24280 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 21026
FAST
1 24285U 96049A 96365.25881303 .00000756 00000-0 77998-4 0 485
2 24285 82.9917 117.5809 2206325 291.1706 46.8382 10.81673477 14152
Microsat
1 24291U 96050A 96364.23712763 .00026766 61402-5 18405-3 0 994
2 24291 62.7960 336.2075 0605290 125.1255 240.8108 14.68407669 17854
MO-30
1 24305U 96052B 96361.59304391 .00000204 00000-0 20364-3 0 552
2 24305 82.9321 122.1265 0030086 329.5013 30.4391 13.73087597 15376
GPS BIIA-27
1 24320U 96056A 96357.14058803 -.00000066 00000-0 00000+0 0 517
2 24320 54.6895 280.8441 0052349 108.6207 252.0932 2.00570173 1902
SAC-B/HETE
1 24645U 96061A 96362.56605077 .00000522 00000-0 33355-4 0 336
2 24645 37.9775 167.7622 0049501 2.1347 357.9618 15.14812993 8020
Progress M-33
1 24663U 96066A 96364.95302371 .00011432 00000-0 13426-3 0 379
2 24663 51.6512 216.9849 0013701 180.7852 179.4362 15.61894366 6260
1996068B
1 24668U 96068B 96365.02295234 .00240695 15329-5 54336-3 0 548
2 24668 36.3887 236.9062 1756463 159.5540 208.5314 12.24057816 3138
1996069A
1 24670U 96069A 96365.11393753 -.00008726 00000-0 -13883-3 0 396
2 24670 65.0415 232.5798 0009903 271.9306 88.0654 15.52047278 2887
INMARSAT III F3
1 24674U 96070A 96364.21298193 -.00000129 00000-0 00000+0 0 137
2 24674 2.6748 286.8762 0021193 122.5138 283.0068 1.00265982 100
1996070B
1 24675U 96070B 96361.84055799 -.00000150 00000-0 00000+0 0 119
2 24675 22.7065 282.4578 7017907 185.5778 157.8790 2.22345318 193
Cosmos 2336
1 24677U 96071A 96364.53484998 .00000015 00000-0 00000+0 0 61
2 24677 82.9389 211.4133 0022230 237.1643 122.7369 13.71046889 1263
1996071B
1 24678U 96071B 96364.01391560 .00000015 00000-0 00000+0 0 179
2 24678 82.9307 211.7845 0020332 214.1160 145.8785 13.72692567 1198
BION 11
1 24701U 96073A 96364.02481603 .00049321 79639-5 77763-4 0 95
2 24701 62.8047 233.7443 0119590 108.3268 253.0915 15.91895966 714
1996073B
1 24702U 96073B 96364.89776319 .00238674 80229-5 33300-3 0 188
2 24702 62.7923 230.3309 0108469 106.3946 254.9172 15.94977757 857
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

Date: Mon, 30 Dec 1996 18:37:00 -0500
From: Susan Driggers <Insight@cris.com>
Subject: Total Newbie Looking for help

I am totally new to satellite communications and am looking for some
advice on the bare minimum needed to get started. I am operating on a very
restricted budget so anything that could be homebrewed would be
appreciated.
I currently have a HT 202 that I am dedicating to sattelite. Everything
else I will need advice on. THanks !
--- 73
Susan Driggers
KF4OBL
Real Radios Glow in the Dark !

End of Ham-Space Digest V96 #458
****

End of Ham-Space Digest V96 #459
****

End of Ham-Space Digest V96 #460
****

End of Ham-Space Digest V96 #461
****

End of Ham-Space Digest V96 #462
****

End of Ham-Space Digest V96 #463
****

Date: (null)
From: (null)

SB KEP ARL ARLK097
ARLK097 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

```
Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 96365.09931830 .00000010 00000-0 -51941-5 0 3044
2 18129 82.9241 3.7231 0011802 339.6863 20.3788 13.72372947477040
UO-11
1 14781U 84021B 96364.96630783 .00000071 00000-0 19851-4 0 09543
2 14781 97.8156 347.1626 0011035 179.2324 180.8903 14.69512489686408
RS-12/13
1 21089U 91007A 96365.13763955 .00000050 00000-0 36428-4 0 09649
2 21089 82.9221 44.0290 0030751 49.3645 311.0179 13.74076005295946
UO-14
1 20437U 90005B 96365.18520891 .00000032 00000-0 29375-4 0 02395
2 20437 98.5334 84.4194 0011276 349.9522 10.1438 14.29944235362068
RS-15
1 23439U 94085A 96365.11165315 -.00000039 00000-0 10000-3 0 01910
2 23439 64.8167 66.2446 0154785 164.1798 196.4034 11.27528009082876
AO-16
1 20439U 90005D 96365.13576490 .00000017 00000-0 23318-4 0 00435
2 20439 98.5489 86.9487 0011689 351.1810 8.9221 14.29994548362074
DO-17
1 20440U 90005E 96364.78872888 .00000031 00000-0 28831-4 0 00450
2 20440 98.5505 87.3563 0012745 350.1639 9.9293 14.30137315362058
WO-18
1 20441U 90005F 96364.99269554 -.00000009 00000-0 13420-4 0 00458
2 20441 98.5520 87.4786 0012378 351.6212 8.4762 14.30105019362083
LO-19
1 20442U 90005G 96365.18330293 .00000050 00000-0 35989-4 0 00459
2 20442 98.5548 88.2505 0013064 351.3288 8.7673 14.30217279362137
FO-20
1 20480U 90013C 96365.00249566 -.00000013 00000-0 39482-4 0 09409
2 20480 99.0225 352.5895 0541267 40.6829 323.3421 12.83236086323009
AO-21
1 21087U 91006A 96364.96224735 .00000094 00000-0 82657-4 0 07836
2 21087 82.9408 176.8172 0036461 21.9693 338.3016 13.74576353296907
UO-22
1 21575U 91050B 96365.12250587 .00000039 00000-0 27277-4 0 07465
2 21575 98.3277 65.4337 0008628 41.6780 318.5064 14.37051083286203
KO-23
1 22077U 92052B 96364.87138801 -.00000037 00000-0 10000-3 0 06363
2 22077 66.0774 139.7421 0014843 254.5295 105.4083 12.86300142205970
KO-25
1 22828U 93061F 96365.15311834 -.00000005 00000-0 15307-4 0 05066
2 22828 98.5610 77.2690 0011076 5.2480 354.8818 14.28163818138087
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IO-26
1 22826U 93061D 96365.21853299 -.00000004 00000-0 15822-4 0 5248
2 22826 98.5658 77.2633 0010225 19.7179 340.4390 14.27822670169979
AO-27
1 22825U 93061C 96365.16708120 .00000006 00000-0 20046-4 0 05282
2 22825 98.5649 77.0060 0009691 19.2082 340.9465 14.27713692169952
FO-29
1 24278U 96046B 96365.19384463 .00000010 00000-0 49049-4 0 00548
2 24278 98.5631 63.2820 0350761 264.1510 91.9553 13.52627971018272
MO-30
1 24305U 96052B 96364.87216783 .00000204 00000-0 20364-3 0 00812
2 24305 82.9347 119.7055 0030776 320.2559 39.6340 13.73088514015827
Mir
1 16609U 86017A 96365.46485841 .00003355 00000-0 43775-4 0 9236
2 16609 51.6544 214.4000 0013679 182.2114 177.8729 15.61890800620686

Keplerian bulletins are transmitted twice weekly from W1AW. The
next scheduled transmission of these data will be Saturday, January
4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

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End of Ham-Space Digest V96 #464
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End of Ham-Space Digest V96 #465
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--==06570182600123==--
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4. Message from Pat Clawson

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: george.tamayo@infosoftpub.com
Message-ID: <62114677@infosoftpub.com>
Source record: 20458

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

C(>George...
C(>
C(>
C(>My remarks concering BBS systems were not meant in any way as
C(>a slight against ham radio operators. I've personally been involved
C(>in commercial broadcasting AND amateur radio activities for over
C(>20 years, and I have a very high regard for hams and recognize their
C(>public service activities and technical expertise.
C(>
C(>Still, there is a world of difference between commercial broadcasters
C(>-- who have tens of millions of dollars wrapped up in their stations
C(>-- and the local ham, who has at most several thousand dollars. I was
C(>attempting, perhaps somewhat inartfully at a very late hour, to make
C(>a similar comparison between BBS sysops and Web site operators.
C(>
C(>I hope you will post this to those newsgroups and lists that you
C(>forwarded my original message.
C(>
C(>Regards,
C(>
C(>Pat Clawson
C(>TeleGrafix Communications
C(>
C(>
C(>

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 The UART's won't take this speed, Captain

5. Message from Pat Clawson

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: george.tamayo@infosoftpub.com
Message-ID: <69754678@infosoftpub.com>
Source record: 20459

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

C(>George...
C(>
C(>
C(>My remarks concering BBS systems were not meant in any way as
C(>a slight against ham radio operators. I've personally been involved
C(>in commercial broadcasting AND amateur radio activities for over
C(>20 years, and I have a very high regard for hams and recognize their
C(>public service activities and technical expertise.
C(>
C(>Still, there is a world of difference between commercial broadcasters
C(>-- who have tens of millions of dollars wrapped up in their stations
C(>-- and the local ham, who has at most several thousand dollars. I was
C(>attempting, perhaps somewhat inartfully at a very late hour, to make
C(>a similar comparison between BBS sysops and Web site operators.
C(>
C(>I hope you will post this to those newsgroups and lists that you
C(>forwarded my original message.
C(>
C(>Regards,
C(>
C(>Pat Clawson
C(>TeleGrafix Communications
C(>
C(>
C(>

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 The UART's won't take this speed, Captain

6. how about keeping failed etc.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: steve <kd6fyk@wco.com>
Message-ID: <32CA29F9.624@wco.com>
Source record: 20460

darn mail and hop count and undel and undisirable etc the blank outta here,it is giving my confuzer the runs.

7. Undeliverable mail

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: mailer-daemon@n3baf.COM
Message-ID: <290959193108734976@n3baf.com>
Source record: 20461

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ham.space@N3BAF.COM

----- Original message follows -----
Received: from mailbox.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by n3baf1.n3baf.com
(NTMail 3.02.12) with ESMTP id xa000257 for <ham.space@n3baf.com>; Wed, 1 Jan 1997 09:25:47
-0500
Received: from mail.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by UCSD.EDU (8.8.3/8.6.9) with
ESMTP id FAA27175 for <ham-space-list@mailbox.ucsd.edu>; Wed, 1 Jan 1997 05:58:11 -0800
(PST)
Received: by mail.ucsd.edu; id EAA20161
sendmail 8.8.3/UCSD8.2.2
Wed, 1 Jan 1997 04:30:46 -0800 (PST)
Errors-To: owner-ham-space@UCSD.EDU
Sender: owner-ham-space@UCSD.EDU
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id EAA20145
sendmail 8.8.3/UCSD8.2.2
Wed, 1 Jan 1997 04:30:43 -0800 (PST)
Message-Id: <199701011230.EAA20145@mail.ucsd.edu>
Date: Wed, 1 Jan 97 04:30:42 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@UCSD.EDU>
Errors-To: Owner-Ham-Space@UCSD.EDU
Reply-To: Ham-Space@UCSD.EDU
Precedence: List
Subject: Ham-Space Digest V96 #467
To: Ham-Space@UCSD.EDU
X-Info: Evaluation version at n3baf1.n3baf.com

Ham-Space Digest Wed, 1 Jan 97 Volume 96 : Issue 467

Today's Topics:
how about keeping failed etc.
Long Delayed Echo mysteries...
Message from Pat Clawson (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 01 Jan 1997 01:10:17 -0800
From: steve <kd6fyk@wco.com>
Subject: how about keeping failed etc.

darn mail and hop count and undel and undisirable etc the blank outta
here,it is giving my confuzer the runs.

Date: Tue, 31 Dec 96 22:26:27 GMT
From: pbs@iaccess.za (J. L.)
Subject: Long Delayed Echo mysteries...

Long Delayed Echo mysteries...

Hi,
I'm doing some research for a documentary about anomalies. One of the
subjects I'm interested in is that of LDE's. I have done some reading on
the subject and noted a few experiments - however, I'm looking for new
information & experiences which may help to throw more light on the matter.

Of especial interest is the geographic "preferences" of LDEs. I noted for
example that some evidence pointed to LDEs being more prevalent in
the Polar regions. Do LDE's have any other preferences? Also, I'm
interested in the various characteristics of the LDEs. I noted some
saying that it tends to occur when "opening up" a frequency.

If you have had any experiences, or know of further literature or people
I can consult - I would very much appreciate it.

I have posted this in several newsgroups since I wasn't quite sure
which is the best place to go, so if this is out of place - I apologise.

If you can help in any way, kindly reply by e-mail. Thanks.

Cheers, Jan...
* Ignorant people think it's the noise which fighting cats make
that is aggravating, but it ain't so; it's the sickening
grammar they use. (Mark Twain)
* No one's life, liberty or property is safe while
the legislature is in session. (Mark Twain)
* What do politicians and porn stars have in common? They're both
experts at changing positions in front of the camera.

Date: Wed, 01 Jan 1997 00:41:00 (PST)
From: george.tamayo@infosoftpub.com (George Tamayo)
Subject: Message from Pat Clawson

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

C(>George...
C(>
C(>
C(>My remarks concering BBS systems were not meant in any way as
C(>a slight against ham radio operators. I've personally been involved
C(>in commercial broadcasting AND amateur radio activities for over
C(>20 years, and I have a very high regard for hams and recognize their
C(>public service activities and technical expertise.
C(>
C(>Still, there is a world of difference between commercial broadcasters
C(>-- who have tens of millions of dollars wrapped up in their stations
C(>-- and the local ham, who has at most several thousand dollars. I was
C(>attempting, perhaps somewhat inartfully at a very late hour, to make
C(>a similar comparison between BBS sysops and Web site operators.
C(>
C(>I hope you will post this to those newsgroups and lists that you
C(>forwarded my original message.
C(>
C(>Regards,
C(>
C(>Pat Clawson
C(>TeleGrafix Communications
C(>
C(>
C(>

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 The UART's won't take this speed, Captain

Date: Wed, 01 Jan 1997 00:41:00 (PST)
From: george.tamayo@infosoftpub.com (George Tamayo)
Subject: Message from Pat Clawson

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

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George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 The UART's won't take this speed, Captain

End of Ham-Space Digest V96 #467
****

8. Re: ICOM CT-17 (CI-V) Interface programs out there?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: olympus@jimdee.prestel.co.uk
Message-ID: <32cabe6f.22237966@news.prestel.co.uk>
Source record: 20462
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

On Tue, 31 Dec 1996 18:37:30 GMT, Tom Valenti <valenti@eskimo.com>
wrote:

>I am looking for bare bones, or better, shareware programs used by us to
>tie our rigs to the PC. My shack will be automating an IC-R7000, IC-735,
>IC-275H, and a IC-475H. If you have a program (BOTH binary and source
>code) I would love to download it.

Should you get something that actually works Tom, please post
or EMail details. TIA.

- Jim
jayemd@cix.compulink.co.uk | Work is the curse of the
olympus@prestel.co.uk | drinking classes.
g4rga@gb7tjf.#45.gbr.eu | - Oscar Wilde 1854-1900

9. Amateur Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: abarrese@vivanet.com
Message-ID: <32cad6e2.833143@news.vivanet.com>
Source record: 20463

Can anyone tell me what amateur satellites are still active and ones
that are not, in that order please.

Thanks
abarrese@vivanet.com

10. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: czeczmar@free.polbox.PL
Message-ID: <199701012210.XAA21928@free.polbox.pl>
Source record: 20464

subscribe

Polbox On-Line Service Internet Services Provider
+48 22 6656363 Web Pages Design
FREE EMAIL ACCOUNTS http://free.polbox.pl

11. Mir Freq change.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-01 00:00:00 UTC
From: doslover@juno.COM
Message-ID: <19970101.115904.6919.7.doslover@juno.com>
Source record: 20465

Greetings all and Happy 1997.

Just a reminder that Mir has switched the offset on the 2 meter station.

We all now listen on 145.800 and we transmit on 145.200

(I KNOW some of you are tired of talking about this..)
But, I though a reminder would be good to get the word out to others who
do not read this listserv, This morning I heard A LOT of stations who
were operating on the old
offset. Have fun and saty safe in '97!

Jason N1RWY
Fn54kd

12. Re: Mir Freq change.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-02 00:00:00 UTC
From: fer-tree@pacbell.net
Message-ID: <5af4kn$16d@news4.snfc21.pacbell.net>
Source record: 20466

doslover@juno.COM (Jason K Baack) wrote:

>Greetings all and Happy 1997.

>Just a reminder that Mir has switched the offset on the 2 meter station.

>We all now listen on 145.800 and we transmit on 145.200

>(I KNOW some of you are tired of talking about this..)
>But, I though a reminder would be good to get the word out to others who
>do not read this listserv, This morning I heard A LOT of stations who
>were operating on the old
>offset. Have fun and saty safe in '97!

>Jason N1RWY
>Fn54kd
Is packet still 145.80 simplex, or is it also using a 600 khz split?

13. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-02 00:00:00 UTC
From: w6uv@ccnet.com
Message-ID: <32cb5685.10084050@news.ccnet.com>
Source record: 20467
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

:You'll need a pair of steerable yagis or helixes, for mode U/V. You can
:build these yourself and save a bunch of money. When the sat is near apogee,
:it hangs in virtually the same spot in the sky for long periods, so you can
:aim the antennas by hand, no need for auto-tracking, or even for rotators.
:The antennas don't have to be very high off the ground, since they are
:looking up. You can use a tripod or post mount and turn them directly
:by hand as needed. The antennas can be made from a length of 2x2 and use
:aluminum clothesline wire for elements. There are a number of antenna
:programs available on the net which can optimize the design for you.

I thought the P3D power output and antenna gain is high enough to
allow the use of omni antennas on the ground. Is this not true?

14. wd: d2mac encoder!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-02 00:00:00 UTC
From: peter smit <peter_smit@hoogovens.e-mail.com>
Message-ID: <32CAF8A8.5CEF@hoogovens.e-mail.com>
Source record: 20468

I would like to buy a d2mac encoder (no decoder)
if you have any information where i can get it.

Please help me

Peter smit
Peter_smit@hoogovens.e-mail.com

15. What does MIR look like?????

Newsgroup: rec.radio.amateur.space
Date: 1997-01-02 00:00:00 UTC
From: j <john@g7mri.demon.co.uk>
Message-ID: <eiUaGEApb5yyEwRv@g7mri.demon.co.uk>
Source record: 20469

Hello all,

Can anyone send me a jpg of what MIR looks like please as
i have started to get into this MIR stuff! i can hear it but so
far not get back to them, o well one day i may!

73's de John@G7MRI.DEMON.CO.UK
--
jOHN,

16. Re: new mir freq for 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-01-02 00:00:00 UTC
From: Jeff Griffin <griffinj@admin.tc.faa.gov>
Message-ID: <5agjsf$gnd@faatcrl.faa.gov>
Source record: 20470

Jim, I read your message about the change on January 1. I talked to kc5tzq in the morning New Year's day. John said he was glad I got the frequency change. But no one mentioned the fact that the paket frequencies are now the same as voice, no longer simplex that is. So, the new paket freqencies are now 145.200 up 145.800 down. Everyone in the group have a Happy and prosperious New Year.

73 Jeff

17. Feng Yung 2 line NASA telemetry data wanted of Japanese satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: Geert Pirens <pass@glo.be>
Message-ID: <01bbf932$b50e12a0$LocalHost@default>
Source record: 20372

Hello your all

Can someone help me on the telemetry 2 line elements of the Feng Yung satellite.

All information is welkom !!

Thanks in advance

Geert Pirens ONL2057

18. New MIR frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bbf923$4d195ce0$2fbc92ce@bjarts.uslink.net>
Source record: 20373

MIR is now officially on 145.800 -600 for both packet and voice. I will
have more on this in the upcoming AMSAT NEWS SERVICE bulletins. This change
is effective as of Jan 1. 1997.
BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

19. ? TR9000 and RS/10

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: tedh@xcelco.on.ca
Message-ID: <5aivi2$iih@nr1.toronto.istar.net>
Source record: 20374

Hi

A friend of mine without internet acess has the Kenwood TR9000 and
wishes to work RS/10 with it. Unfortunately it will not change
frequency when he transmits so its difficult to follow the satelite.
Has anyone any idea if the unit can be modified to change frequency
while transmitting?
73 Ted VE3ONJ

20. Re: Internet satellite services

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: dcinege@fuckthejunkmailers.org
Message-ID: <5aj167$2ob@earth.superlink.net>
Source record: 20375
Cross-posted to: rec.video.satellite.dbs,alt.satellite.tv.crypt,rec.radio.scanner,rec.radio.amateur.space

In <851794158.12184@dejanews.com>, dmann10@juno.com writes:
>Besides DirectPC what other home Internet satellite service
>companies are there? Thanks in advace,

I just pulled up this company with yahoo:

http://www.techguardian.com/

They seem to have everything from 400K receive only (like DirectPC) to
receive and transmit to 3Mbps!!! (Screw Bell Atlantic! Who needs 'um!)

Unfortunately the webpage has no prices. : <

I called up and the Service they offer that is equivalent to DirectPC has
software for '95, NT, and Unix (alright!! Linux!) with network options. They
charge a flat $16 a month per 64mb. Hughes wants $26 a month for this.

These guys seem like the way to go.....as far as I'm concerned that
over priced Windows '95 only peice of of shit DirectPC can go suck
dirty donkey balls!

Dave 'Kill a Cop' Cinege (aka Psychopath #3) --- Super Genius at Large
"Early one morin' while making the rounds, I took a shot a cocaine and
I shot my baby down......shot her down then I went bed....an I stuck that
lovin' .44 beneath my head." George Thorogood

http://www.psychosis.com/

Libertarian Party 1-800-682-1776 http://www.lp.org/

21. test

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: VTM Lijnencentrum <lijnencentrum@qmserver.vtm.be>
Message-ID: <32CD0064.6426@qmserver.vtm.be>
Source record: 20376

```
test
```

22. test2

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: VTM Lijnencentrum <lijnencentrum@qmserver.vtm.be>
Message-ID: <32CD0195.7D89@qmserver.vtm.be>
Source record: 20377

```
Test2 TNX
```

23. AEA ST-1 tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: Walter <ON4BCB@dma.be>
Message-ID: <32CD359E.78A8@dma.be>
Source record: 20378

Hello
I would like to know who is using the ST-1 tracker under Windows
with the WISP package.

What is the actual Driver version

Pse send me an Email

ON4BCB@dma.be

24. ARLS001 MIREX QSOs made with four schools

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls001.1997@arrl.org>
Source record: 20379
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS001
ARLS001 MIREX QSOs made with four schools

ZCZC AS01
QST de W1AW
Space Bulletin 001 ARLS001
From ARRL Headquarters
Newington, CT January 3, 1997
To all radio amateurs

SB SPACE ARL ARLS001
ARLS001 MIREX QSOs made with four schools

Space success: MIREX QSOs made with four schools

''Yes, Yes, Yes.'' That was the reaction of Bruce Burke, WB4YUC, in late December as he helped students at Silver Lakes Middle School in North Lauderdale, Florida, talk with US astronaut John Blaha, KC5TZQ, aboard the Russian space station Mir. The contact--the first scheduled school QSO between unlicensed students and a NASA astronaut-ham living on board Mir--marked a new page in the history of ham radio in space. On Friday December 27, Blaha spoke with 17 students at the Silver Lakes Middle School. Halfway through the contact, Mir Commander Valery Korzun extended his greetings to the students and congratulated them for being the first Americans to take part in this kind of contact. At the end of the QSO, the students wished Blaha a happy new year. School group contact coordinators for the Motorola ARC Kai Siwiak, KE4PT, and Burke said signal strength was outstanding throughout the pass.

The FCC only recently approved third-party contacts with Blaha from the Russian Mir space station. However, the FCC's permission only extends through Blaha's mission. Over the past year, the SAREX team has worked closely with the Mir International Radio EXperiment (MIREX) team in the United States, the Space Amateur Funk EXperiment (SAFEX) team in Germany and the Mir Amateur Radio EXperiment (MAREX) team in Russia to allow unlicensed school students in the US to talk to the astronauts on Mir.

Three other MIREX QSOs also went off on schedule. On Saturday, December 28, students at Granby High and Mary Calcutt Elementary schools in Hampton, Virginia, successfully contacted Blaha aboard Mir and got to put a dozen questions to the astronaut. Blaha attended Mary Calcutt and graduated from Granby High School in the 1960s. The 10-minute contact was conducted from the Amateur Radio

satellite station exhibit, KE4ZXW, at the Virginia Air and Space Center. Blaha told the students he had some Granby/Calcutt memorabilia on board Mir that he expects to return to the schools.

Monday, December 30, students at The Johnson School in Warrenville, Illinois, got to ask Blaha how the Mir crew emptied the trash. In all, the students got to ask 15 questions as an audience of some 900 people (including approximately 450 youngsters) looked on. Enthusiasm at all three schools was high despite the fact that the students were on Christmas break, and volunteers, parents and teachers had to take time away from their holiday activities to arrange for equipment and operators.

Friday, January 3, students at Ririe Elementary School, Ririe, Idaho, enjoyed a successful 10-minute QSO with Blaha. Seventeen excited third graders and their teacher, Tina Anderson, got to ask questions
of the astronaut.

As a result of the QSOs, all four schools got a lot of media attention. ''These Mir QSOs are so very important since competition is accelerating against SAREX being selected as a payload on the last few orbiting shuttle missions of 1997 and 1998 prior to International Space Station activities,'' said Rosalie White, WA1STO, ARRL Educational Activities Department manager.

Four more schools have been scheduled for contacts before the end of Blaha's mission in mid-January. Jerry Linenger, KC5HBR, will take Blaha's place on Mir.

Schools wishing to arrange contacts with astronauts aboard a US space shuttle carrying the SAREX payload should submit a SAREX application to the ARRL Educational Activities Department (EAD), e-mail ead (at) arrl.org. More information about the MIREX and SAREX programs is available at http://www.arrl.org or check the Mir Web page at http://www.osf.hq.nasa.gov/mir/.
NNNN
/EX

25. Re: NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: Rainer.Redweik@t-online.de
Message-ID: <5aiar9$1ci@news00.btx.dtag.de>
Source record: 20380

31-Dez-96 22:05:12: TS Kelso has written to the theme
"NORAD Two-Line Orbital Element Set Format":

...

> Data for each satellite consists of three lines in the following format:

...

> Line 1
> Column Description
> 01-01 Line Number of Element Data
> 03-07 Satellite Number
> 10-11 International Designator (Last two digits of launch year)
> 12-14 International Designator (Launch number of the year)
> 15-17 International Designator (Piece of launch)
> 19-20 Epoch Year (Last two digits of year)
^^^^^ ^^^^^^^^^^

Hei,

I'm interested, how looks out the Epoch Year in 2000.

Was it 00 or 100 ?

This is importend, because I'm asking me, how many calculation-
programs work after 1999.

So long !

Rainer

--
Bewahre mich davor zu wissen, was ich nicht wissen muï¿½.
Bewahre mich davor, auch nur zu wissen, daï¿½ es Wissenswertes gibt,
von dem ich nichts weiï¿½.
Bewahre mich davor zu wissen, daï¿½ ich beschlossen habe, nichts von
den Dingen zu wissen, die nicht zu wissen ich beschlossen habe.
Douglas Adams

26. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan3.224328.6949@ke4zv.atl.ga.us>
Source record: 20381
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In article <32cb5685.10084050@news.ccnet.com> w6uv@ccnet.com writes:
>I thought the P3D power output and antenna gain is high enough to
>allow the use of omni antennas on the ground. Is this not true?

P3D will have more power, but from what I understand that power will
be used to have more than one mode active at the same time, IE the
power will be spread over more bandwidth. So you'll still need at
least a minimum Oscar 10 class receiving station for most activities
near apogee. At perigee it should kick butt, but it will spend a lot
more time out toward apogee so you should plan your station accordingly.

One big advantage will be the 3-axis stablization it will use.
That means the gain antennas will always be nadir pointing.
The problems we had with O10 and O13 due to poor squint angles
should be gone. It won't have to switch to its omni antennas at
perigee. And spin modulation shouldn't be an issue either. This
will lessen Earth station requirements somewhat. I don't know
if omni antennas will suffice, though. The receivers on P3D
won't be any better than those on O13, so you'll still need a
fair amount of uplink ERP even with gain antennas on the satellite.
I suppose you could use an amp into an omni, but it seems to me to
be better to use steerable beams for both up and down links.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

27. Re: MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: russell@probe.net
Message-ID: <5ak1tidae1@jake.probe.net>
Source record: 20382

dwittich@concentric.net (Doug Wittich) writes:

>And with nationwide APRS activity on 145.79, that's a problem for
>many, as well. Folks in Indianapolis want APRS to move from it's
>coordinated frequency. Seems like MIR could have researched a bit
>and tried to coordinate before they moved.

Hmm, seems to me that there was somewhat of an uproar among the amateur satellite community when APRS started up on 145.79, and they were basically ignored. I think it serves the APRS crowd right.

Like it or not, 145.8 is within the satellite band, and the APRS people knew full well how close they were to it when they started up. Only thing is that they weren't terribly worried about it, because all they'd be doing is drowning out the satellites to ground stations. Now that the situation is reversed, they're yelling.

145.79 is supposed to be for experimental use, and once APRS was out of the experimental stage, long ago, they should have moved off.

APRS is a great program, but IMHO the people who placed it so close to the satellite band when it's specifically /designed/ for wide-area coverage and high-output relays were inconsiderate.

Now, 145.2, that's another story.

--
Tim Russell System Admin, Probe Technology email: russell@probe.net
"Apache is our biggest competitor. It's gaining share faster than Netscape."
- Bill Gates

28. where is mir uhf?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: steve <kd6fyk@wco.com>
Message-ID: <32CD9216.274C@wco.com>
Source record: 20383

?????????

29. used wefax / apt gear

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: "Jimmy D. Burrell" <jburrell@inst.com>
Message-ID: <01bbf9d1$1c7f3380$a629e5cd@bigboy>
Source record: 20384

Hello,

I'm looking for an inexpensive, moderate to good quality, wideband 137MHz
receiver for apt / wefax, used or new. Also, any other related equipment
for this (hobby for me) such as pre amps, antennas, dishes, software, etc.
Primarily interested in used gear but recommendations on the best of the
new gear appreciated. Anyone have any recommendations or anything for sale?

Thanks for your help. BTW.. I do have Dr. Ralph E. Taggart's book on
Weather satellites.

73
Jim
jburrell@inst.com

30. PK900 with WISP ????

Newsgroup: rec.radio.amateur.space
Date: 1997-01-03 00:00:00 UTC
From: Charlie Rubenstein <rubenc@iglou.com>
Message-ID: <32CC7ED6.4E48@iglou.com>
Source record: 20471

I had WISP running fine with a PK96 TNC set as a TNC-2. I recently got a 9600 baud card for my PK900 TNC, and when I set it up to run in place of the PK96, NOTHING worked. I reset the TNC type to PK900, and even with strong signals, nothing appears on MSPE. I reset the TNC type to TNC-2, with non improvement. Does anyone here have a PK900 running with WISP?

WHAT AM I DOING WRONG?

Charlie KB8BWE
rubenc@iglou.com

31. Re: Amateur Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: Adriaan <pe1khp@pi.net>
Message-ID: <32CE10F1.7DD0@pi.net>
Source record: 20385

Anthony wrote:
>
> Can anyone tell me what amateur satellites are still active and ones
> that are not, in that order please.
>
> Thanks
> abarrese@vivanet.comGo to the amsat page...

73, adriaan

--
Cuagn, Adriaan
////
(o o)
--ooOO--(_)--OOoo--
VHF DX AmateurRadio Station PE1KHP JO22XE
Home site http://home.pi.net/~adpe1khp/home.htm
Pakect Radio pe1khp@pi8apd

Use 70cm, don't give it to the LPD-boys

Member of the dutch radioclub Veron (IARU), member of VHF
commitee and chair-man of the local-club Apeldoorn
----

32. CD-R Media for Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: tccs@sprintmail.com
Message-ID: <5aksic$i8i@newsfep3.sprintmail.com>
Source record: 20386

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

33. KC5TZQ qsl address needed

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5amjklgsn1@news.mhv.net>
Source record: 20387

Well I am so PUMPED, I FINALLY made a voice qso with MIR! Talked to John at 10:52 am this morning. Do I send the QSL to Dave Larsen or is there another address for John's QSLs? Post or e-mail appreciated! After 2 years of trying I finally got through! Thanks again John for coming back to me and the nice qso, it was an honor..

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

34. Re: where is mir uhf?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: Al Williams <otheral@erols.com>
Message-ID: <32CEED7A.4DC6@erols.com>
Source record: 20388

steve wrote:
>
> ?????????

uplink 435.750 downlink 437.950 pl 141.3
enjoy
cul n3tyd Al

35. Re: KC5TZQ qsl address needed

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: Stan Vandiver <w4sv@pla-net.net>
Message-ID: <32CED2EE.1E36@pla-net.net>
Source record: 20389

Hi Tom... CONGRATULATIONS!

John is a member of the MIR crew, thus your QSO was with the MIR and Doc Dave
should be able to provide your QSL card. I haven't heard of any other schemes
for cards from KC5TZQ. The card from Dave may or may not reflect "which"
cosmonaut/astronaut was at the control... so just keep your own log of the
contact, and annotate the card yourself if Dave doesn't. I've not worked them
on voice, only packet... but I know the THRILL! I've made 13 shuttle contacts
in the past 3 years, and the excitement never seems to diminish.

73,
Stan/W4SV (ex-KD9BE)
Portage, Indiana

trandall@mhv.net wrote:
>
> Well I am so PUMPED, I FINALLY made a voice qso with MIR! Talked to John
> at 10:52 am this morning. Do I send the QSL to Dave Larsen or is there another
> address for John's QSLs? Post or e-mail appreciated! After 2 years of trying
> I finally got through! Thanks again John for coming back to me and the nice
> qso, it was an honor..
>
> Tom
>
> Tom Randall Amateur Radio - KB2SMS
> trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
> Member: AAVSO Solar Division
>
> Opinions herein are mine and may not be that of MHV.NET!

36. Re: where is mir uhf?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: steve <kd6fyk@wco.com>
Message-ID: <32CED587.56C@wco.com>
Source record: 20390

```
Al Williams wrote:
>
> steve wrote:
> >
> > ?????????
>
> uplink 435.750 downlink 437.950 pl 141.3
> enjoy
> cul n3tyd Al

al,thanks for reply.what i should have posted is:why haven't i heard mir
uhf for 7 days?
73 steve
```

37. Re: where is mir uhf?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: jdawdy@juno.com
Message-ID: <32cedf7f.0@206.103.128.3>
Source record: 20391

steve <kd6fyk@wco.com> wrote:>Al Williams wrote:
>>
>> steve wrote:
>> >
>> > ?????????
>>
>> uplink 435.750 downlink 437.950 pl 141.3
>> enjoy
>> cul n3tyd Al
>
>al,thanks for reply.what i should have posted is:why haven't i heard mir
>uhf for 7 days?
>73 steve

I heard the UHF repeater playing a recorded message regarding the new freqs the other day.
It saiunded about 30KHZ below the regular receive freq.
Havn't heard anything since though.

38. KPC9612&Wisp

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: Cees Slager <cees@mecom.nl>
Message-ID: <01bbfa71$03587d80$8873b7c2@pentium133>
Source record: 20392

I have the Kantronics KPC 9612 TNC. I would like to use it together with
Wisp for Sat use. Is there anyone who can tel me how to set up the KPC9612
I have tried it in Kiss mode but this does not work.
Any solution ?

39. Re: Feng Yung 2 line NASA telemetry data wanted of Japanese satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: gkennedy@axionet.com
Message-ID: <5ak7cvdd1@binky.axionet.com>
Source record: 20393

"Geert Pirens" <pass@glo.be> wrote:

>Hello your all

Hello Geert !

>Can someone help me on the telemetry 2 line elements of the Feng Yung
>satellite.

>All information is welkom !!

Feng Yun was not a Japanese satellite, but a Chinese one. I don't
think it is transmitting now. But here are the elements as of
Dec. 30/96:

Feng Yun1-2
1 20788U 90081A 96364.86770033 .00000262 00000-0 20170-3 0 2126
2 20788 98.8100 3.6070 0014589 318.2048 41.8004 14.01382899323507

```
*************************************************************************
* Geoff L. Kennedy ** Located on the WEsT Coast of *
* "Kennedy's Space Centre" 8-) ** Beautiful British Columbia ! *
* E-mail: gkennedy@axionet.com ** Coquitlam, BC, Canada *
*************************************************************************
```

40. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-01-04 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32CE2472.7498@mailhost.cyberramp.net>
Source record: 20394

http://www.cyberramp.net/~johnf

41. Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: lewedward@aol.com
Message-ID: <19970105004700.TAA05099@ladder01.news.aol.com>
Source record: 20395

If anyone knows when the next STS is, please advise.

42. Re: Nice Visual on Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: jrespler@injersey.com
Message-ID: <5anhc2$3k4@news.injersey.com>
Source record: 20396

orion@capital.net wrote:
> Congrats on your sighting, Jim. I've used STSPlus for a long time. I
> don't believe there is a better program for tracking sats.

That depends on whether you're tracking radio or visual, and the # of sats
you're predicting for.
I feel the best by far, is QUICKSAT.

--

Jay Respler
--
Details of how to get on the Satellite Observer Mail List, satellite elements,
prediction programs and other satellite information, at the Visual Satellite
Observers Home Page: http://www.physics.ox.ac.uk/sat/vsohp/satintro.html
--
JRespler@InJersey.com
Satellite Tracker * Early Typewriter Collector
Freehold, New Jersey

43. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: Practice <Eckart@usa.net>
Message-ID: <01bbfaff$a8293d20$836a2299@eckart>
Source record: 20397

For all information on the Space Shuttle go to http://shuttle.nasa.gov .

LewEdward <lewedward@aol.com> wrote in article
<19970105004700.TAA05099@ladder01.news.aol.com>...
> If anyone knows when the next STS is, please advise.
>

44. Mir UHF Rptr Freqs.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: michael890@aol.com
Message-ID: <19970105132700.IAA21136@ladder01.news.aol.com>
Source record: 20398

Is Mir still using the same freqs. for the uhf repeater??
Has it been off the air??
I got some great passes a while back, but lately it has been quiet..

Michael890@aol.com

45. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: rloftin@phoenix.net
Message-ID: <rloftin-0501971035440001@dial137.phoenix.net>
Source record: 20399

In article <19970105004700.TAA05099@ladder01.news.aol.com>,
lewedward@aol.com (LewEdward) wrote:

> If anyone knows when the next STS is, please advise.

STS-81 is scheduled for launch at 3:27 a.m. CST (09:27 GMT) on January 12.

Toni L.
tloftin@phoenix.net

46. Thanks from DXER.COM

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32cfd6a1.4035755@news.primenet.com>
Source record: 20400

We at DXER.COM would like to thank all
of you for your comments and support for
the site. And invite you back to check
out the updates. New sites are being added
weekly.

40 new links have been added with more to come.
Check out the new "Shortwave Listening" index

"http://www.dxer.com"

"Your Ham Radio Resource Site"

73 de KB7UB & K0OK

47. DOVE decoder program

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970105111738.25521C-100000@spacelink>
Source record: 20401

I posted a request for a program to decode DOVE telemetry several
weeks ago. I heard from others wanting the same program, but from nobdy
with a copy of the program. I know there is a fairly new DOVE for
Windows program and at least one for DOS. Can anybody assist us?

Dick N1MDZ

"Live Long and Prosper" - Mr. Spock.
"Eat Fuzz and Prosper" - my daughter.

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

48. Rotor and Radio Control program FodTrack

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5aonp4$4kn$1@excalibur.flash.net>
Source record: 20402

Anyone using this? Did it work OK at first?
I'm having a problem with it thinking that
the Keps are three years into the future and
then shutting down. Haven't got it to do anything yet.

Ken K5MBV mbv@flash.net

49. ANS-005 Weekly bulletins

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bbfb38$d35dc9a0$15bc92ce@bjarts.uslink.net>
Source record: 20403

SB SAT @ AMSAT $ANS-005.01
MIR FREQUENCY CHANGE

HR AMSAT NEWS SERVICE BULLETIN 005.01 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.01

John Blaha, KC5TZQ, made an announcement that, as of
January first 1997, the 2-meter voice and packet frequencies would change
from 145.800 Mhz uplink and 145.200 Mhz downlink to 145.800 Mhz
downlink and 145.200 Mhz uplink for groundstations John
was switching between the two frequencies as he was trying to work
stations and inform anyone listening of the change to the frequencies
used to uplink and downlink to MIR.
Below are the frequencies a groundstation would use to communicate
to the MIR space station.
FM voice ops:
uplink 145.200 Mhz transmit
downlink 145.800 Mhz receive

Packet ops:
uplink 145.200 Mhz transmit
downlink 145.800 Mhz receive

[ANS thanks John Blaha, KC5TZQ, for this information.]

/EX

SB SAT @ AMSAT $ANS-005.02
MIR QSOs MADE WITH SCHOOLS

HR AMSAT NEWS SERVICE BULLETIN 005.02 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.02

''Yes, Yes, Yes.'' That was the reaction of Bruce Burke, WB4YUC, in
late December as he helped students at Silver Lakes Middle School in
North Lauderdale, Florida, talk with US astronaut John Blaha,
KC5TZQ, aboard the Russian space station Mir. The contact--the
first scheduled school QSO between unlicensed students and a NASA
astronaut-ham living on board Mir--marked a new page in the history
of ham radio in space. On Friday December 27, Blaha spoke with 17
students at the Silver Lakes Middle School. Halfway through the
contact, Mir Commander Valery Korzun extended his greetings to the
students and congratulated them for being the first Americans to

take part in this kind of contact. At the end of the QSO, the students wished Blaha a happy new year. School group contact coordinators for the Motorola ARC Kai Siwiak, KE4PT, and Burke said signal strength was outstanding throughout the pass.

The FCC only recently approved third-party contacts with Blaha from the Russian Mir space station. However, the FCC's permission only extends through Blaha's mission. Over the past year, the SAREX team has worked closely with the Mir International Radio EXperiment (MIREX) team in the United States, the Space Amateur Funk EXperiment (SAFEX) team in Germany and the Mir Amateur Radio EXperiment (MAREX) team in Russia to allow unlicensed school students in the US to talk to the astronauts on Mir.

Three other MIREX QSOs also went off on schedule. On Saturday, December 28, students at Granby High and Mary Calcutt Elementary schools in Hampton, Virginia, successfully contacted Blaha aboard Mir and got to put a dozen questions to the astronaut. Blaha attended Mary Calcutt and graduated from Granby High School in the 1960s. The 10-minute contact was conducted from the Amateur Radio satellite station exhibit, KE4ZXW, at the Virginia Air and Space Center. Blaha told the students he had some Granby/Calcutt memorabilia on board Mir that he expects to return to the schools.

Monday, December 30, students at The Johnson School in Warrenville, Illinois, got to ask Blaha how the Mir crew emptied the trash. In all, the students got to ask 15 questions as an audience of some 900 people (including approximately 450 youngsters) looked on. Enthusiasm at all three schools was high despite the fact that the students were on Christmas break, and volunteers, parents and teachers had to take time away from their holiday activities to arrange for equipment and operators.

Friday, January 3, students at Ririe Elementary School, Ririe, Idaho, enjoyed a successful 10-minute QSO with Blaha. Seventeen excited third graders and their teacher, Tina Anderson, got to ask questions of the astronaut.

As a result of the QSOs, all four schools got a lot of media attention. ''These Mir QSOs are so very important since competition is accelerating against SAREX being selected as a payload on the last few orbiting shuttle missions of 1997 and 1998 prior to International Space Station activities,'' said Rosalie White, WA1STO, ARRL Educational Activities Department manager.

Four more schools have been scheduled for contacts before the end of Blaha's mission in mid-January. Jerry Linenger, KC5HBR, will take Blaha's place on Mir.

Schools wishing to arrange contacts with astronauts aboard a US space shuttle carrying the SAREX payload should submit a SAREX application to the ARRL Educational Activities Department (EAD),

e-mail ead (at) arrl.org. More information about the MIREX and
SAREX programs is available at http://www.arrl.org or check the Mir
Web page at http://www.osf.hq.nasa.gov/mir/.

[ANS thanks the ARRL for the news report.]

/EX

SB SAT @ AMSAT $ANS-005.03
TWO P3D KEY WORKERS DEPART

HR AMSAT NEWS SERVICE BULLETIN 005.03 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.03

AMSAT-NA's Vice President for Engineering, Dick Jansson WD4FAB announced January 3 that his Assistant Vice President for Engineering, Stan Wood, WA4NFY, has new employment in Colorado, making him unavailable for further work on P3D after sometime in February. In the meantime, Stan will be devoting all the time he can to completing the satellite antenna work he has been doing for the past several years. Dick noted further that this news is doubly bad because Stan's wife, Mary, has been a great help during the past six months, acting as Office Manager for the Phase 3D Integration Laboratory.

Dick stated for ANS:
"One of the inexorable facts of life in a project like P3D is that people need to live their lives and most of the participants need to work (real) jobs for a living. Most of those of you who do need to so work also occasionally are subject to new job opportunities that cannot be turned away. We are at that threshold with two of our long standing key volunteers,
Stan Wood and his dear wife Mary Wood. Both of these fine people are highly
accomplished pilots in the world of business aviation. It has very recently
come to pass that Stan and Mary have both been offered new opportunities in the Colorado area, and they have accepted this very interesting situation.

Stan and Mary will depart the Florida scene in a very short while and move to their new assignments in Colorado."

The impact to the P3D Project will be felt almost immediately. The up-side

of this all is that Stan is very close to completing the flight antennas for
the spacecraft, his *major* challenge and accomplishment over the years.

Mary Wood has been a key participant at the P3D Laboratory as the Office Manager, keeping all of us on our toes and doing things properly. Both of these super people will be sorely missed at every turn in the project as we

push on to launch later this year. Stan and Mary will depart the Florida area with our fondest wishes for their new jobs and with our deepest appreciation for their help on the project. We would not have been able to

accomplish what we have without their help." Dick concluded by re-affirming
AMSAT's commitment to complete and launch Phase 3D in 1997.

AMSAT President Bill Tynan, W3XO, and Executive Vice president Keith Baker, KB1SF, echoed Dick's statement. "We will all miss Stan and Mary, and their

contributions to the Phase 3D effort" Bill said.

Those who would like to contact Stan and Mary and thank them for their service to AMSAT and wish them well in their new endeavor, may do so at their email address: n280ra@aol.com

[ANS thanks BJ Arts, WT0N, for this report]

/EX

SB SAT @ AMSAT $ANS-005.04
LEO CUNNIFF, W2OEH, SK

HR AMSAT NEWS SERVICE BULLETIN 005.04 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.04

Leo Cunniff, W2OEH, recently passed away after a long illness; he was 70 years of age. An early member and substantial contributor to AMSAT, he had a distinguished career in electronics, founding several high-tech companies and retiring as Senior Vice President of Beckman Instruments. Among his many philanthropic activities, he served as chairman of the board of Stevens
Institute of Technology, his alma mater. Leo was also a longtime member of the North Jersey DX Association. One of the nicest, least self-possessed people I've ever known despite his many accomplishments, Leo will be missed.

[Ray Soifer, W2RS, provided this information to ANS.]

/EX
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SB SAT @ AMSAT $ANS-005.05
LINENGER TO REPLACE BLAHA

HR AMSAT NEWS SERVICE BULLETIN 005.05 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.05

Astronaut Jerry Linenger is scheduled to replace John Blaha aboard Mir. He's scheduled to be launched on STS-81 (currently set for launch on January 12) and will return on STS-84 (scheduled for May).

Jerry is the first of the long term Mir astronauts license for a previous shuttle mission before his assignment to a Mir
mission who had an active ham license before his assignment to a Mir mission. He earned the call sign KC5HBR while training for his only previous spaceflight, STS-64.

As far as third party agreements go, the temporary third party agreement which permits John Blaha to talk to unlicensed students expires when John leaves Mir. So it will be illegal to permit non-hams to talk to Jerry until the paperwork is approved for Jerry's third-party agreement.

Unlike the previous shuttle-Mir astronaut (Norm Thagard, Shannon Lucid, and John Blaha) who have had many spaceflights before their trips to Mir, Jerry's only experience is his eleven days during STS-64.

Also unlike the previous Mir astronauts he's got a family which is just starting. He has a one year old son and another child expected in June. His wife Kathy is actually planning on going back to Russia after his launch since she works for the NASA office at Star City as a medical trainer and will be supporting Mike Foale's training. Currently she's planning on coming back to the U.S. for the birth of her second child, which is due after Jerry's return. However Jerry is quite aware that he may be in space while his second child is born if there are any delays.

Jerry is scheduled to spend 132 days aboard Mir, but of course that may change for other reasons. He will become the first U.S. astronaut to perform an EVA from Mir (wearing a Russian spacesuit).

His full official NASA biography is available on the NASA Web site - http://www.jsc.nasa.gov/Bios/htmlbios/linenger.html

Jerry Linenger KC5HBR said -"Maybe I'm the right person for this kind of mission because I'm not a real good communicator. I could live without a telephone. So car phones and this great revolution we've had, does not phase me. If I were by myself without my family I probably wouldn't have a phone in my house so I could have some peace and quiet. I enjoy talking on the ham [radio], but I think I'm going to be looking out the window more than just talking. [As far as] news from home we have a little bit of E-mail capability and things like that. So as I want the news I'll be grabbing it. My old alumni University of North Carolina and I've been a big Michigan fan, college basketball I enjoy. So I'll be looking for that information."

In the past astronaut's activities have changed, especially after long periods in space. So while Jerry may not plan on using the radio much while he's in space, that may change over time.

[ANS thanks Philip Chien, KC4YER, Earth News - space writer and consultant for this news item.]

/EX

SB SAT @ AMSAT $ANS-005.06
P3D S BAND KIT INFO

HR AMSAT NEWS SERVICE BULLETIN 005.06 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.06

An S-Band to 70cm Receive Converter for Phase 3D
A kit of parts for this project will be available from the end of January
or
early February. The kit comprises of all the components from the parts list

including a 109.333 MHz crystal, and tinplate box from Piper Communications
mentioned in the notes. A reprint of the article which appeared in The
AMSAT Journal and OSCAR News with additional construction
information is also included.

To further simply construction, the PCB to be supplied with the kit has
been modified to include plated through holes. This will remove the need
for the wire feedthroughs used for all earth-grounded connections. The
use of a plated through holes printed circuit board will significantly
reduce construction time and give a professional finish to the project.

The kit will be available from the author at the address below.
Cost: 66.80 British pounds (about US $105.00)
Postage: United Kingdom: 1.90 British Pounds
Europe: 3.75 British Pounds
United States, VE, Z1, VK: 4.75 British Pounds
(about US $7.50)
All non-UK orders will be sent by small packet air mail and include
international recorded delivery. Insured post is available to most
destinations if required. Checks and international money orders in
British sterling may be sent to:

David Bowman, G0MRF
31 Benson Close
Hounslow, Middlesex
England, TW3 3QX

[ANS thanks The AMSAT Journal editor Russell K. Tillman, KC5JVB,
for this product information.]

/EX

SB SAT @ AMSAT $ANS-005.07
BEST FIST NOMINATIONS DUE

HR AMSAT NEWS SERVICE BULLETIN 005.07 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.07

Judging by the activity levels observed at W2RS (especially on
RS-10 and RS-12), OSCAR SKN '97 was a great success, with lots of
fun for all who took part.

Some nominations for "Best Fist" have already been received. If
you haven't yet sent yours in, please take a moment to nominate
someone you worked. To submit a "Best Fist" nomination, please
address it via packet radio to W2RS @ WA2SNA.NJ.USA.NA or W2RS @
GB7HSN.#32.GBR.EU (whichever is closer to you), via the Internet
to <w2rs@amsat.org>, or via "snail-mail" to W2RS' callbook
address. Those nominated will be featured in a bulletin sent to
Amateur Radio publications and posted to ANS and AMSAT-BB in
early February

[ANS thanks Ray Soifer, W2RS, for this update.]

/EX

SB SAT @ AMSAT $ANS-005.08
S. A. YOUTH TO TALK TO MIR

HR AMSAT NEWS SERVICE BULLETIN 005.08 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.08

On Sunday 5 January, 1997, many young
South African youth will be talking to MIR as part of the ARISAS ,
Amateur Radio in South African Schools project. ARISAS
had hoped to include youth from other African countries but due to
third party restrictions it was not possible in the few days available to
make the arrangements.

ARISAS has arranged to cover the link up on SW as follows;

Sunday 5 January
16:30 - 17:10 UTC 7205 KHz (250 kW) beaming north from Johannesburg
3215 KHz 100 kW omni

ARISAS is a joint project of the SA Radio League, SA AMSAT and the SA
Amateur Radio Development Trust.

[ANS thanks Hans ZS5AKV, for this report.]

/EX
SB SAT @ AMSAT $ANS-005.09
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 005.09 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.09

FO-29
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
JARL changed the FO-29 operating schedule. 9600bps operation was
canceled.
31Dec - 6Jan : Digi-Talker
[ANS thanks Masa, JN1GKZ, for this update.]

MIR:
(Uplink 145.2MHz FM, Downlink 145.8MHz FM)
The above split is used for both packet and voice operation.
See ANS-005.01 for more information.

SAFEX,
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater appears to be down at this time and no further
information is available.

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat is giving extremely good downlink signals on 2 meters. In
this period of poor propagation on 15 m, the T-mode is providing very
easy access to the satellite. Interesting DX activity has been spotted
in Europe with stations in Egypt, Crete, Cameroon, etc.
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Operating normally.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 downlink frequency is approximately 4 KHz low, but all other
operations are normal.

.KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 continues to send messages "Frames heard from LOADER-9" The
satellite is closed to file uploads.

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
December-08-1996.
Good conditions on the bird and good QSO in it's orbits
over Europe during the weekend Heard: F6HLG, DG5MNC,
EB5BCF, EA5AAJ, DH5JY, DL2DRD etc
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

As of NOV 2, the AO-27 schedule is as follows:

TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.
[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz CW/USB)
Operating normally. Stacey E. (Chuck) Mills, W4SM, reports that
Ken Ernandes is looking into getting updated keps. Though the orbit
doesn't change very fast, things are now off by a bit, especially at
perigee. Mills calculated the blon/blat, -125/5, about one year ago and
is waiting to see if predictions for this year hold up.

Below is a 14-day update on the AO-10 Keps from the NASA OIG RAID RBBS.
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
[ANS thanks Ken Ernandes, N2WWD, for these keps.]
.A lot of activity was noted this weekend when the sat was over
America. The bird was still workable up to phase 60. Still a bit of
FM-ing when operating in CW
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

/EX

SB SAT @ AMSAT $ANS-005.10
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 005.10 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.10

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
Continues in good working order.
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Strong downlink signal and very busy with activity.

OSCAR-11
Good, steady signals have been received from OSCAR-11
on 145.825MHz. FM, 1200 Baud PSK
ANS thanks Clive Wallis, G3CWV, for this information.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
Operating normally. Some report indicate that the downlink
signals from the bird are stronger.
[ANS thanks Richard W L Limebear, G3RWL, for this
report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
Jim White reports that DOVE had timed out on December second.
DOVE's software was then uploaded again to correct the
time out problem. Signals from Dove are once again being
received.
[ANS thanks Jim White, WD0E, and Sergio Adrian Gorgone,
LW7DXF, for this information.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB,
1200 Baud PSK AX.25.)
This satellite is normally working.
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]
.
WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
WeberSat (WO-18) is operational with the new telemetry/housekeeping suite
active. The satellite is currently sending battery WOD:
16 - Battery 1 Voltage
17 - Battery 2 Voltage
18 - Battery 3 Voltage
1B - Battery 6 Voltage
1E - Solar Array Voltage
21 - BCR +10 V Bus

The taking and sending of photos and spectra will begin again soon.
Check it out!
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

[Please send your Satellite reports to bjarts@uslink.net or to
wt0n@amsat.org]

/EX

**Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT

lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.**

--

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

50. Re: DOVE decoder program

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5apb3a$cu9@kirin.wwa.com>
Source record: 20404

Richard David Glueck <glue9600@spacelink.msfc.nasa.gov> wrote:
> I posted a request for a program to decode DOVE telemetry several
>weeks ago. I heard from others wanting the same program, but from nobdy
>with a copy of the program. I know there is a fairly new DOVE for
>Windows program and at least one for DOS. Can anybody assist us?
>
>Dick N1MDZ
>
>"Live Long and Prosper" - Mr. Spock.
>"Eat Fuzz and Prosper" - my daughter.
>----------
>Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov
>
>

Hi

The windows program i have not seen but if you go to
WWW.AMSAT.ORG it will direct you to their FTP site which has all
the telemetry decoders ya will ever need. I use one called i
believe DUVTLM or something like that and it works great, its DOS
based and comes from Italy. Hope that helps ya!

51. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: David Zalaback <dave@IntNet.net>
Message-ID: <32CF925A.38D5@IntNet.net>
Source record: 20405

LewEdward wrote:
>
> If anyone knows when the next STS is, please advise.
The next STS mission is STS 81 and is scheduled for liftoff on JAN 12 at
9:27 UTC.
I do beleave it is a SAREX flight.

52. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5aotfj$j7b$1@news.mhv.net>
Source record: 20406

In article <19970105004700.TAA05099@ladder01.news.aol.com>, lewedward@aol.com (LewEdward) wrote:
>If anyone knows when the next STS is, please advise.

Jan. 12th, 4:27am EST. 51 degree inclined orbit. The orbiter is Atlantis.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

53. DOVE decoder

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: "M.Bertolino" <I121171@amsat.org>
Message-ID: <32CFFDC0.10C8@amsat.org>
Source record: 20407

I wrote a decoder program for DOVE TLM running on MS-DOS. Look for it at
amsat web site (http://www.amsat.org)
The name is DUVTLM
Let me know if you'll like it.
Maurizio Bertolino
I1-21171

54. RS-16 info

Newsgroup: rec.radio.amateur.space
Date: 1997-01-05 00:00:00 UTC
From: "M.Bertolino" <I121171@amsat.org>
Message-ID: <32CFFDFC.3AB4@amsat.org>
Source record: 20408

I'd like to have info on supposed launch of RS-16 sat.
Frequency, date of launch, estimated kep...
Thanks in advance
I1-21171

55. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5as55i$k2g@techsrv1.tech>
Source record: 20322
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Brian Mileshosky, N5ZGT (n5zgt@swcp.com) wrote:
: Dear Fellow Amateur Radio operators,
: Remember the ARRL bulletins from last summer warning us of a threat to
: our 2 meter and 70 centimeter bands?? Read on.
: An article in the December 23, 1996 issue of USA today discusses the
: development of Teledesic, which will involve putting 840 loe-earth
: orbit satellites (LEOS) into orbit.
: Keep in mind that these satellites are the beginning of the threat to
: our 2 meter and 70 cm (440 MHz) bands. If these things go up, we had
: better expect our 2 meter and 70 cm bands to shrink up, or even
: vanish.

----snip-----

It seems, after reading some of the stuff (not too technical :)) that
happened during the WRC-95(?), that Teledesic was already assigned it's
spectrum that it wanted and that bit o' spectrum was no where near the 2m
or 440Mhz bands. In fact it was in the Ghz region.

You do have a point about saving our 2m and 440 bands but Teledesic is not
the threat.

TTYL,
Mike

--
/\
\ Michael Long || President /
/ Callsign: KB8WPE || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

56. ! MASS POST Was Here! (DqZXpY)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: Ones-And-Zeros@prodigy.net
Message-ID: <5aqqt8$34si@usenet1y.prodigy.net>
Source record: 20409

MASS POST--the program by Ones and Zeros--has been used to send this message
to thousands of newsgroups.

(DqZXpY)

57. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: Stan Vandiver <w4sv@pla-net.net>
Message-ID: <32D11659.59E0@pla-net.net>
Source record: 20410

David Zalaback wrote:
:>
:> LewEdward wrote:
:> >
:> > If anyone knows when the next STS is, please advise.
:> The next STS mission is STS 81 and is scheduled for liftoff on JAN 12
at
:> 9:27 UTC.
:> I do beleave it is a SAREX flight.

Nope, not a SAREX mission. The next SAREX mission is STS-83 in late
March.

73, Stan/W4SV

58. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: dwittich@concentric.net
Message-ID: <32d12166.4834461@news.concentric.net>
Source record: 20411

Do you know the inclination of the launch? Are there pre-launch
Keplarien elements available?

dw

rloftin@phoenix.net (Bob Loftin) wrote:

>In article <19970105004700.TAA05099@ladder01.news.aol.com>,
>lewedward@aol.com (LewEdward) wrote:
>
>> If anyone knows when the next STS is, please advise.
>
>STS-81 is scheduled for launch at 3:27 a.m. CST (09:27 GMT) on January 12.
>
>Toni L.
>tloftin@phoenix.net

59. Re: DOVE decoder program

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: "Roger E. Koss" <kossr@edl1.ksc.nasa.gov>
Message-ID: <5arb19$1qd@niven.ksc.nasa.gov>
Source record: 20412

Richard:
There is a good program for decoding DOVE Telemetry called DOVE3WWG.EXE, which will decode real time from an HAPN card or from a capture file. Do a search for "Dove3wwg.zip" and you will find it. It's DOS based but works fine under Win 3.1 also. If you have trouble finding it, E-Mail me and I will send you a copy.

73 de Roger, KD4ITU

60. Re: KC5TZQ qsl address needed

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: "Roger E. Koss" <kossr@edl1.ksc.nasa.gov>
Message-ID: <5aralm$1qd@niven.ksc.nasa.gov>
Source record: 20413

Tom (and Everybody else!):
I too had the pleasure of working John, on the noon GMT pass over North America on Thanksgiving Day. I sent my QSL to Dave Larsen, and within 10 days had my return QSL from R0MIR/KC5TZQ. I was going to describe what the card looks like, but I don't want to ruin your anticipation !
Congratulations again !

61. READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: n5zgt@swcp.com
Message-ID: <5ar9o7$enr@sloth.swcp.com>
Source record: 20414
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Dear Fellow Amateur Radio operators,
Remember the ARRL bulletins from last summer warning us of a threat to our 2 meter and 70 centimeter bands?? Read on.
An article in the December 23, 1996 issue of USA today discusses the development of Teledesic, which will involve putting 840 loe-earth orbit satellites (LEOS) into orbit.
Keep in mind that these satellites are the beginning of the threat to our 2 meter and 70 cm (440 MHz) bands. If these things go up, we had better expect our 2 meter and 70 cm bands to shrink up, or even vanish. After these satellites go up, more companies will want their satellites in orbit and do similar things.
If you have not taken time to write your Congressmen, Representatives, etc. to ask them to help defend our bands, DO IT PLEASE. I am getting great cooperation from Sen. Domenici here in New Mexico. Get other Amateurs involved. Announce this at meetings. Sign petitions and send them to your government officials and to the FCC (WRC-97). But please be courteous when writing. Emphasize the importance of these bands for us (search & rescue, traffic handling, etc.).
These bands are extremely important to us, and we cannot lose them. Please do something and don't give up.
73,
Brian, N5ZGT

For more info, visit http://www.usatoday.com
and
Global Internet Satellites Set To Be Approved - LA Times
Find this article at: NewsLinx Daily Web News (1/6/97)
http://www.newslinx.com/

Boy Scouts of America Amateur Radio - N5ZGT
Eagle Scout (12-6-96) ARRL QRP: NorCal# 1700 QRP-L# 580
JASM - Troop 41 Author of Worldradio's "Youth Forum" Column
Albuquerque, N.M. Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
O.A. Lodge 66 <-W-W-W-<< Internet: n5zgt@swcp.com
---

62. Re: new mir freq for 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: ke4htm@bluenet.net
Message-ID: <32d0bd08.91240638@snews.zippo.com>
Source record: 20415

On 2 Jan 1997 15:22:55 GMT, Jeff Griffin <griffinj@admin.tc.faa.gov>
wrote:

>Jim, I read your message about the change on January 1. I
>talked to kc5tzq in the morning New Year's day. John said he
>was glad I got the frequency change. But no one mentioned the
>fact that the paket frequencies are now the same as voice, no
>longer simplex that is. So, the new paket freqencies are now
>145.200 up 145.800 down. Everyone in the group have a Happy and
>prosperious New Year.
>
>73 Jeff
>
I think the move to 145.800 was a very bad move for the MIR. With APRS
operating on 145.790 and has been for a few years there are going to
be problems. I have already noticed that here the bleed over is
noticable from station at ranges of 30 miles away. (I'm in the mtns.)
There may have to be some changes made if this keeps happening either
on the MIRS side or on the APRS side.

73,
Jamie - KE4HTM

http://www.bluenet.net/ke4htm

63. MIR 440 RPTR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: kleite@gtec3.ndhm.gtegsc.com
Message-ID: <5arek5$ti7@news1.chnt.gtegsc.com>
Source record: 20416

Hi There,

Thanks for reading my post, I am curious if anyone has heard the RPTR
on board the MIR recently ???? If so could you please give me the RPTR
frequencies and PL ???

Thanks Keith ....

==
Statements here are mine and do not reflect the opinions of my employer
==

Keith J. Leite, AA1JF Email:kleite@gtec3.ndhm.gtegsc.com
GTE Government Systems
Communications Systems Division
Information Technology Network Operations
400 John Quincy Adams Rd.
Taunton, MA 02780 USA
==

"THROUGH THE GATEWAY; OFF THE REPEATER; OVER THE T-1
BACKBONE...NOTHING BUT NET!!!"

64. Satellite DX web site

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: joehol@microsoft.com
Message-ID: <5arhnf$3kg@news.microsoft.com>
Source record: 20417
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

fyi - The Satellite DX Foundation has a new web site:

http://www.system-one.com/sdxf/

73 Joe Holman, AD7D

--
The opinions expressed in this message are my own personal views
and do not reflect the official views of Microsoft Corporation.

65. Radio Meteor Obs. Bull. December 1996 Geminids, Ursids

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.97.32D17058@vvs.innet.be>
Source record: 20418

Radio Meteor Observation Bulletin No. 41 January 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

December 1996
Geminids, Ursids

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Dec	UT										
1996	21	22	23	00	01	02	03	04	05	06	07
1- 2	25	58	62	95	83	92	122	123	87	82	97
2- 3	14	46	33	45	57	52	59	87	48	59	58
3- 4	25	33	33	30	50	37	73	59	64	54	66
4- 5	15	33	44	57	62	71	109	109	114	106	74
5- 6	23	28	30	45	44	48	50	57	58	63	78
6- 7	15	35	36	31	35	47	58	50	57	83	154
7- 8	6	29	44	40	31	39	53	61	52	64	63
8- 9	38	35	39	50	68	47	78	58	68	105	124

```
9-10 | 12 32 25 20 29 49 79 59 44 32 50
10-11 | 18 19 33 35 34 43 57 52 52 71 64
11-12 | 21 26 26 24 43 39 57 79 66 112 93
12-13 | 13 30 43 54 72 81 68 54 56 102 130
13-14 | 48 50 56 53 48 85 87 73 73 94 147
14-15 | 27 22 25 42 44 50 55 59 46 73 74
15-16 | 18 27 25 41 37 47 64 47 58 59 75
16-17 | 38 24 22 22 33 38 63 70 64 82 53
17-18 | 17 20 18 14 25 43 41 54 45 36 47
18-19 | 8 22 14 21 27 40 23 33 44 59 41
19-20 | 17 20 19 40 36 85 63 40 43 73 107
20-21 | 11 35 22 30 37 47 45 63 35 41 36
21-22 | 25 26 35 33 43 59 56 67 63 66 60
22-23 | 12 10 21 18 29 22 23 31 22 26 37
23-24 | 6 8 7 11 18 26 16 28 27 41 18
24-25 | 8 6 8 8 8 26 23 16 28 13 19
25-26 |
26-27 | 9 13 11 10 11 17 19 26 35 41 27
27-28 | 6 7 12 17 13 19 18 19 27 27 4
28-29 | 4 5 6 14 13 14 12 10 20 23 34
29-30 | 10 2 17 11 32 27 33 30 43 43 40
30-31 | 7 10 14 16 16 32 32 22 30 29 24 34 32
31-01 | - - - 13 26 15 24 21 29 22 17 22 26
------+------------------------------------------------------------------
1996 | 21 22 23 00 01 02 03 04 05 06 07 08 09
Dec | UT
```

Notes:
. local time = UT + 1 hour.
. Geminid activity on Dec 12-14.
Best forward scatter conditions for this setup between 2h and 8h UT.

Maurice De Meyere

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45 ' N)
Antenna: 3 element Yagi
Receiver: AR-8000 at 48.2500 MHz, SSB mode, no preamplifier.
Transmitter: 150 kW TV video carrier in Madrid (Spain),
distance 1550 km, southwest.
Observing method: automatic setup using FFTDSP42t software by AF9Y to
record the audio signal. 20 channels of 2 Hz width are used for
meteor identification.
More details see <http://www.net4you.co.at/user/kuneth/info.html>

I have also included some of the radio meteor shower peaks in 1996
and 1995 at this address, each covering about 1.5 hours of the showers.

From the saved graphic files, the following raw counts are computed:
(minimum reflection duration of 3 seconds):

```
Dec | UT
1996| 0h 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 18 19 20 21 22 23
-----+-----------------------------------------------|-----------------
1 | 8 7 14 4 4 9 20 | 5.12 16
2 | 8.22 17 8.16 12.27 15 33 25 18 20 9 11 6 3 | 3 7 6 5 16
3 | 11 5 8 12 19 9.12 5 12 16 20 9 13 6 7 7 | 7 8 5
4 | 8 6 6 8 6 15 13 10 9 8 14 11 5. 1 | 7. 5 16
5 | 11 9 10 7 9 8.15 13 15 15 6 6 14 3 3 3 | 5 3 1. 4. 7 14
6 | 7 5 2 12.11 12.16 10 13 8 7 3 2 5 7 1.| 2. 3 15
7 | 11 9 8 6 5 7 7 9 4 6. 2 | 5.
8 | 14 23 | 6.14
9 | 16 14 11 18 18 6 8 19 8 4 6 8 7 2 3 2 | 4 10 6 2.14 15
10 | 17 26 15 14 3 11 14 7 6 14 13 8 4 3 4 2 | 1.10 12 12
11 | 20 14 6 18 12 13 16 13 7 8 3 4 2 4 5 2 | 17 8.11 31
12 | 29 21 14 10 7 30 27 22 16 13 1 7 9 9 3 2.| 8 28 13.25.57 53
13 | 49 45 32 11 7 25.28 24 20 9 9 7 7 3 5 0 | 12 38 56 44.58 70
14 | 51 75 26 12 19 32 36 24 9 13 6 3 1 4 | 9 2. 5.15
15 | 17 15 5 12 10 11 8 6 4. | 2. 4 3 8 5
16 | 4 7 18 10 16 13 8 5 4 4 11 6 14 8 2 3 | 2. 0 7 9 4 4
17 | 7 14 9 13 8 10 6 5 3 2 7 2 0 3 0. 1.| 4
18 | 6 5 5 2. 7 11 4 4 4 2 7 7 4 6 4 |
..
21 | 2 5 2 7 | 0. 5. 5 4 2
22 | 15 6. 8.11 13.20 17 19 12 11 |
-----+-----------------------------------------------|-----------------
1996| 0h 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 18 19 20 21 22 23
Dec | UT
```

Notes:
. the Geminids showed up very well from Dec. 12 to Dec. 14.
. from Dec. 21 - Dec 22 the Ursids were recorded.
. a dot (.) after the number stands for a lower observation period: 20-40 min.
. blank value means either few or no data available, interference,
power failure or transmitter shutdown.
. From 02:00 - 04:00 UT a different transmitter is reported.
Precision is therefore lower at that period.
. local time conversion: 1 hours ahead of UT (07h00 UT is 08h00 local)

Werfried Kuneth

Observer: Kimio Maegawa
Transmitter: 50 W CW 53.7500 MHz
Transmitter antenna: 2 element Cross Yagi 4dBi, zenith
Transmitting Location: Sabae city (136 11' E, 35 56' N)
Receiver: IC726 500 Hz BW SSB, sensitivity -150 dBm sensit
Receiver antenna: 3el Yagi 7 dBi (elev 70 deg, az 150 deg = SE)
height 10 m
Receiving Location: Ohno city (136 53' E, 36 00' N)
Data processing : Receiver output is fed into DX2-66 MHz PC and analyzed by
AF9Y's FFTDSP42 software.
Then stored every 4.22 min automatically with GIF format.

Play back GIF files and count echoes manually by the doppler
shift rejecting tropo signal or airplane echo.

A: all echoes L: long echoes (T > 2.5 s)

HRO results during 1996 Orionids
Observed hourly echo number

| October
| 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24
---+--
UT | A L A L A L A L A L A L A L A L A L
21 | @127@12 89 5 @112@11 @72 @8 @121 @6 @142@12 113 16 114 16 119 16
22 | 90 12 92 9 116 8 92 4 112 10 115 7 113 8 91 8 119 13
23 | 100 7 74 6 67 1 75 5 98 8 98 4 64 8 78 7 78 8
00 | 66 3 49 1 34 1 68 3 80 1 105 5 66 5 42 2 69 2
01 | 57 3 65 2 48 2 52 1 76 2 67 2 65 0 53 2 41 0
02 | 45 2 45 3 45 0 35 2 76 2 51 0 65 1 26 0 36 1
03 | 24 0 38 1 41 1 27 0 67 2 56 1 64 1 27 3 37 0
04 | 26 1 25 0 47 1 59 5 58 3 39 1 44 0 25 2 38 1
05 | 15 2 34 1 39 1 26 0 38 0 27 0 31 1 18 0 46 2
06 | 22 2 23 2 20 0 23 2 21 1 23 0 25 1 22 0 32 2
07 | 27 3 23 1 23 0 22 0 27 1 45 0 23 0 22 1 24 0
08 | 20 2 23 2 19 0 14 1 28 1 15 0 28 0 17 0 23 0
09 | 24 1 24 0 24 0 29 0 29 0 31 0 29 1 20 0 20 2
10 | 31 0 33 0 33 2 30 0 37 2 28 0 33 1 19 0 25 1
11 | 44 2 50 2 39 1 59 1 66 1 49 2 49 1 32 1 41 4
12 | 65 2 57 7 48 2 71 3 63 1 84 6 54 7 46 1 42 3
13 | 76 3 92 7 74 6 69 6 86 6 114 5 67 10 72 6 50 5
14 | 66 5 79 0 76 1 61 2 91 7 95 6 79 6 79 3 56 5
15 | 96 7 78 2 76 3 74 4 113 8 111 8 103 11 94 8 56 4
16 | 96 8 85 4 81 4 108 8 115 9 129 14 110 9 106 9 @62 @4
17 | 110 15 110 7 107 10 121 12 142 16 135 9 103 4 104 8 @104 @8
18 | 123 8 124 1 120 4 90 5 127 11 129 12 132 12 85 6 93 8
19 | 113 9 108 7 91 12 89 3 94 7 124 12 113 6 57 6 103 7
20 | @94 @7 @93 @4 @121 @6 @104 @7 @131 @9 @140 @4 @107@16 @91 @7 117 12
---+--
| 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24
| October

Notes:
. @ means less than 60min.
. local time = JST = UT + 9 hours
. additional information is available at
Home Page http://www.tcp-ip.or.jp/~kaze/rmd.htm
Anonymous FTP ftp:rasc5.kurasc.kyoto-u.ac.jp/pub/nakamura/hro

Kimio Maegawa

Observer: Ingo Reimann
Location: 10 51' 01" E, 53 57' 21" N, 13 m above sea level

Frequency: 88.40 MHz (three or more stations)
Antenna: 6 element Yagi
Antenna Azimuth: 340 deg Elevation: 53 deg
Receiver: Technics ST-Z55 with SU-V505
Observing method: Listening (tape-recordings)

Raw counts of reflections during one hour interval starting at UT:

Nov |
1996 | 01h 02 03 04 05 06 07 08 09 10 11 24
------+--
13 | 11 13 16 17 - - - 04 04 01 09 11
14 | 28 25 33 22 - - - 10 10 - 06 -
15 | - - 20 24 - - - - - - - 13
16 | - - 16 - - - - - - - - -
17 | - - - - - - - - - - 10 -
18 | - - - - - - - - - - - -
19 | 14 19 32 16 - - - 16 17 16 07 -
20 | 13 12 15 17 - - - 14 14 12 07 -
------+--
1996 |
Nov |

Ingo Reimann / via Jeroen Van Wassenhove

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the Zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

Dec | UT
1996 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
-----+---+-----------
1 | 12 16 18 25 14 25 21 26 24 24 | 18.3 23.8
2 | 9 16 18 24 17 20 19 23 27 29 27 15 | 17.3 23.3
3 | 17 15 14 20 21 19 20 18 25 24 18 26 | 17.7 21.8
4 | 15 22 29 27 24 20 15 21 25 25 19 25 | 22.8 21.7
5 | 15 17 11 14 18 18 32 30 27 21 24 16 | 15.5 25.0
6 | 15 24 15 22 19 17 13 19 22 18 20 16 | 18.7 18.0
7 | 16 8 19 10 19 15 19 18 26 26 17 26 | 14.5 22.0
8 | 11 17 12 23 22 17 36 16 28 13 | 17.0 23.3
9 | 17 20 22 28 22 29 24 33 28 24 26 19 | 23.0 25.7
10 | |
11 | 16 25 33 22 26 15 15 18 18 28 31 30 | 22.8 23.3
12 | 24 36 35 39 30 14 18 22 39 30 44 29 | 29.7 30.3
13 | 34 70 53 52 48 24 22 27 39 41 31 32 | 46.8 32.0
14 | 19 27 24 25 29 13 19 20 27 24 33 27 | 22.8 25.0

```
15 | 10 16 13 11 24 15 21 23 24 24 21 25 | 14.8 23.0
16 | 7 21 11 16 20 14 21 22 19 30 20 17 | 14.8 21.5
17 | 15 13 18 19 16 13 28 19 27 15 24 24 | 15.7 22.8
18 | 13 14 20 13 13 18 20 19 24 17 22 22 | 15.2 20.7
19 | 10 16 19 21 | 16.5
20 | 15 20 19 15 17 25 20 18 24 19 | 11.5 20.5
21 | 15 13 16 10 15 16 19 21 20 21 19 27 | 14.2 21.2
22 | 12 8 9 18 12 11 17 19 21 19 16 21 | 11.7 18.8
23 | 10 13 7 14 | 11.0
24 | 9 17 11 11 12 22 11 12 13 28 18 23 | 13.7 17.5
25 | 15 19 16 12 16 17 17 21 23 33 20 23 | 15.8 22.8
26 | 13 12 10 8 17 14 21 18 25 28 29 20 | 12.3 23.5
27 | 7 15 11 15 13 10 17 20 18 14 23 19 | 11.8 18.5
28 | 11 16 13 12 17 14 10 18 15 23 24 17 | 13.8 17.8
29 | 13 12 14 10 10 9 19 18 18 15 18 | 11.3 17.6
30 | 8 7 15 16 16 18 13 20 22 20 17 15 | 13.3 17.8
31 | 10 16 12 11 14 19 15 17 15 24 28 15 | 13.7 19.0
-----+-------------------------------------------------+-----------
1996 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Dec | UT

* (1) average hourly rate between 11-17 UT
**(2) average hourly rate between 17-23 UT

Ursids 1996

Total echoes:

Dec UT
1996 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
-------------------------------------------------------------------------
20-21 19 15 17 25 20 18 24 19 15 11 12 10 10 10 8 5 8 5 4 6 15 13 16 10
21-22 15 16 19 21 20 21 19 27 22 22 26 24 14 17 11 11 7 7 7 4 12 8 9 18
22-23 12 11 17 19 21 19 16 21 18 14 10 11 12 7 6 5 3 5 3 8 10 13 7 14

Echoes longer than 5 s:

Dec UT
1996 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
-------------------------------------------------------------------------
20-21 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
21-22 0 0 0 0 1 1 0 0 0 2 2 1 0 3 2 0 1 1 0 0 0 0 0 0
22-23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

- local time = JST = UT + 9 hours

Chikara Shimoda

-------------------------------------------------------------------------
Observer: Kazuhiro Suzuki
HRO (Radio Meteor Observation using HAM)
Location: Toyokawa Meteor Observatory (137.32 deg E, 34.81 deg N)
Shiinoki, Toyokawa-city, Aichi, 442, Japan
```

Transmitter: JA9BOH 53.7500 MHz, CW 50 W
Antenna: Dipole (height 7 m, to zenith)
Receiver: IC-575 (ICOM) LSB BW 2.5 kHz
Transmitter location: Sabae (in Fukui pref.), about 150 km
north north-west from receiving station.
Method of echo sampling: After image procedure was done by PC with FFT
software, echoes(>10 dB(S/N)) were counted.

Total echo rates

```
Dec | UT
1996 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
------+-------------------------------------------------------------------------
30- 1 | 37 39 43 55 43 37 51 36 41 34 26 24 19 21 23 15 16 15 14@16@19 24 24 40
1- 2 | 36 42 58 61 51 56 55 43 37 34 36 32 19 21 19 15 20 17 15 13@19 28 31 42
2- 3 | 42 38 64 63 67 51 57 58 47 34 45 36 27 23 20 21 17 15 14@16
3- 4 | @24 16 18 13@18@21 22 25 32
4- 5 | 23 35 35 38 35 39 43 53 46 42 29 23 25@27 23 22 17 18 18 17@17 25 24 38
5- 6 | 40 41 50 56 47 42 45 44 33 39 36 28 29 24 24 20 18 16 13@19@18 29 29 44
6- 7 | 51 43 50 64 53 57 42 47 38 34 30 34 20 32 21 21 16 16 13@17 19 23 26 31
7- 8 | 38 39 38 58 53 55 41 41 29 39 31 29 22 21 24 17 16 17 13@15 @40 36
8 -9 | 46 38 49 49 42 51 47 52 55 33 43 36 31 31 19 18 15 18 24@23 24 46 48
9-10 | 58 42 48 69 71 70 46 37 45 40 30 34 24 28 21 16 17 11 14@20@26 39 41 65
10-11 | 84 45 61 75 81 58 53 51 49 35 33 37 29 23 24 19 20 16 17@25@30 56 46 89
11-12 | 93 50 92117 93 82 63 53 38 36 31 32 24 21 19 15 15 14 14@14@24 59 78117
12-13 |154 71 88200139125 80 63 54 47 38 37 30 25 22 24 18 17 21 28@50 62105148
13-14 |166 74118198140 87 89 75 45 33 31 30 28 23 23 17 19 14 18@31@33 36 61 77
14-15 | 66 49 69 73 62 62 55 54 51 40@32@32 23 20 20 19 15 14 14@17@20 29 42 38
15-16 | 39 34 53 44 48 66 43 44 40 33 27 25 29 22 23 13 14 16 17@17@22 32 26 30
16-17 | 45 46 54 53 51 48 48 42 52 42 43 31 33 29 25 15 15 12 15@18 23 20 23 25
17-18 | 29 37 40 44 41 37 40 46 46 47 31 26 24 18 20 19 12 14 14@20 28
18-19 | 23 33 39 36 37 38 50 46 36 34 24 29 20 22 15 16 11 11 12 13@21 20 20 34
19-20 | 19 27 31 42 43 44 56 47 34 37 33 30 28 19 16 15 14 15 14@16 @21 20 28
20-21 | 27 38 41 35 46 48 56 49 49 24 33 30 25 20 21@24 18 15 13@15 21 21 23 27
21-22 | 30 30 52 37 49 47 39 41 37 48 42 42 36 35 31@23 17 18 18@20 @24 23 24
22-23 | 22 31 44 54 40 46 29 35 40@44 36 30 28 18 17 21 18 12 14@17@26 17 22 25
23-24 | 24 43 40 38 44 38 45 49 34 30 23 24 21 19 19 14 14 14 15@19@20 26 27 28
24-25 | 29 37 39 50 43 30 35 38 33 50 33 27 29 21 21 20 14 18 18 16@24 25 22 22
25-26 | 27 29 42 44 50 35 42 47 40 29 29 31 30 20 19 19 15 12 13@18@28 20 27 31
26-27 | 37 30 34 39 45 50 53 36 45 34 31 26 23 25 23 16 13@15 17@16@19 26 26 28
27-28 | 29 30 39 36 38 46 51 51 41 42 40 38 33 28 22@17 15 14 12@16 21 19 34 32
28-29 | 29 38 26 37 45 42 46 43 44 21 31 36 23 17 15 18 16 16 15@15@24 14 21 39
29-30 | 26 39 52 40 53 47 49 39 38 26 33@25 16 19 19 13 13 13 12 16@21 15 31 31
30-31 | 25 29 30 35 33 38 40 33 33 29 28 43 28 22 21
------+-------------------------------------------------------------------------
1996 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Dec | UT
```

Hourly rate of long (> 20 s) echoes

```
Dec | UT
1996 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
------+------------------------------------------------------------------------
1- 2 | 1 2 1
2- 3 | 2 1 1 1 1
3- 4 |
4- 5 | 1 1 1 1
5- 6 | 1
6- 7 | 1 1 1 1
7- 8 | 2 1
8- 9 | 1 2 1
9-10 | 1 2
10-11 | 1 1 1
11-12 | 1 4 2 1 1
12-13 | 1 1 1 1 1
13-14 | 1 1 1 1
14-15 | 1 1
15-16 | 1 1 1 1
16-17 | 1 3
17-18 | 1 2 1 1
18-19 | 1
19-20 | 1 1
20-21 | 1 1
21-22 | 1 4 1 2 1
22-23 | 1 1 1 1 2
23-24 | 1 1
24-25 | 1 1
25-26 | 2 1 1
26-27 | 1 2 1
27-28 | 1 1 1
28-29 |
29-30 | 1 1
30-31 | 1
------+------------------------------------------------------------------------
--
1996 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Dec | UT
```

Notes:
. local time = JST = UT + 9 hours.
@nn means converted hourly rate.

Kazuhiro Suzuki

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 o (SW)

Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (new version!)

Counts in one hour intervals starting at:

Geminids

| 1996
UT | 12 Dec 13 Dec 14 Dec 15 Dec
----+----------------------------------
0 | 579 970 956 437
1 | 447 654 767 414
2 | 462 460 830 384
3 | 603 917 1067 478
4 | 856 1196 1122 470
5 | 817 1157 948 419
6 | 786 971 697 491
7 | 740 788 802 409
8 | 546 640 704 484
9 | 425 587 557 450
10 | 390 445 384 333
11 | 272 327 341 304
12 | 301 270 260 230
13 | 255 252 215 228
14 | 272 341 257 206
15 | 361 456 248 178
16 | 354 473 248 201
17 | 451 653 322 222
18 | 639 903 384 216
19 | 796 1224 481 281
20 | 1016 1289 403 282
21 | 1246 1507 410 310
22 | 1265 1244 486 354
23 | 1278 1348 467 395
----+----------------------------------
UT | 12 Dec 13 Dec 14 Dec 15 Dec
| 1996

Ursids

| 1996
UT | 20 Dec 21 Dec 22 Dec 23 Dec
----+----------------------------------
0 | 362 344 560 366
1 | 329 367 613 327
2 | 433 252 562 415
3 | 374 345 588 362
4 | 357 398 546 349

5 | 384 407 500 338
6 | 315 327 536 309
7 | 386 446 685 365
8 | 355 395 674 418
9 | 339 351 449 384
10 | 322 386 553 371
11 | 297 422 390 259
12 | 265 214 405 259
13 | 259 314 305 226
14 | 194 318 220 178
15 | 174 222 231 167
16 | 205 224 177 177
17 | 195 300 210 165
18 | 246 270 226 235
19 | 202 300 179 214
20 | 246 351 273 199
21 | 298 288 269 295
22 | 325 382 337 263
23 | 321 411 326 281
----+-----------------------------------
UT | 20 Dec 21 Dec 22 Dec 23 Dec
| 1996

Ilkka Yrjola / via M. De Meyere

Observer : W.T. Zanstra
Location : Appingedam, Netherlands (6 51' E, 53 19' N)
Frequency: 72.11 MHz
Transmitter location: Wroclaw, Poland, 135 kW, distance 735 km.
Antenna : Yagi, 5 elements, geographical azimuth 110 deg (ESE),
elev 12 deg.
Receiver : Bearcat UBC 177XLT Scanning Radio, sensitivity 0.3 uV
Observing method: listening

Draconids, Leonids and sporadic meteors in October and November 1996

Raw counts of reflections (corrected for dead time) during one
hour intervals starting at:

| October 1996 November 1996
UT | 08 11 15 16 17 18
----+---
04 | 102 131 91
05 | 82 104 121 83
06 | 81 108 108 89
07 | 84 79 119 90
08 | 74 71 75 76 100 62
09 | 71 63 68 76 93 75
10 | 66 56 61 81
11 | 58 57 43 40
12 | 53 63 54 61

```
13 | 51
----+-------------------------------------------
UT | 08 11 15 16 17 18
| October 1996 November 1996
```

Wim Zanstra

2. ANNOUNCEMENT

Making RMOB results more widely-known

As some of you may already be aware, thanks to the kind offices of Chris Steyaert, I have been able to analyse and publish some of the recent RMOB data in the IMO's journal "WGN", partly to thank all the observers involved, but partly to make more people aware of what radio meteor work is currently being carried out. I am also interested to discover what correlations are or are not present between different observers' data collected at the same time. This may well help refine our understanding of radio meteor showers (especially the daytime showers which are naturally not otherwise observable), and also to clarify problem areas, such as periods of Es, local interference or other difficulties. My intention is to continue to analyse and produce reports from recent RMOB data as part of the on-going series of SPA Meteor Section results in "WGN" and the "SPA News Circulars".
However, Chris Steyaert also thoughtfully sent me the complete series of RMOBs, and rather than simply let these lie and be forgotten, I would like to at least summarize the main points of what they show, perhaps as annual or six-monthly articles, again, so that more people will be made aware of just what radio observing is being carried out now, and what has been done in recent years. As it is over three years since the initial RMOB in August 1993, it is entirely possible that some of the observers involved may have analysed their data themselves, and perhaps even published articles from their data. I have no desire to duplicate any such efforts, especially as the task of producing these summaries is not a short-term proposition. Consequently, if anyone has carried out such analyses or published articles, I would be greatful if the people concerned would send me copies of what they have done with their data, or at least, let me know where and how they published their results.
All observers will naturally be acknowledged in anything I publish, and I would like to thank you in advance for your cooperation. Good luck with all your observing!

Alastair McBeath

3. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing

stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts sh

66. Re: MIR 440 RPTR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: Mike Cat <mcat@nosuchplace.net>
Message-ID: <32D161F7.3552@nosuchplace.net>
Source record: 20419

Keith J. Leite wrote:

> Thanks for reading my post, I am curious if anyone has heard the RPTR
> on board the MIR recently ???? If so could you please give me the RPTR
> frequencies and PL ???

I tried to simply receive any of MIR's transmissions repeatedly on
1/4/97 but to no avail. I am using the latest information:

Voice uplink: 435.750
Voice dwnlnk: 437.950

Also

Voice and Packet Uplink at: 145.200 Downlink: 145.800

A recorded greeting should also be found at: 437.925

Again, though, I have verified my Keps and all my settings with STSPlus
(and have co-verified with other ops), but have not heard anything from
any of these frequencies. I'm hoping to try again later this week.

Mike
catman@codem.com

67. Analysis & Synthesis Capability Now Available to Ham Clubs, Groups and Consortia!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <32D1848F.7675@webblabs.com>
Source record: 20420
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I posted material some time ago regarding the Webb Laboratories Education & Professional Partnership Programs, unprecedented opportunities through which every faculty member, graduate student and undergraduate student (alternatively for the PP program - each member of a working group of designers) can achieve true ownership, at school, home and on the job, of powerful electronic CAE capability. The EP and PP Programs provide general, graphical nodal circuit analysis, RF/microwave-specific analysis, unconstrained nodal noise capability and true 'floating' two-nodes-per-port definition. In addition, the EP and PP Programs include the industry's most comprehensive transmission structure analysis/synthesis engine as well as the powerful SystemPlus suite of design tools for the wireless/receiver/system designer.

The complete EP or PP Program package, including over 500 pages of documentation, may be distributed department/group/consortium/company-wide with no restrictions, without expiration, and at no liability to the School, Group, Consortium or Corporation. EP/PP Program details, an editorial review and a growing example library may be found at:

http://www.webblabs.com/ep.htm

or

http://www.webblabs.com/pp.htm

I ask that you forward this announcement to potentially interested individuals. If you prefer, kindly reply with names and e-mail addresses of those to whom I should convey information directly. Thank you for taking the time to consider what has become a unique access and ownership opportunity for a great number of designers worldwide.

Wishing you a Happy New Year!

Kathy Goerg
Education Partnership Program Liaison
Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI USA
kgoerg@webblabs.com
TEL 414.367.6825
FAX 414.367.6824

68. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-06 00:00:00 UTC
From: Randy <randyZ@ainsworth.ca>
Message-ID: <01bbfc25$97f92e20$c9f13cc7@alc-pc01>
Source record: 20421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Brian:
I think you are suffering from 'Tunnel Vision'. Please put on the Wide Angle Lens and see the whole world! The FCC does not dictate to Canada, or any other country, with the exception of the USA, what bands it may use for communications. Do you think that the radio waves produced up here in Canada bounce off some invisible force field when they reach the 49th parallel? I don't think so. The 2 meter and 70 centimeter bands don't just belong to the USA and some congressman from the US isn't going to give a fat rats ass if I send him a letter from the Great White North anyway. I don't think I'm going to panic.
73s
Randy.
ps: I think its called the WWW... hmmmm... none of those 'W's stands for Washington, I guess they don't own the World Wide Web either.
<< the opinions expressed above are my own>>

Brian Mileshosky, N5ZGT <n5zgt@swcp.com> wrote in article <5ar9o7$enr@sloth.swcp.com>...
> Dear Fellow Amateur Radio operators,
> Remember the ARRL bulletins from last summer warning us of a threat to
> our 2 meter and 70 centimeter bands?? Read on.
> An article in the December 23, 1996 issue of USA today discusses the
> development of Teledesic, which will involve putting 840 loe-earth
> orbit satellites (LEOS) into orbit.
> Keep in mind that these satellites are the beginning of the threat to
> our 2 meter and 70 cm (440 MHz) bands. If these things go up, we had
> better expect our 2 meter and 70 cm bands to shrink up, or even
> vanish. After these satellites go up, more companies will want their
> satellites in orbit and do similar things.
> If you have not taken time to write your Congressmen,
> Representatives, etc. to ask them to help defend our bands, DO IT
> PLEASE. I am getting great cooperation from Sen. Domenici here in New
> Mexico. Get other Amateurs involved. Announce this at meetings. Sign
> petitions and send them to your government officials and to the FCC
> (WRC-97). But please be courteous when writing. Emphasize the
> importance of these bands for us (search & rescue, traffic handling,
> etc.).
> These bands are extremely important to us, and we cannot lose
> them. Please do something and don't give up.
> 73,
> Brian, N5ZGT

69. Re: MIR 440 RPTR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: ydtlzmj@news.atglab.bls.combst.bls.com
Message-ID: <5asaq3$5ec@atglab10.atglab.bls.com>
Source record: 20323

I also have monitored this frequency on a very good visual
pass on 12/31 and did not hear traffic. I have monitored
this freqency before and heard several QSOs.

I need a 440 FM Xcvr that can handle the doppler shift.
I have three different 440 HTs and none have a tuning
step less than 5 KHz. Any suggestions?

Victor Gregg, KF4BUX

: I tried to simply receive any of MIR's transmissions repeatedly on
: 1/4/97 but to no avail. I am using the latest information:
:
: Voice uplink: 435.750
: Voice dwnlnk: 437.950
:
: Mike
: catman@codem.com

70. KC5PZQ/R0MIR QSL ADDRESS PLEASE.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Wave@mindspring.com
Message-ID: <5asl0f$1qf@camel2.mindspring.com>
Source record: 20324

Can someone please post the QSL address for MIR voice contacts.

Thanks
Pieter
N4IP

71. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bbfc61$bcc3dac0$b9a1dece@kg5u.hal-pc.org>
Source record: 20325

pre-launch elements are on the JSC ARC BBS at 281-244-5625

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Doug Wittich <dwittich@concentric.net> wrote in article
<32d12166.4834461@news.concentric.net>...
> Do you know the inclination of the launch? Are there pre-launch
> Keplarien elements available?
>
> dw
>
>
> rloftin@phoenix.net (Bob Loftin) wrote:
>
> >In article <19970105004700.TAA05099@ladder01.news.aol.com>,
> >lewedward@aol.com (LewEdward) wrote:
> >
> >> If anyone knows when the next STS is, please advise.
> >
> >STS-81 is scheduled for launch at 3:27 a.m. CST (09:27 GMT) on January
12.
> >
> >Toni L.
> >tloftin@phoenix.net
>
>

72. Re: MIR 440 RPTR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Mike Cat <foobar@abc.xyz>
Message-ID: <32D2B9B7.7F16@abc.xyz>
Source record: 20326

Victor Gregg wrote:

> I also have monitored this frequency on a very good visual
> pass on 12/31 and did not hear traffic. I have monitored
> this freqency before and heard several QSOs.
>
> I need a 440 FM Xcvr that can handle the doppler shift.
> I have three different 440 HTs and none have a tuning
> step less than 5 KHz. Any suggestions?

Hi Victor!

I have been using a 5 KHz step HT myself, along with a Realistic scanner
but to no avail. The only suggestions I can come up with:

1) Catch a 89 degree pass where the Doppler shift is minimal.
2) Buy yourself a dual band satellite rig.

I am planning on doing the latter sometime within the next few months
when the $$$$ is accumulated. I'm looking at the new ICOMs.

I have used this same HT to listen to DOVE (DO-17) many times on 2
meters. Even with Doppler, it's just fine.

I'm gonna keep trying to at least hear MIRs voice greeting the rest of
this week when both of our schedules are compatible.

Cheers!

Mike N1YHW
catman@codem.com

>
> : I tried to simply receive any of MIR's transmissions repeatedly on
> : 1/4/97 but to no avail. I am using the latest information:
> :
> : Voice uplink: 435.750
> : Voice dwnlnk: 437.950
> :
> : Mike
> : catman@codem.com

73. NORAD Two-Line Orbital Element Sets (TLE925)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5aulnn$ncj@blackbird.afit.af.mil>
Source record: 20327

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

```
- Current Two-Line Element Sets #925 -
Alouette 1
1 00424U 62049A 97006.27041746 .00000066 00000-0 67354-4 0 2583
2 00424 80.4661 83.3689 0022340 230.6346 129.2818 13.67885415710107
ATS 1
1 02608U 66110A 97006.24130534 -.00000141 00000-0 10000-3 0 9962
2 02608 14.5647 350.6394 0006867 101.2738 258.8319 1.00289484 26903
ATS 3
1 03029U 67111A 97006.48257799 -.00000108 00000-0 10000-3 0 6006
2 03029 14.9147 357.6035 0010641 268.6694 268.3079 1.00272924106801
Starlette
1 07646U 75010A 97003.24411289 -.00000154 00000-0 -85502-5 0 242
2 07646 49.8276 79.2511 0206449 171.2376 189.2207 13.82191729106636
LAGEOS
1 08820U 76039A 97003.19759376 -.00000004 00000-0 00000+0 0 2547
2 08820 109.8468 94.5452 0043641 85.3275 275.2452 6.38664661226602
ETS-2
1 09852U 77014A 96365.26756578 .00000078 00000-0 10000-3 0 921
2 09852 13.4588 30.6789 0005713 150.7215 209.3348 1.00015729 19605
GOES 2
1 10061U 77048A 97006.60653022 .00000056 00000-0 10000-3 0 7836
2 10061 12.6361 34.7985 0010332 140.8884 332.3028 1.00283923 16485
IUE
1 10637U 78012A 97006.39646670 .00000036 00000-0 10000-3 0 3399
2 10637 35.7870 80.3121 1340781 63.0828 330.9607 1.00061446 21974
GOES 3
1 10953U 78062A 97006.48415316 -.00000105 00000-0 10000-3 0 7589
2 10953 11.6383 37.7266 0002402 207.3461 290.7466 1.00264542 21094
```

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SeaSat 1
1 10967U 78064A 97005.57065967 -.00000061 00000-0 24230-4 0 5432
2 10967 107.9913 233.5248 0001604 282.6067 77.4898 14.38143711970545
Nimbus 7
1 11080U 78098A 97006.10665382 -.00000085 00000-0 -39857-4 0 6409
2 11080 98.9193 224.1812 0009138 136.0519 224.1367 13.83686668919231
GOES 5
1 12472U 81049A 96364.24976996 .00000094 00000-0 10000-3 0 9759
2 12472 8.5030 48.2212 0003965 81.6505 278.3897 1.00294831 15054
Cosmos 1383
1 13301U 82066A 97005.91339729 .00000029 00000-0 16172-4 0 5565
2 13301 82.9288 345.1503 0029038 42.4611 317.8781 13.68080190725092
LandSat 4
1 13367U 82072A 97004.70169681 .00000012 00000-0 12449-4 0 355
2 13367 98.0458 55.2009 0005909 231.0667 129.0067 14.57193771769883
DMSP B5D2-1
1 13736U 82118A 97006.87634422 -.00000056 00000-0 -50778-5 0 1490
2 13736 98.6219 197.9749 0008477 149.0581 211.1101 14.25815799730094
IRAS
1 13777U 83004A 97007.15192971 .00000159 00000-0 13916-3 0 5420
2 13777 98.9647 194.3414 0011646 251.4182 108.5717 13.99261562381899
Cosmos 1447
1 13916U 83021A 97005.10165358 .00000024 00000-0 10000-4 0 6486
2 13916 82.9445 41.7019 0036920 311.4499 48.3443 13.74350253691473
TDRS 1
1 13969U 83026B 97006.05975216 -.00000288 00000-0 00000+0 0 6898
2 13969 9.2738 41.7012 0002423 245.6213 151.0478 1.00272918 23425
GOES 6
1 14050U 83041A 97006.46253939 -.00000061 00000-0 10000-3 0 5997
2 14050 7.3620 51.7196 0002472 53.1281 58.7285 1.00217531108233
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97005.52766087 .00000041 00000-0 19391-4 0 5816
2 14780 98.3082 69.0649 0003363 35.6835 324.4588 14.57062005683428
UO-11
1 14781U 84021B 97005.50304382 .00000053 00000-0 16786-4 0 9419
2 14781 97.8161 353.4211 0011506 157.8904 202.2801 14.69513705687367
Cosmos 1574
1 15055U 84062A 97004.80110194 .00000072 00000-0 60450-4 0 8470
2 15055 82.9568 97.2612 0028458 137.7447 222.5907 13.73643535628668
Cosmos 1602
1 15331U 84105A 97005.83181195 .00000198 00000-0 20402-4 0 5309
2 15331 82.5345 283.1595 0020869 2.9795 357.1539 14.84826469663046
ERBS
1 15354U 84108B 97005.20536129 -.00000063 00000-0 15859-4 0 2476
2 15354 56.9936 290.8908 0005435 155.7540 204.3807 14.95008480667055
NOAA 9
1 15427U 84123A 97006.95685984 .00000045 00000-0 47109-4 0 9885
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2 15427 98.9252 77.7483 0015922 94.9112 265.3878 14.13828960622424
Mir
1 16609U 86017A 97007.14260667 .00002896 00000-0 38559-4 0 9437
2 16609 51.6510 175.6867 0013432 211.6664 148.3500 15.61940194621887
SPOT 1
1 16613U 86019A 97006.22010776 -.00000045 00000-0 00000+0 0 213
2 16613 98.8155 79.6479 0001428 66.5004 293.6334 14.19994766249127
Cosmos 1766
1 16881U 86055A 97003.00901337 .00000147 00000-0 14756-4 0 4444
2 16881 82.5174 343.4569 0021261 39.6313 320.6448 14.83796328563477
EGP
1 16908U 86061A 97005.88385284 -.00000083 00000-0 10000-3 0 1440
2 16908 50.0070 93.8225 0011638 170.1924 189.9138 12.44415698141649
NOAA 10
1 16969U 86073A 97006.89448163 -.00000006 00000-0 15482-4 0 9171
2 16969 98.5329 4.2298 0013830 115.6159 244.6456 14.25015547535612
MOS-1
1 17527U 87018A 97006.20392970 -.00000043 00000-0 00000+0 0 5027
2 17527 98.9110 69.5239 0019482 118.0669 242.2440 14.00441406503405
GOES 7
1 17561U 87022A 97006.43002441 -.00000156 00000-0 10000-3 0 2203
2 17561 3.4646 68.0072 0002139 287.1279 171.5961 1.00275683 19348
Kvant-1
1 17845U 87030A 97007.14259081 .00004534 00000-0 56910-4 0 8637
2 17845 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801555992
DMSP B5D2-3
1 18123U 87053A 97006.95974506 -.00000027 00000-0 83065-5 0 7563
2 18123 98.7632 199.8783 0014942 35.2292 324.9868 14.15462969493328
RS-10/11
1 18129U 87054A 97003.10922329 .00000005 00000-0 -11246-4 0 3057
2 18129 82.9237 0.7557 0011264 328.2546 31.7907 13.72372900477595
Meteor 2-16
1 18312U 87068A 97006.52928433 .00000031 00000-0 14621-4 0 5350
2 18312 82.5556 190.7928 0013431 14.4684 345.6848 13.84090049474307
Meteor 2-17
1 18820U 88005A 97006.58446024 .00000041 00000-0 23099-4 0 1449
2 18820 82.5416 245.2903 0018126 74.3402 285.9759 13.84767778451676
DMSP B5D2-4
1 18822U 88006A 97006.57543445 -.00000028 00000-0 57721-5 0 4322
2 18822 98.3794 194.9205 0006645 123.6429 236.5384 14.23212186463500
Glonass 34
1 19163U 88043A 97005.77773713 -.00000015 00000-0 10000-3 0 1450
2 19163 65.3484 79.0159 0008599 134.2680 225.8642 2.13102381 66550
Glonass 36
1 19165U 88043C 97004.42706371 -.00000022 00000-0 10000-3 0 5552
2 19165 65.3162 79.0089 0004437 346.3360 13.6973 2.13102071 67147
METEOSAT 3
1 19215U 88051A 96363.47599704 -.00000156 00000-0 10000-3 0 2981
2 19215 3.6520 66.6866 0006016 131.0881 228.7236 0.96948920 19062
OKEAN 1
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1 19274U 88056A 97006.27823456 .00000183 00000-0 19722-4 0 1459
2 19274 82.5141 81.4955 0019685 170.0966 190.0640 14.82560282459462
Meteor 3-2
1 19336U 88064A 97003.87989777 .00000051 00000-0 10000-3 0 5401
2 19336 82.5391 24.4131 0017924 91.3791 268.9380 13.16980151405897
Glonass 39
1 19503U 88085C 97005.86554550 -.00000039 00000-0 10000-3 0 4370
2 19503 65.5061 317.8772 0003990 138.1841 221.8506 2.13101747 64667
NOAA 11
1 19531U 88089A 97006.93969690 .00000004 00000-0 27302-4 0 8086
2 19531 99.1692 36.2087 0012489 31.7992 328.3929 14.13117162427228
TDRS 3
1 19548U 88091B 97006.66746580 -.00000185 00000-0 10000-3 0 2641
2 19548 2.9000 70.8583 0006845 162.4844 198.4531 1.00276126 17579
Glonass 40
1 19749U 89001A 97006.37214405 -.00000011 00000-0 10000-3 0 6507
2 19749 65.2974 78.5067 0007247 257.7875 102.1884 2.13101490 62181
Glonass 41
1 19750U 89001B 97004.54987170 -.00000022 00000-0 10000-3 0 5558
2 19750 65.3060 78.6402 0008644 224.2327 135.7487 2.13101798 62167
GPS BII-01
1 19802U 89013A 97007.06548028 -.00000022 00000-0 00000+0 0 3401
2 19802 55.4201 102.5143 0026539 179.2669 180.7656 2.00560929 57806
Akebono
1 19822U 89016A 97006.10615715 .00006584 00000-0 34136-3 0 8413
2 19822 75.1084 5.7423 3728447 312.6784 21.4101 7.95528001182799
Meteor 2-18
1 19851U 89018A 97006.36790958 .00000048 00000-0 29432-4 0 5340
2 19851 82.5202 119.0812 0014991 122.0328 238.2289 13.84423321396945
MOP-1
1 19876U 89020B 97002.22373983 -.00000037 00000-0 00000+0 0 2392
2 19876 2.3936 71.0594 0017119 280.1407 79.3146 0.97108949 8558
TDRS 4
1 19883U 89021B 97006.30798032 -.00000256 00000-0 00000+0 0 2999
2 19883 0.2862 87.4316 0005296 187.5659 260.8354 1.00270016201144
GPS BII-02
1 20061U 89044A 97002.91753331 -.00000030 00000-0 10000-3 0 3345
2 20061 54.0684 278.1452 0164109 223.3549 135.5341 2.00563102 55467
Nadezhda 1
1 20103U 89050A 97006.91162397 .00000050 00000-0 36931-4 0 293
2 20103 82.9596 318.4225 0036407 204.7295 155.2116 13.73872598376652
GPS BII-03
1 20185U 89064A 97004.59707602 -.00000024 00000-0 10000-3 0 3770
2 20185 55.2792 103.0443 0011725 345.2443 6.7261 2.00642920 54077
GMS 4
1 20217U 89070A 97007.19699074 -.00000361 00000-0 10000-3 0 5186
2 20217 2.1998 73.9060 0000602 336.3456 247.3218 1.00264267 27460
INTERCOSMOS 24
1 20261U 89080A 97004.89134138 .00000147 00000-0 45152-4 0 5565
2 20261 82.5923 141.9021 1240912 303.0545 45.7247 12.47373803331058
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GPS BII-04
1 20302U 89085A 97005.77608319 .00000101 00000-0 10000-3 0 3595
2 20302 53.1951 217.7588 0025811 181.5771 178.4823 2.00571408 52892
Meteor 3-3
1 20305U 89086A 97007.00224336 .00000044 00000-0 10000-3 0 7264
2 20305 82.5494 343.6689 0007655 162.8057 197.3332 13.04425140344772
COBE
1 20322U 89089A 97007.05868778 -.00000271 00000-0 -14540-3 0 2739
2 20322 98.9344 24.7997 0008107 185.1970 174.9114 14.03456291365526
Kvant-2
1 20335U 89093A 97007.14259081 .00004534 00000-0 56910-4 0 7860
2 20335 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801405006
GPS BII-05
1 20361U 89097A 97006.29380974 -.00000026 00000-0 10000-3 0 1613
2 20361 56.1156 45.2546 0092496 141.2920 219.4435 2.00565826 42382
COSMOS 2054 (Altair-1)
1 20391U 89101A 97007.00703307 -.00000128 00000-0 00000+0 0 4904
2 20391 4.2300 62.1910 0003228 177.5374 213.3726 1.00275445 26048
SPOT 2
1 20436U 90005A 97005.99641104 -.00000044 00000-0 00000+0 0 1703
2 20436 98.7446 82.8232 0001743 90.5780 269.5631 14.20019258360625
UO-14
1 20437U 90005B 97007.23206924 .00000004 00000-0 18270-4 0 2383
2 20437 98.5327 92.3040 0010944 326.2681 33.7799 14.29945002363215
AO-16
1 20439U 90005D 97006.20275526 .00000045 00000-0 34442-4 0 365
2 20439 98.5485 93.8875 0011245 330.7029 29.3518 14.29995588363084
DO-17
1 20440U 90005E 97006.20483614 -.00000039 00000-0 19167-5 0 379
2 20440 98.5509 94.6437 0011838 329.0718 30.9776 14.30136794363116
WO-18
1 20441U 90005F 97006.19906830 .00000028 00000-0 27707-4 0 407
2 20441 98.5516 94.5584 0012204 329.9702 30.0780 14.30106179363117
LO-19
1 20442U 90005G 97005.75947632 -.00000015 00000-0 10936-4 0 362
2 20442 98.5545 94.7131 0012551 331.6804 28.3693 14.30217951363077
GPS BII-06
1 20452U 90008A 97005.69319925 .00000064 00000-0 10000-3 0 2587
2 20452 54.0455 158.5181 0073244 91.9652 269.0976 2.00553105 50879
MOS-1B
1 20478U 90013A 97004.24912780 -.00000156 00000-0 -84905-4 0 127
2 20478 99.1099 77.0753 0006176 61.1367 299.0409 13.93968870272562
DEBUT
1 20479U 90013B 97003.54894504 .00000006 00000-0 83751-4 0 369
2 20479 99.0242 356.5084 0541187 29.7400 333.3338 12.83348060323604
FO-20
1 20480U 90013C 97006.01915079 -.00000030 00000-0 22017-5 0 9330
2 20480 99.0222 358.2684 0541405 24.7872 337.8233 12.83236042323902
MOS-1B R/B
1 20491U 90013D 97006.23733192 .00000439 00000-0 88888-3 0 3084
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2 20491 99.0555 70.0451 0470017 178.9366 181.2855 13.02997960328309
LACE
1 20496U 90015A 97004.56305223 .00000706 00000-0 27685-4 0 7186
2 20496 43.1017 133.3645 0012116 284.9692 74.9820 15.36251442384799
Nadezhda 2
1 20508U 90017A 97006.73280159 .00000056 00000-0 42898-4 0 288
2 20508 82.9535 93.0379 0044550 157.4644 202.8481 13.73516920343832
OKEAN 2
1 20510U 90018A 97006.53045298 .00000107 00000-0 11418-4 0 5537
2 20510 82.5235 36.8861 0019924 17.5860 342.6046 14.78656351369727
GPS BII-07
1 20533U 90025A 96353.12701437 -.00000065 00000-0 00000+0 0 2950
2 20533 54.4343 279.6053 0040336 77.6117 282.8589 2.00570188 49270
PegSat
1 20546U 90028A 97005.33858897 .00004358 00000-0 74599-4 0 144
2 20546 94.1275 107.8027 0054461 304.3121 55.2987 15.49703867376288
HST
1 20580U 90037B 97006.26355002 .00000343 00000-0 18675-4 0 9080
2 20580 28.4704 353.0834 0006513 138.7099 221.3976 14.91153556168926
MACSAT 2
1 20608U 90043B 97006.49800012 .00000138 00000-0 20643-4 0 2385
2 20608 89.9246 171.6379 0108645 65.2140 296.0332 14.64968506356055
Glonass 44
1 20619U 90045A 97006.26984791 -.00000040 00000-0 10000-3 0 3537
2 20619 65.0945 317.0047 0023940 214.9455 144.8985 2.13102532 51632
Glonass 45
1 20620U 90045B 97005.91933041 -.00000040 00000-0 10000-3 0 3419
2 20620 65.0949 316.9964 0010030 38.4609 321.6115 2.13102482 51667
Glonass 46
1 20621U 90045C 97002.23274517 -.00000036 00000-0 10000-3 0 9510
2 20621 65.1149 317.1812 0012995 194.5491 165.4195 2.13102519 51585
Kristall
1 20635U 90048A 97007.14259081 .00004534 00000-0 56910-4 0 5784
2 20635 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801375836
ROSAT
1 20638U 90049A 97003.72835168 -.00000051 00000-0 15505-4 0 6231
2 20638 52.9867 115.8748 0012446 26.1822 333.9796 15.07524831362568
Meteor 2-19
1 20670U 90057A 97007.04688688 -.00000024 00000-0 -35011-4 0 1766
2 20670 82.5464 185.9561 0017052 44.6746 315.5789 13.84130890329949
CRRES
1 20712U 90065A 97001.45026398 .00000153 00000-0 22803-3 0 3807
2 20712 17.7081 169.1372 7175945 167.9580 229.0801 2.35820131 47795
GPS BII-08
1 20724U 90068A 97004.42271683 -.00000027 00000-0 00000+0 0 1587
2 20724 55.0660 100.5708 0132352 187.6401 172.1667 2.00564147 45483
Feng Yun1-2
1 20788U 90081A 97006.86419445 .00000313 00000-0 23540-3 0 2184
2 20788 98.8114 11.3287 0014142 294.5304 65.4388 14.01388554324629
Meteor 2-20
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1 20826U 90086A 97006.25937198 .00000059 00000-0 40015-4 0 457
2 20826 82.5259 122.7482 0012621 314.4122 45.6006 13.83642927316923
GPS BII-09
1 20830U 90088A 97006.47126223 -.00000026 00000-0 00000+0 0 1346
2 20830 56.0531 43.1561 0067153 95.7755 265.0586 2.00568558 46163
GPS BIIA-10
1 20959U 90103A 97005.87786071 -.00000024 00000-0 10000-3 0 1198
2 20959 55.2522 102.6218 0113940 238.5028 120.3915 2.00556906 44747
DMSP B5D2-5
1 20978U 90105A 97006.95874720 .00000069 00000-0 40366-4 0 9117
2 20978 98.5743 82.2062 0078414 289.2015 70.0692 14.32709629318891
Glonass 47
1 21006U 90110A 97006.47950909 -.00000010 00000-0 10000-3 0 9126
2 21006 65.2750 77.8334 0057859 186.7313 173.2508 2.13102644 47348
Glonass 48
1 21007U 90110B 97005.26434481 -.00000018 00000-0 10000-3 0 494
2 21007 65.2950 77.9603 0032928 178.5760 181.4865 2.13101133 47301
Glonass 49
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2 23802 86.3366 23.8864 6527026 276.3341 18.2723 1.36264408 4285
1996010E
1 23824U 96010E 97005.47002439 .00346211 00000-0 34346-1 0 1557
2 23824 47.4375 195.9821 7083024 79.8593 1.3186 2.55618902 7184
GPS BIIA-25
1 23833U 96019A 97006.31866365 -.00000057 00000-0 00000+0 0 1279
2 23833 54.6448 339.7396 0028551 147.1036 213.0821 2.00565124 5754
Priroda
1 23848U 96023A 97007.14259081 .00004534 00000-0 56910-4 0 2273
2 23848 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801 40407
MSX
1 23851U 96024A 97007.06816677 -.00000047 00000-0 00000+0 0 1650
2 23851 99.4072 356.8084 0005632 321.5412 38.5283 13.97463385 35972
SAX
1 23857U 96027A 97006.03444621 .00001422 00000-0 64711-4 0 482
2 23857 3.9552 74.7294 0013557 51.7931 308.2972 14.91701731 37488
MSTI 3
1 23868U 96031A 97007.20454741 -.00001692 00000-0 -32162-4 0 1020
2 23868 97.1153 200.1286 0010215 145.0623 215.1222 15.46677280 36341
TOMS-EP
1 23940U 96037A 97004.82516232 .00001687 00000-0 77291-4 0 737
2 23940 97.4343 273.7812 0013722 4.6184 355.5172 15.21784772 28291
GPS BIIA-26
1 23953U 96041A 97006.23427555 -.00000026 00000-0 00000+0 0 996
2 23953 55.1302 100.1468 0017401 356.7374 3.2681 2.00561110 3546
ADEOS
1 24277U 96046A 97007.19691854 -.00000044 00000-0 00000+0 0 1296
```

```
2 24277 98.6115 87.2048 0000236 170.4378 189.6811 14.27635908 20397
FO-29
1 24278U 96046B 97007.18262385 -.00000019 00000-0 19707-4 0 491
2 24278 98.5630 70.2024 0350572 243.4011 113.0807 13.52628360 19352
Soyuz TM-24
1 24280U 96047A 97007.14259081 .00004534 00000-0 56910-4 0 1314
2 24280 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801 22307
FAST
1 24285U 96049A 97003.23558851 .00001039 00000-0 10778-3 0 490
2 24285 82.9937 115.7364 2205706 284.1374 52.5827 10.81681244 14581
Microsat
1 24291U 96050A 97005.31832960 .00027465 61523-5 18912-3 0 1049
2 24291 62.7960 313.2629 0603074 126.0946 239.7547 14.68848651 18898
MO-30
1 24305U 96052B 97005.35755313 .00000204 00000-0 20364-3 0 589
2 24305 82.9305 114.9068 0031990 303.8067 56.0027 13.73089413 16715
GPS BIIA-27
1 24320U 96056A 97002.10883583 -.00000036 00000-0 00000+0 0 531
2 24320 54.6984 280.3971 0055375 113.5952 246.9136 2.00569138 2120
SAC-B/HETE
1 24645U 96061A 97004.73999332 .00000273 00000-0 20724-4 0 350
2 24645 37.9763 118.9291 0047517 66.3645 294.2095 15.14818603 9268
Progress M-33
1 24663U 96066A 97007.14259081 .00004534 00000-0 56910-4 0 443
2 24663 51.6493 175.6905 0013114 212.1113 147.8089 15.61939801 7541
1996069A
1 24670U 96069A 97006.58882555 -.00011900 00000-0 -19203-3 0 483
2 24670 65.0394 207.3277 0010167 278.3408 81.6562 15.51916930 4049
INMARSAT III F3
1 24674U 96070A 97005.62114997 -.00000123 00000-0 00000+0 0 161
2 24674 2.6594 286.7463 0021460 122.6087 77.0688 1.00264328 176
1996070B
1 24675U 96070B 97 2.56849125 .00000815 00000-0 10000-3 0 139
2 24675 22.7262 280.4278 7019774 189.0987 143.4814 2.22358808 334
Cosmos 2336
1 24677U 96071A 97006.85434640 .00000015 00000-0 00000+0 0 81
2 24677 82.9389 205.2894 0022329 213.1075 146.8683 13.71047080 2407
1996071B
1 24678U 96071B 97003.11613989 .00000015 00000-0 00000+0 0 195
2 24678 82.9264 208.0121 0023188 196.2574 163.7839 13.72711860 1891
BION 11
1 24701U 96073A 97007.00481110 .00023179 79810-5 38031-4 0 203
2 24701 62.8023 198.8518 0115737 109.1102 252.3079 15.92753966 2143
1996073B
1 24702U 96073B 97007.22402928 .00295095 81081-5 34649-3 0 366
2 24702 62.7899 197.7312 0094841 106.7100 254.4484 15.99620652 2186
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

74. ARLK002 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk002.1997@arrl.org>
Source record: 20328
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK002
ARLK002 Keplerian data

ZCZC SK02
QST de W1AW
Keplerian Bulletin 2 ARLK002
From ARRL Headquarters
Newington, CT January 7, 1997
To all radio amateurs

SB KEP ARL ARLK002
ARLK002 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97007.11912897 .00000009 00000-0 -63877-5 0 3064
2 18129 82.9241 357.7918 0011040 316.8270 43.1999 13.72372994478148
UO-11
1 14781U 84021B 97007.06913666 .00000030 00000-0 12865-4 0 09535
2 14781 97.8162 354.9203 0011458 152.8410 207.3397 14.69513741687599
RS-12/13
1 21089U 91007A 97007.14750591 .00000009 00000-0 -65585-5 0 09671
2 21089 82.9219 38.0876 0030470 27.9383 332.3399 13.74075973297041
UO-14
1 20437U 90005B 97007.23206924 .00000004 00000-0 18270-4 0 2383
2 20437 98.5327 92.3040 0010944 326.2681 33.7799 14.29945002363215
RS-15
1 23439U 94085A 97007.18278706 -.00000039 00000-0 10000-3 0 1897
2 23439 64.8167 53.1951 0154486 162.6777 197.9488 11.27527418 83783
AO-16
1 20439U 90005D 97007.18233776 .00000049 00000-0 35966-4 0 00405
2 20439 98.5483 94.8489 0011078 327.8430 32.2071 14.29995808363229
DO-17
1 20440U 90005E 97007.18432153 -.00000017 00000-0 10054-4 0 00415
2 20440 98.5509 95.6059 0011746 326.2520 33.7921 14.30137027363253
```

```
WO-18
1 20441U 90005F 97007.17857510 .00000030 00000-0 28421-4 0 00447
2 20441 98.5516 95.5206 0012211 327.1608 32.8813 14.30106343363257
LO-19
1 20442U 90005G 97007.15866258 -.00000023 00000-0 77626-5 0 00406
2 20442 98.5544 96.0882 0012539 327.4868 32.5542 14.30217949363272
FO-20
1 20480U 90013C 97007.03266536 -.00000089 00000-0 -12840-3 0 09404
2 20480 99.0225 359.0892 0541305 22.5152 339.8762 12.83235406324038
AO-21
1 21087U 91006A 97007.47872991 .00000094 00000-0 82657-4 0 7762
2 21087 82.9404 170.5142 0035896 358.7288 1.3770 13.74576806298070
UO-22
1 21575U 91050B 97007.19925715 .00000020 00000-0 20921-4 0 7434
2 21575 98.3281 73.2520 0008452 19.1220 341.0283 14.37051971287361
KO-23
1 22077U 92052B 97007.42390446 -.00000037 00000-0 10000-3 0 6320
2 22077 66.0773 121.8350 0014838 250.6372 109.3042 12.86300303207079
KO-25
1 22828U 93061F 97007.13993698 .00000029 00000-0 29075-4 0 05266
2 22828 98.5601 85.0964 0010988 343.1795 16.9017 14.28165045139220
IO-26
1 22826U 93061D 97007.13718487 -.00000028 00000-0 62599-5 0 05433
2 22826 98.5647 85.0222 0010366 359.1235 0.9930 14.27823171171101
AO-27
1 22825U 93061C 97007.15641836 .00000030 00000-0 29880-4 0 05456
2 22825 98.5642 84.8343 0009506 358.1739 1.9402 14.27714675171099
FO-29
1 24278U 96046B 97007.18262385 -.00000019 00000-0 19707-4 0 491
2 24278 98.5630 70.2024 0350572 243.4011 113.0807 13.52628360 19352
MO-30
1 24305U 96052B 97007.32503218 .00000203 00000-0 20364-3 0 593
2 24305 82.9282 113.4491 0031658 298.4554 61.3380 13.73089439 16982
Mir
1 16609U 86017A 97007.14260667 .00002896 00000-0 38559-4 0 9437
2 16609 51.6510 175.6867 0013432 211.6664 148.3500 15.61940194621887

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
January 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

75. vhf dummy load

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <44d_9701071939@conchbbs.com>
Source record: 20329
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Hi all i got a lote of replys about a vhf dummy load and i want to ask some of you would a 1watt Metal-oxide 5% work radio shack sells them thay carry the 10 ohms,100 ohms,1k ohms.

Or if not how about a 8 ohm non-inductive resistor 5% 20 watts

Please tell me if them will work.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

76. READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <44c_9701071939@conchbbs.com>
Source record: 20330
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Hi ther not takeing them bands ther takeing the bands 700mhz and up to the
3.0gig area iv all ready red about it in the fidonet ham echo.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

77. Shuttle HF Experiment

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: marina <marina@rain.org>
Message-ID: <32D2650C.3638@rain.org>
Source record: 20331

Does anybody know where I could find the results of the HF experiment
that was conducted?

Thanks,

Tom King KA6SOX
tking@kcrw.org

78. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: raiar@inlink.com
Message-ID: <5auh3f$t6u$2@news1.inlink.com>
Source record: 20332
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Not that your suggestions are not valid, I think positive intervention from all hams on this issue should be mandantory.

However, FWIW: In my numerous years as a ham, I have seen our bands increased not decreased. With the exception of early ham radio prior to WWII.

How do you think taking away any of our bandwidth would be enforced?

The FCC cannot handle nor do they care to, the one simple 11 meter band that has become a thorn in the radio spectrum.

Deallocating 2 meters from Ham use would open it wide up to CBer's and disgruntled hams all over the world and it will probably become as useless as 11 meters has become.
For less than 30 bucks, any earth based station could easily jam the weak signal produced by those Commercial low orbit satellites.

I see any intervention by the government in deallocating the current spectrum assignments as opening pandora's box and obliterating the entire radio spectrum as we know it. And literally losing what little control of it they now have.

The entire radio spectrum will become one big 11 meter band, that he with the most power dominates, even if it means ruining it for everybody else in the process.

The government can't own what it can't control. How can they sell something they don't own in the first place.

Think about it!

TTUL
Gary

79. FS Timestep PDUS receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Jeff Kelly <jkelly@bellatlantic.net>
Message-ID: <32D2D658.66FD@bellatlantic.net>
Source record: 20333

```
For Sale: Timestep PDUS receiver/software used in USA for M 3.
Excellent condition. $350.00
Contact jeff kelly (KT2K) jkelly@bellatlantic.net
```

80. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <32D31ECF.27C5@ix.netcom.com>
Source record: 20334
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

DON'T PANIC!

Teledesic is not one of the "Little LEO Operators that are after 2m and 440. They are a "Big LEO Operator" (hence the financial ability to put up 840 satellites) who already have spectrum assigned, and it's not the ham bands.

BTW, if I recall correctly, The Bill Gates is part owner of Teledesic, which sparked some negative comments due to misunderstanding early on in the fracas.

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

Brian Mileshosky, N5ZGT wrote:
>
> Dear Fellow Amateur Radio operators,
> Remember the ARRL bulletins from last summer warning us of a threat to
> our 2 meter and 70 centimeter bands?? Read on.
> An article in the December 23, 1996 issue of USA today discusses the
> development of Teledesic, which will involve putting 840 loe-earth
> orbit satellites (LEOS) into orbit.
> Keep in mind that these satellites are the beginning of the threat to
> our 2 meter and 70 cm (440 MHz) bands. If these things go up, we had
> better expect our 2 meter and 70 cm bands to shrink up, or even
> vanish. After these satellites go up, more companies will want their
> satellites in orbit and do similar things.
> If you have not taken time to write your Congressmen,
> Representatives, etc. to ask them to help defend our bands, DO IT
> PLEASE. I am getting great cooperation from Sen. Domenici here in New
> Mexico. Get other Amateurs involved. Announce this at meetings. Sign
> petitions and send them to your government officials and to the FCC
> (WRC-97). But please be courteous when writing. Emphasize the
> importance of these bands for us (search & rescue, traffic handling,
> etc.).
> These bands are extremely important to us, and we cannot lose
> them. Please do something and don't give up.
> 73,
> Brian, N5ZGT
>
> For more info, visit http://www.usatoday.com
> and
> Global Internet Satellites Set To Be Approved - LA Times
> Find this article at: NewsLinx Daily Web News (1/6/97)
> http://www.newslinx.com/

>
>
> ____
> Boy Scouts of America Amateur Radio - N5ZGT
> Eagle Scout (12-6-96) ARRL QRP: NorCal# 1700 QRP-L# 580
> JASM - Troop 41 Author of Worldradio's "Youth Forum" Column
> Albuquerque, N.M. Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
> O.A. Lodge 66 <-W-W-W-<< Internet: n5zgt@swcp.com
> ____

81. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: Ernie Stedman <estedman@radia1.com>
Message-ID: <32D2EC26.1D4B@radia1.com>
Source record: 20335
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Gary V. Deutschmann, Sr. wrote:
>----snip-----
> The entire radio spectrum will become one big 11 meter band, that he
> with the most power dominates, even if it means ruining it for
> everybody else in the process.
>
> -----snip----
>
> TTUL
> Gary

One big 11 meter band - does that mean those yahoos will be running echo boxes and roger beeps on their cell phones?

Ernie
N2OJQ

82. What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: waheeb@scscomm.com
Message-ID: <2.2.32.19970104103214.006858b0@scscomm.com>
Source record: 20336
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

If this post has been sent to wrong place I am very sorry

Could anyone explain to me what is packet radio, amateur radio and the difference between them.

What sort of equipment do I need

Does it work worldwide or do I have to be within a distance of (say a tower or station)

Anything extra would be very valuable

pls drop me email direct
Thanks in advance

waheeb

83. Re: Next Shuttle Mission?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: DIANA HSIAO-MIN WAGNER <dhw6011@email.unc.edu>
Message-ID: <Pine.A41.3.95.970107170516.123586B-100000@login1.isis.unc.edu>
Source record: 20337

The next shuttle mission is scheduled for January 12th. It is an
Atlantis/MIR docking mission.

****
"The mere fact that someone acts like
a maniac does not necessarily mean he
doesn't know exactly what he's doing."

Diana Wagner dhw6011@email.unc.edu
The University of North Carolina
at Chapel Hill
****

On 5 Jan 1997, LewEdward wrote:

> Date: 5 Jan 1997 00:49:07 GMT
> From: LewEdward <lewedward@aol.com>
> Newsgroups: rec.radio.amateur.space
> Subject: Next Shuttle Mission?
>
> If anyone knows when the next STS is, please advise.
>
>

84. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: David Ho <davidho@one.net>
Message-ID: <32D283D4.563@one.net>
Source record: 20338
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

N5ZGT de VS6UE/W4 K

How would satellites that are supposed to handle high volume traffic
sattle with narrow bandwidth like our precious 2m and 70cm?

Analogy:
Amateur HF RTTY cannot be over 300 bps but in the VHF area can
go as high as 19.2 kbps. Why? BANDWIDTH!

To accomodate high speed internet traffic, T1 (1.544 mbps) is already
getting tighter as hours go by. But Satellites are talking about T3
or even bunch of T4's (if there is anything called T4). How much do
our 2m and 70cm get to offer?

Don't worry. It seems to me that the microwave regions are more likely
to be where they get the bandwidth from.

73!

de VS6UE/W4 (New callsign pending)
David Ho
davidho@one.net

SK . .

85. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-07 00:00:00 UTC
From: bheaton@txdirect.net
Message-ID: <32d29bab.86664085@news.txdirect.net>
Source record: 20339
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Randy,

While the original post was directed to a US-centric audience
the band threat is a worldwide issue. The LEO providers are
attempting to gain additional spectrum via the next WARC. So while
writing to a US congressman might not help much a letter to your local
legislator won't hurt a bit.

BDH/N5VFF

On 6 Jan 1997 22:52:32 GMT, "Randy" <randyZ@ainsworth.ca> wrote:

>Brian:
>I think you are suffering from 'Tunnel Vision'. Please put on the Wide
>Angle Lens and see the whole world! The FCC does not dictate to Canada, or
>any other country, with the exception of the USA, what bands it may use for
>communications. Do you think that the radio waves produced up here in
>Canada bounce off some invisible force field when they reach the 49th
>parallel? I don't think so. The 2 meter and 70 centimeter bands don't
>just belong to the USA and some congressman from the US isn't going to give
>a fat rats ass if I send him a letter from the Great White North anyway. I
>don't think I'm going to panic.
>73s
>Randy.

86. Re: where is mir uhf?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: <>
Message-ID: <97Jan07-213429@spinner.alive.com>
Source record: 20340

I heard the UHF repeater playing a recorded message regarding the new freqs the other day.
It saiunded about 30KHZ below the regular receive freq.
Havn't heard anything since though.

If the MIR UHF side is not able to transmit on more than one frequency at
a time [e.g. the usual case], then the activation of the recorded message
would explain the non-responsiveness of the repeater.

-- KD6PAG ('networking old-timer, RF newbie')

87. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: Mike Dickman <mdickman@ptel.net>
Message-ID: <32D35875.18EB@ptel.net>
Source record: 20341
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Gary V. Deutschmann, Sr. wrote:
>
> Not that your suggestions are not valid, I think positive intervention
> from all hams on this issue should be mandantory.
>
> However, FWIW: In my numerous years as a ham, I have seen our bands
> increased not decreased. With the exception of early ham radio prior
> to WWII.
>
> How do you think taking away any of our bandwidth would be enforced?
>
> The FCC cannot handle nor do they care to, the one simple 11 meter
> band that has become a thorn in the radio spectrum.
>
> Deallocating 2 meters from Ham use would open it wide up to CBer's and
> disgruntled hams all over the world and it will probably become as
> useless as 11 meters has become.
> For less than 30 bucks, any earth based station could easily jam the
> weak signal produced by those Commercial low orbit satellites.
>
> I see any intervention by the government in deallocating the current
> spectrum assignments as opening pandora's box and obliterating the
> entire radio spectrum as we know it. And literally losing what little
> control of it they now have.
>
> The entire radio spectrum will become one big 11 meter band, that he
> with the most power dominates, even if it means ruining it for
> everybody else in the process.
>
> The government can't own what it can't control. How can they sell
> something they don't own in the first place.
>
> Think about it!
>
> TTUL
> GaryI agree, the FCC cannot even keep business band under control. Then they
think they are going after some irrate Hams? I don't think so...
--

Name: Mike Dickman, KD4LLA
E-mail: mdickman@ptel.net (Mike Dickman)
@date@@time@

88. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <5b0jhc$6nq@news.myriad.net>
Source record: 20342
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In <2.2.32.19970104103214.006858b0@scscomm.com>, waheeb@scscomm.com writes:
>If this post has been sent to wrong place I am very sorry

For what? All of us have to start somewhere! You have arrived in the friendliest place in the world, ham radio. Sort of like Internet without wires! <Huge grin>

Once you discover what all this is about, you may embark on a lifetime of discovery. At 44 years into this thing, I am still having fun and, for the most part, the people in it are WAY above average folks.

>Could anyone explain to me what is packet radio, amateur radio and the
>difference between them.

Amateur radio is the permitted use of a relatively large part of the radio channels by individuals who do not have to pay for the right to use the channels. If you look at your broadcast radio, your FM radio and your TV set, you will see they are marked in channel numbers. Never mind about the meaning of that, right now, just discover here that there are MORE channel numbers above and below and between those that you see!

Many, many more. Whole sections of the channels are used by different people for different things! Police, fire people, constuction crews, people sending I love you messages from a cruise ship - they ALL use these other channels and MOST of the time they have to get a LICENSE from the government to use one or more of them.

Hams have to get licenses too. However, the hams use whole chunks of channels. Each chunk has different characteristics. Some chunks can be used to talk directly from Podunk, Texas, to Sydney, Australia, direct! On a good day, you can do that with the power of no more than a FLASHIGHT!

Imagine that, shining a flashlight up in the air and having it seen in Australia! Not only that but your little flashlight can be seen by THOUSANDS of people, all over the world at the SAME TIME! And, its all for free (well, not the cost of the flashlight or the very little for the paper work of the license), totally free, any time of day or night, just holler hello!

It is a priceless, fascinating hobby.... MAGIC that even David Copperfield cannot top.....

Now Packet Radio is a form of radio that packages up blocks of text and numbers into small groups within a larger message. It uses the radio channel to communicate these chunks of text to someone else, and while it is doing it, it makes sure that the chunk was received correctly at the

other end of the circuit. It is just one of MANY forms of amateur radio, but note... it isn't used just by hams. It is also used by fire departments, astronaughts in space... you name it.

>What sort of equipment do I need

A transmitter and receiver that operate upon a channel or set of channels that can be used with a similar type setup on the other end. Cost can be very little or LOTS. Like dogs, or most anything else, some dogs are bigger than other dogs. Ham radio is competitive and the my dog is bigger than your dog deal exists here too! That's part of the fun! It leads to CONTESTS!

There, a well trained little dog can often bite the heck out of even far bigger dogs... expererience and dedication count, just like other sports.

>Does it work worldwide or do I have to be within a distance of (say a tower >or station)

All of the above!

You may talk direct from you to someone else, or go through what we call a repeater station to help you.

Either way, your station uses an antenna. You buy or build your own antennas, some of which need be no larger than a foot or less in size, to HUGE ones that can require towers more than 200 feet high with wire lengths of 2400 to 4000 feet long.

The controlling factor for the tower and antenna size is the channel area. Some channels take bigger antennas than others.

Owning a St. Bernard can be a chore... Using the channels that require the huge antennas above takes space only found out in the country, but there are TONS of channels that can be carried around in your hand or pocket!

<smile>

All dogs are welcome!

>Anything extra would be very valuable

Yes indeed. Go to Radio Shack or a book store or a library and look us up! Your local library is a fine place, or in any event, one of several books you can thumb through is "Now You're Talking", published by one of the fraternal organizations in the hobby called the American Radio Relay League.

If you take it home, the chances are you will be started on this stuff!

In even most smaller cities or even out in the country, chances are someone will know of a "ham operator." Seek the person out, guys and gals abound in this thing!

The rest is all MAGIC!

>pls drop me email direct

Not really. I hope I've answered it in such a way that you will come back here or seek the area that will let you start this fascinating journey!

>Thanks in advance
>
>waheeb
>

De nada. !

//----------------------------
Mike - W5WQN
Mike.Luther@ziplog.com
MIke.Luther@f3000.n117.z1.fidonet.org

89. Re: vhf dummy load

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: Philip Peake <philip@vogon.rain.com>
Message-ID: <32D4075E.4F62@vogon.rain.com>
Source record: 20343
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Charles Mccurdy wrote:
>
> Hi all i got a lote of replys about a vhf dummy load and i want to ask some of
> you would a 1watt Metal-oxide 5% work radio shack sells them thay carry the 10
> ohms,100 ohms,1k ohms.
>
> Or if not how about a 8 ohm non-inductive resistor 5% 20 watts
>
> Please tell me if them will work.

Check the construction of the metal oxide resistors (ask the
manufacturer if all else fails). They are typicaly fabricated by
depositing a thin layer of metal oxide on a ceramic body, and then
cutting away some of the oxide in a spiral down the length of the
ceramic core.

This is obviously not what you want in a VHF dummy load.
It is possible that other fabrication techniques are used, but
you need to check.

The "non-inductive" resistors sound like the way tp go to me.

Philip

90. Rad-hard circuit design

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: alanb@sr.hp.com
Message-ID: <5b0vfc$gkt@canyon.sr.hp.com>
Source record: 20344

I'm working on one of the electronics modules for the Phase 3D satellite to be going up this Spring. Does anyone on the net have any experience in designing space-qualified circuitry? I have lots of circuit design experience but have never designed anything for space applications.

What I need is practical advice on how radiation affects the design. I have been assuming that it's only an issue for small-geometry IC's like memory chips. My design is all analog and consists of LM324 op amps, LM339 and LM311 comparators, AD538 analog multiplier/dividers, 78L15 and 79L15 regulators, and some bipolar transistors. Can I assume that special rad-hard devices are not required? (I don't even think they exist.)

The P3D satellite will be in a highly elliptical orbit that passes through the Van Allen belts.

I would be interested in any comments from anyone with experience in this area. It would be helpful if you could list your qualifications in your reply. I'll check this newsgroup for the next couple weeks, but email replies will get to me faster.

Thanks,

Al Bloom N1AL
alanb@sr.hp.com

91. RS-10

Newsgroup: rec.radio.amateur.space
Date: 1997-01-08 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bbfd74$897c9ee0$5e427fce@default>
Source record: 20345

Pleased to say that I did try using my 2m rig (IC2350) PTT to send CW and made a couple of contacts on the RS-10 bird. CW sure sounded strange though when listening on 10 meters down. Also, I got up to a blazing 5 - 7 WPM. Wonder how long the PTT switch would last sending CW??? It was fun and have received a QSL card for the contact. Bill - Helena, Montana

92. Re: Rad-hard circuit design

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Harri Leskinen <hle@spider.compart.fi>
Message-ID: <32D4A214.29E2@spider.compart.fi>
Source record: 20346

Alan Bloom wrote:
>
> I'm working on one of the electronics modules for the Phase 3D satellite
> to be going up this Spring. Does anyone on the net have any experience
> in designing space-qualified circuitry? I have lots of circuit design
> experience but have never designed anything for space applications.
>
> What I need is practical advice on how radiation affects the design. I
> have been assuming that it's only an issue for small-geometry IC's like
> memory chips. My design is all analog and consists of LM324 op amps,
> LM339 and LM311 comparators, AD538 analog multiplier/dividers, 78L15 and
> 79L15 regulators, and some bipolar transistors. Can I assume that special
> rad-hard devices are not required? (I don't even think they exist.)
>

Hi Alan

I have build PHASE3D X-BAND transmitter control logic and we use
standard
bipolar and 74HCXXX devices on our board. You do not need any RAD-HARD
stuff on your
design. Bipolar devices are Ok. I have used LM358 and LM7815, MC33166T
Power devices should be derated and conduction cooled (Mounted to
enclosure wall).

We have mounted tantalium metal radiation shield plate over 74HCxxx
devices.
this is needed only for CMOS devices. According Karl Mainzer there
should be 3 gram / cm2
mass between space and CMOS semiconductor die.
Usually mass of satellite outside wall give enough mass if your module
have thick wall.

Some hints and tips

1. Derate component power handling to 3 - 4 time compared to ground
environment
In space there is only radiation cooling. We have used 3 times power
capability
handling on our design ..

2. Do not use EEPROM based memory or PLD's

3. MOSFETS are going to leak (Turn of voltage may be even negative)
after radiation.
if you use MOSFETS drive gat to negative side.

Best regards

Harri Leskinen, OH2JMS

93. Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970108232742.8779B-100000@prog1.caprica.com>
Source record: 20347
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Can ANYONE here give me a computer-designed plan to make a beam antenna that fits the following "rough-draft" parameters?

A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam antenna for 144.3 MHz, on a manually-swiveling rear-mount boom,(made of 2" OD Aluminum tubing), with a mono-filar element,(made of bare #6 solid copper wire, commonly used by electricians as ground wire for a building's main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass rods or wood dowels).

My idea is to mount the boom vertically on a universal joint, which itself is mounted atop a 10' mast,(5' of the mast actually being below ground level in concrete), and to use pullies and counter-weights with the non-conductive guy ropes to actually TILT the antenna at the moon,(using a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks I can track the movement of the moon manually anywhere in it's path anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly vertical position). The mechanics of it are much the same as those of the older mobile cranes they used to use on rural construction sites.

BTW: I am not open to the idea of using a yagi, so please don't suggest it.

Please reply via both, the newsgroup and email.

Thank you.

94. Air Pollution Really Sucks

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Jeff Griffin <griffinj@admin.tc.faa.gov>
Message-ID: <5b2qf1$r8c@faatcrl.faa.gov>
Source record: 20348

I finally get my station tuned up to where I can post on Mir reliably, and with the frequency changes, here comes APRS. Is it true that APRS is on the satellite band as an experiment? If so we should try to collectively voice our opinions to the parties responsible for this temporary frequency allocation. We should lobby for a move of APRS off the satellite band. I'm going to put up an az-el rotator with beams, with tracking hardware in the near future, primary to work other satellites, along with Mir. I'm sure the beams will solve the QRM. But what about someone trying to work just Mir on a tight budget, there not going to be able to purchase all that satellite specific equipment. I just think the we here in North America got the wrong end of the stick in this whole frequency change thing. Oh, by the way I got that Air Pollution Really Sucks from an APRS operator.

73 Jeff kb2wqm@juno.com

95. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <32D50DA9.14D2@ix.netcom.com>
Source record: 20349
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

waheeb@scscomm.com wrote:
>
> If this post has been sent to wrong place I am very sorry
>
> Could anyone explain to me what is packet radio, amateur radio and the
> difference between them.
>
> What sort of equipment do I need
>
> Does it work worldwide or do I have to be within a distance of (say a tower
> or station)
>
> Anything extra would be very valuable
>
> pls drop me email direct
> Thanks in advance
>
> waheeb

Waheeb. For lots of information on Packet and the digital modes -- go to the DX Reference page below.

For What is Amateur Radio and how to become one go to the INDEX Page, then ARRL Home pages. Tons of info for u there. The ARRL will send u a packet of info upon request. See how to get started in Amateur Radio on the ARRL Pages.

Good luck
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V

96. Timer/receiver combo unit?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: "Michael T." <michaelt@emtel.com>
Message-ID: <32D521F6.152@emtel.com>
Source record: 20350
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Happy New Year, all.

I'd like to be able to record (unattended) my favorite radio programs and features for later listening. Something like a VCR with multi-event programming would do the job nicely. Some have suggested using a VCR and a tuner connected to the audio input, but that would require going back and retuning the receiver to different stations between events, which is not possible in this case.

Any ideas? Thank you in advance.
Michael

michaelt@emtel.com

97. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: raiar@inlink.com
Message-ID: <5b3auf$c26$2@news1.inlink.com>
Source record: 20351
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Ernie Stedman <estedman@radia1.com> wrote:

>Gary V. Deutschmann, Sr. wrote:
>>----snip-----
>> The entire radio spectrum will become one big 11 meter band, that he
>> with the most power dominates, even if it means ruining it for
>> everybody else in the process.
>>
>> -----snip----
>>
>> TTUL
>> Gary

>One big 11 meter band - does that mean those yahoos will be running echo
>boxes and roger beeps on their cell phones?

>Ernie
>N2OJQ
Not only that, they will probably make it one big party line by
running a couple of gigawatts from their mobile on a pair of co-phased
cellular towers mounted at each end of their pickem-up trucks.
Cooking every thing for miles around from the radiation.

TTUL
Gary

98. Re: Shuttle HF Experiment

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Tony Planinac <tplan@mail.direcpc.com>
Message-ID: <32D523C9.2FE5@mail.direcpc.com>
Source record: 20352

> Tom King KA6SOX
> tking@kcrw.org
****
Try one of the NASA web sites!
Tony P.

99. Re: Timer/receiver combo unit?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D5642A.C22@erols.com>
Source record: 20353
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael T. wrote:

> I'd like to be able to record (unattended) my favorite radio programs
> and features for later listening. Something like a VCR with multi-event
> programming would do the job nicely.

Me, too!

I bought a Reveal FM radio board for the PC (about $40 at Best Buy), with the idea of being able to program it as you suggest.

<flame> I got disgusted at the dain-bramaged software that came with it (only 10 presets, hard to set with fixed scroll rate, roundoff errors in freq display, . . .). I'd have kept it if I could have gotten specs for how to control it -- I'd have written a control program myself. But their "24/7" tech support line put me on permahold so I gave up and returned it. </flame> I could always buy another one if I decide to try it again someday. It seemed like a well-build piece of hardware.

Seems like you could build an integrated control out of an old XT with the FM radio card in it and an IR emitter to drive the VCR. If the VCR won't record sound without a video signal to sync to, put a CGA card in the PC; you could put a timestamp on the video to tell you when the audio was sent, freq, station/program ID, etc., in nice bold characters that would show up in fast forward / rewind.

If your existing FM receiver is IR controllable, then that opens other possibilities.

I agree, this is a product that is missing from the marketplace. Probably wouldn't be terribly hard for the VCR makers to implement, either; they already have the front end, what's a couple more chips for the FM broadcast IF and detector? They can sell an entire Walkman for $cheap. . . It'd be neat: an 8-hour stereo audio recorder! There's not much on the tube worth watching, anyway.

We can't be the only two who've felt this need. Ideas, anyone?

-rrk

100. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Jim <nospam@the.net>
Message-ID: <32D55669.41C6@the.net>
Source record: 20354
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi Teddy,

Some thoughts on this interspersed with your text.

Teddy Bear wrote:
>
> Can ANYONE here give me a computer-designed plan to make a beam antenna that
> fits the following "rough-draft" parameters?
>
> A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> antenna for 144.3 MHz,

I'm not sure what you mean by log-spaced for a helical antenna (helix).
The helix is a spiral and is defined by circumference and pitch in
degrees. Log spaced relly makes no sense here. It does for yagis and
log-periodics and others, but not for helicals.

Also thirty turns for the 2m band is going to give you one ENORMOUS
antenna. Probably something on the order of 50 to 60 feet. Nice gain it
would have though, around 20.5 dB.

> on a manually-swiveling rear-mount boom,(made of
> 2" OD Aluminum tubing),

Rear mounting of a 60 foot boom? not likely. And the boom for a helix
has to be non-conducting and preferably low-loss fi it is a dielectric.
The interior of a helix supports a traveling wave and therefore needs to
be free of obstructions to that wave.

> with a mono-filar element,(made of bare #6 solid
> copper wire, commonly used by electricians as ground wire for a building's
> main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass
> rods or wood dowels).

Well these parts are OK.

>
> My idea is to mount the boom vertically on a universal joint, which
> itself is mounted atop a 10' mast,(5' of the mast actually being below
> ground level in concrete), and to use pullies and counter-weights with the
> non-conductive guy ropes to actually TILT the antenna at the moon,(using

Hummm, more like bend the boom of the antenna. Even with the u-joint
youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
not sure what a bent boom helix is going to do. This proposal seems to
be getting further and further from realistic.

> a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks
> I can track the movement of the moon manually anywhere in it's path
> anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly
> vertical position).

Ummm, yeah.

> The mechanics of it are much the same as those of the
> older mobile cranes they used to use on rural construction sites.
>
> BTW: I am not open to the idea of using a yagi, so please don't suggest it.
>
> Please reply via both, the newsgroup and email.
>
> Thank you.

Well I can see some advantages to a helix over yagis, and I'm considering one myself for 2m, but I don't see why you don't want them for EME that's your call.

But you can get the same amount of gain as a single long helix by stracking several shorter ones in a box pattern. Four 8 - 10 turn helicals spaced approx 1 wavelength apart would be similar to one single 30 turn as far as gain. The booms would then be more managable at 15 - 18 feet. The groundplane screen however would be something like 15 feet square.

Maybe if we started with what your goals are, then we could find something more realistic to do. But if you insist on doing it with your rough specs tehn I can supply the relative cookbook plans. The helix is not all that complicated to need to go to a computer design.

Jim

--
My from line is not machine readable my real e-mail address is:
jimf<atsign>corp.sgi.com Do not hit reply to send back to me.

Sending unsolicited e-mails to my address that are not of a
previously established personal nature nor directly related
to my business will be considered a request of my proof reading
services. My rates are $50 per word and punctuation. Sending
to my address is considered acceptance of these terms.

101. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>
Source record: 20355
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Thu, 9 Jan 1997, Jim wrote:

> Teddy Bear wrote:
> >
> > Can ANYONE here give me a computer-designed plan to make a beam antenna that
> > fits the following "rough-draft" parameters?
> >
> > A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> > antenna for 144.3 MHz,
>
> I'm not sure what you mean by log-spaced for a helical antenna (helix).

Log spacing of the coil instead of even spacing.

> The helix is a spiral

Duh.

> and is defined by circumference and pitch in degrees. Log spaced
> relly makes no sense here. It does for yagis and
> log-periodics and others, but not for helicals.

That's an old XYL's tale.

> Also thirty turns for the 2m band is going to give you one ENORMOUS
> antenna. Probably something on the order of 50 to 60 feet.

The length for MONO-filar would be about half that,(30 to 40 feet maximum).

> Nice gain it would have though, around 20.5 dB.

I expect 25-30 bB.

> > on a manually-swiveling rear-mount boom,(made of
> > 2" OD Aluminum tubing),
>
> Rear mounting of a 60 foot boom? not likely.

As I said above... 40 feet max... Plus I did mention the use of guy ropes.

> And the boom for a helix has to be non-conducting

Not so when you're talking about 2 meters. They used to say the same
for quads and I've seen 3 quads that prove that old XYL's tale wrong. One
of them is 12 element at 17.5' long and the other 2 are 9 element and 10'
long and not only do they have a flat match but their beamwidth is as sharp
as a tack and their gain is better than their PVC prototypes.

> > My idea is to mount the boom vertically on a universal joint, which
> > itself is mounted atop a 10' mast,(5' of the mast actually being below
> > ground level in concrete), and to use pullies and counter-weights with the
> > non-conductive guy ropes to actually TILT the antenna at the moon,(using
>
> Hummm, more like bend the boom of the antenna. Even with the u-joint
> youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
> not sure what a bent boom helix is going to do. This proposal seems to
> be getting further and further from realistic.

I don't remember asking for criticism. I remember asking for a computer designed plan. Translate that as this: The only things I was asking for was the exact spacing, overall wire legnth, helix diameter and reflector demensions, nothing more.

> Well I can see some advantages to a helix over yagis, and I'm
> considering one myself for 2m, but I don't see why you don't want them
> for EME that's your call.

You mean to say that you critiqued my idea when don't even HAVE a 2m helical much less built one?

> Maybe if we started with what your goals are, then we could find
> something more realistic to do. But if you insist on doing it with your
> rough specs tehn I can supply the relative cookbook plans. The helix is
> not all that complicated to need to go to a computer design.

No thanks, I'll wait for someone who can offer exact formulas or mesurements, rather than speculations. My time is valuable and my money is sparse. This is not a game to me so I can't just wing it.

102. FS: TAPR/AMSAT DSP-93 TNC Assembled

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <kg2ic@amsat.org>
Message-ID: <32D56FD0.6C44@amsat.org>
Source record: 20356

I have a TAPR/AMSAT DSP-93 kit for sale. Unit has been professionally
built, checked out and works just super. Have orignal box, paperwork,
manuals, cables, etc. Does all current HF and VHF/UHF digital modes.
Modems are changed and updated via software so the unit never becomes
"dated".
TAPR's kit price on this unit is $430, I am asking $450 for
mine assembled! Compare this unit the the AEA DSP2232 which retails over
$1100.
You may contact me via email at kg2ic@amsat.org or call 716/625-8800 or
716/689-6727.
--

73,
Bruce KG2IC
==========
Bruce J. Howes KG2IC "The governmentï¿½s view of the economy
Grid FN03pa could be summed up in a few short phrases:
East Amherst, NY If it moves, tax it. If it keeps moving,
AMSAT#30466 ARRL regulate it. And if it stops moving,
ARMY-MARS AAR2AJ subsidize it." -Ronald Reagan
www.buffnet.net/~bhowes
==========

103. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Jim <nospam@the.net>
Message-ID: <32D59A14.41C6@the.net>
Source record: 20357
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi all,

Well when I read the original post asking for help, the tone of the wording and absolute strangness made me think that it might have been a troll. Something gave me the impression that this ask for help was more than just that. Now it turns out that my sixth sense proved correct and this person really seems to not want help or advice, but is more interested in a flame war, or is simply a jerk. I'm not sure. It is really sad that this person chose to be confrontational when someone else was honestly trying to help.

But I'll give it one more shot, since others may learn something about helicals and I think that is a good thing.

Teddy Bear
Ted T. Barry teddyb@caprica.com

wrote:
>
> On Thu, 9 Jan 1997, Jim wrote:
>
> > Teddy Bear wrote:
> > >
> > > Can ANYONE here give me a computer-designed plan to make a beam antenna that
> > > fits the following "rough-draft" parameters?
> > >
> > > A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> > > antenna for 144.3 MHz,
> > >
> > I'm not sure what you mean by log-spaced for a helical antenna (helix).
>
> Log spacing of the coil instead of even spacing.

In all the many texts, cookbooks, etc. treating helicals that I have seen in my research of helicals including Kraus I have never seen any mention of log *spacing*. Some have mentioned stepped or tapered changes in diameter of the coil, but none have talked about variable spacing. In fact, if the spacing, which is defined by the pitch is changed much out of the limits of 13 - 17 degrees then the helix will start to change from the axial mode to the normal mode meaning this is no longer the antenna that is desired.

>
> > The helix is a spiral
>

> Duh.

You seem to be a fantastically tempered person, how nice. It is always
so refreshing to be treated so well from someone that is asking for
help when that help is returned.

>
> > and is defined by circumference and pitch in degrees. Log spaced
> > relly makes no sense here. It does for yagis and
> > log-periodics and others, but not for helicals.
>
> That's an old XYL's tale.

Throwing out cliches does not make it true nor does it serve any
usefulness.

>
> > Also thirty turns for the 2m band is going to give you one ENORMOUS
> > antenna. Probably something on the order of 50 to 60 feet.
>
> The length for MONO-filar would be about half that,(30 to 40 feet maximum).

This is the second time that you have seemed to make a big point about
monofilar, big deal. This is by far the more common design compared to
bifilar and quadrifilar.

Anyways, for an axial mode helix the parameters of the "coil" follow:
.9 < C (Circumference) < 1.3 wavelengths
13 < p (pitch) < 17 degrees

Typical values are 1 wavelength for C and 14 degrees for p.

Otherwise it degenerates to a normal mode helical or dipole like
antenna.

The value of S which is the lineal length of on turn is found by:

S = C * tan(p)

Taking C = 1 lamda at 144 MHz = 6.83 ft * tan(14) = 1.70 ft = S

Now for 30 turns 30 * 1.7 = 51 ft plus you add some more for the
feedpoint and matching area.

>
> > Nice gain it would have though, around 20.5 dB.
>
> I expect 25-30 bB.

I do not believe this is possible. Nor do any of the other people I
contacted on this issue.

>
> > > on a manually-swiveling rear-mount boom,(made of
> > > 2" OD Aluminum tubing),

> >
> > Rear mounting of a 60 foot boom? not likely.
>
> As I said above... 40 feet max... Plus I did mention the use of guy ropes.

The premise of 40 ft is questionable based on the "log spacing" but
even then, 40 ft is a long boom. Your right about the guy ropes, it is
not a pure cantelever, but even with support at both ends, it will
deflect in the middle area.

>
> > And the boom for a helix has to be non-conducting
>
> Not so when you're talking about 2 meters. They used to say the same
> for quads and I've seen 3 quads that prove that old XYL's tale wrong. One
> of them is 12 element at 17.5' long and the other 2 are 9 element and 10'
> long and not only do they have a flat match but their beamwidth is as sharp
> as a tack and their gain is better than their PVC prototypes.

A quad is not a helix. A quad is not a treveling wave antenna and a
helix is. The helix relies on supporting an E field on the inside of
the coil. The quad does not. This may have some relevance, but if it
does then it is small and circunstancial.

>
> > > My idea is to mount the boom vertically on a universal joint, which
> > > itself is mounted atop a 10' mast,(5' of the mast actually being below
> > > ground level in concrete), and to use pullies and counter-weights with the
> > > non-conductive guy ropes to actually TILT the antenna at the moon,(using
> >
> > Hummm, more like bend the boom of the antenna. Even with the u-joint
> > youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
> > not sure what a bent boom helix is going to do. This proposal seems to
> > be getting further and further from realistic.
>
> I don't remember asking for criticism. I remember asking for a computer
> designed plan. Translate that as this: The only things I was asking
> for was the exact spacing, overall wire legnth, helix diameter and
> reflector demensions, nothing more.

I was not criticising you as you seem to be taking it so personally. I
was questioning the ability to realistically achieve your design goals.
If soemone asked you for plans per spec for something that is in your
area of expertise and it was apparant that they would have a difficult
time making it would you not state it so? Or would you simply answer
the question and let them try to deal with the unrealistic situation.

It's kinda like the new ham that was asking me to help him with an 80
meter antanna. He lives in an apartment. He mention that he had heared
that a quad was a good design, and wanted soem help with that. By your
demeanor I should have simply told hime the design formulas and left it
at that. But he was much more thankful that I explained that a 20m on a

side square plus a long boom would not quite fit in on on his apartment.

>
> > Well I can see some advantages to a helix over yagis, and I'm
> > considering one myself for 2m, but I don't see why you don't want them
> > for EME that's your call.
>
> You mean to say that you critiqued my idea when don't even HAVE a 2m
> helical much less built one?

Yes I have critiqued your design spec. But no you are wrong with teh rest of your statement. No I do not currently have a 2m helix. My housing situation precludes that. I did use to have one at a differnt location used for satellite weather sat. I have built a few for/with friends for 2m. I have built and experimented with dozens of others for bands other than 2m. I have also studied them for classwork back in school a few years ago, and written dissertaions on them. I am no stranger to teh design and performance of the helix.

>
> > Maybe if we started with what your goals are, then we could find
> > something more realistic to do. But if you insist on doing it with your
> > rough specs then I can supply the relative cookbook plans. The helix is
> > not all that complicated to need to go to a computer design.
>
> No thanks, I'll wait for someone who can offer exact formulas or
> mesurements, rather than speculations.

I said I could do that. And my advice is not speculation, it is experience from a good deal of experimentation.

> My time is valuable and my money
> is sparse. This is not a game to me so I can't just wing it.

Well my time is also valuable, probably more so since my money is not sparse. With the free advice I have supplied to you costing roughly $350 dollars time equivalent if I were to charge... I'm very glad that you are so gracious with my advice that was sent with good intentions to help out a fellow ham (or radio-nut since I can't find your name in the callsign lists for certain).

But that is the treatment I should have expected from someone connecting to a Monterey Park ISP. From down in the Los Angeles cesspool. I just love that the cretins from LA are there and not where I am.

Soemone mentioned that we might just have ALTAVOZ back, and it sure does seem so. When he was back on with the worldnet.att ISP he would connect to either an LA area pop or a SF bay area pop. Always posting many messages from the same pop per login. I couldn't find out his pattern before his account was yanked. Now this winner is from LA too and pretty much has the same attitude and temperment as ALTAVOZ. Maybe I can hope his account gets yanked also.

For the others that have posted concerning Teddy's attitude, thank you.

Jim

104. test post

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Bill WD2AEV <bkantz@monmouth.com>
Message-ID: <32D56CE7.57D2@monmouth.com>
Source record: 20358

```
test post
```

105. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109222311.20816C-100000-100000-100000@prog1.caprica.com>
Source record: 20359
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Fri, 10 Jan 1997, John M Dashner provoked me by saying:

> The conotation of "Teddy Bear" to me suggests a fat ass sitting back who is
> either:

Hey... Go screw yourself, butthole. You are NOBODY... as in Nobody to talk and as in Nobody to me. If you think the purpose of this newsgroup is to dessimate criticism, you must be one of those lame fidonet rejects like Ken Freeland, accustomed to flames and retarded in brains. Since you have such a love affair with criticism, how's that suit you? And I'll bet my assessment of you is accurate too.

This newsgroup is NOT for flaming so go back to Fight-o-Net and leave us alone to discuss HAM RADIO, dumbass! NOTHING I SAID TO JIM DESERVED WHAT YOU SAID TO ME! But you, by blasting me without sufficient cause, deserve every bit of what I am saying here now.

> 1. wanting to have a little perverse fun at other's expense; or
> 2. someone who truly needs help but not the kind you have asked for.

ACTUALLY you are doing exactly what you accuse me of on both, counts 1 & 2!

Only a clueless half-assed moron who speaks without knowing the entire story would see it the way you did. If you thought Jim was right for replying to me with what I TOLD him I did NOT want to hear, then you are indeed a moron for speaking up before you read my FIRST post which was a mere 24 hours ago or less so you can't use the excuse that the post was already deleted, since it wasn't! You deliberately flamed-on without threading back to see that Jim WAS INDEED bringing it upon himself!

He WAS warned, and chose to ignore the warning, so it is HIS OWN FAULT that I replied negatively, you clueless idiot. When I tell someone not to bother me with something IT MEANS DON'T FRIGGING BOTHER ME WITH IT!

I hope your VE will one day regret taking the bribe that got you your license. You obviously don't have the attention span it takes to EARN one!

> I have seen people ask for help and submit their own ideas worked up to the
> point of exhausting their knowledge,

Oh you're breaking my heart!

> but the crap you submitted is what led me to the conclusions stated above.

Your post was absolutely out of line and off base. Everything I said in this reply was provoked by YOU. If you want to hold Jims hand and kiss his butt, go ahead and do so IN HIS EMAIL, NOT MINE!

No further email messages from you are welcome here and WILL be reported to your ISP admin as net abuse. THAT IS A PROMISE! I am sure that they, like most ISP's have a company policy against harrassment eminating from their customers. Learn to PAY ATTENTION TO A WHOLE THREAD before you go shooting your mouth off or keep your stupid mouth shut, twit!

106. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bbfe81$3d176400$fd1479a8@wave.mindspring.com>
Source record: 20360
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> Duh.

> That's an old XYL's tale.

> I expect 25-30 bB.

> I don't remember asking for criticism. nothing more.

> You mean to say that you critiqued my idea when don't even HAVE a 2m
> helical much less built one?

> No thanks, I'll wait for someone who can offer exact formulas or
> mesurements, rather than speculations. My time is valuable and my money
> is sparse. This is not a game to me so I can't just wing it.

You obviously have an attitude ploblem "teddy bear". Someone here is trying
to help you and at
the same time you are treating him like an idiot. How can you expect
anybody to help you when
you treat people the way you do? If you don't like the help that you are
being offered for free then
hire an engineer and pay him consulting fees. I am sure that he will put up
with your shit if you
pay him enough. By the way, if you are expecting 25-30bB's of gain you are
just dreaming.

Or do your bB's = MFJ dB's?
73's

107. Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109233122.20816G-100000@prog1.caprica.com>
Source record: 20361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Wayne Green, W2NSD, where are you when I need to hear from someone with good sense?

108. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32D57E63.35AC@ccm.ch.intel.com>
Source record: 20362
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Pieter Ibelings wrote:
> Teddy Bear <teddyb@prog1.caprica.com> wrote
> > I don't remember asking for criticism.
> Someone here is trying to help you and at
> the same time you are treating him like an idiot.

Reckon our old friend Altavoz has gotten himself a new
internet account?

109. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>
Source record: 20363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On 9 Jan 1997, Pieter Ibelings wrote:

> Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > Duh.
>
> > That's an old XYL's tale.
>
> > I expect 25-30 bB.
>
> > I don't remember asking for criticism. nothing more.
>
> > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > helical much less built one?
>
> > No thanks, I'll wait for someone who can offer exact formulas or
> > mesurements, rather than speculations. My time is valuable and my money
> > is sparse. This is not a game to me so I can't just wing it.
>
> You obviously have an attitude ploblem "teddy bear". Someone here is trying
> to help you and at
> the same time you are treating him like an idiot.

Since you are addressing this to me more politely than John did, I will
reply more politely to you...

DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
CRITICISM, SIR?

> How can you expect anybody to help you when you treat people the way
> you do?

Help MUST be the information that was ASKED FOR in order to qualify AS help.
Since it was CLEARLY what I had said in advance that I DON'T want, then
it is not help.

If you are visiting someone working on something and they ask you to pass
them a screwdriver and instead you pass them a hammer then you are
annoying them, not helping them, RIGHT?

> If you don't like the help that you are being offered for free then
> hire an engineer and pay him consulting fees. I am sure that he will put up
> with your **** if you pay him enough.

With that language, young man, you just threw all politeness right out the
window. If you can't discuss it without cussing me out, get lost. This is

not email, it's a public forum and kids DO read the posts here.

> By the way, if you are expecting 25-30 bB's of gain you are
> just dreaming.

WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN SPECS! IS THAT CLEAR???

> Or do your bB's = MFJ dB's?

Since you DID ask:

MFJ makes crap. They are hung up on using half-wave designs which usually ARE crap. When they figure out what a quad is they might have a clue, but until then much of what they make is overpriced trash.

> 73's

What's the purpose of that? Don't tell me "73" after you just cussed me out. 73 means best regards and you've displayed contempt, not best regards.

TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.

If you can't give someone what they asked for then don't annoy them by wasting their time and "bandspace" with unwanted opinions!

110. Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>
Source record: 20364
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

I THOUGHT that these were newsgroups for radio science discussions, based upon factual information. But mostly all I see here are people's unsolicited opinions based upon conjecture.

That's what happens when code skills are emphasized, hailed and rewarded instead of engineering skills. That's also why hams of today would rather buy equipment from a store than built it.

Once upon a time iw was WE who invented everything elecronic! Now most of us have been reduced to clueless consumers, lead by the nose like dumb sheep... a sad legacy indeed to leave to future hams.

When someone asks for calculations, instead they get speculation. But I must warn that if you were to try to build things out of speculation, you'll soon have a pile of failed projects stacked taller than you are.

Amateur radio is a SCIENCE, not a realm of personal opinions! We are SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I shouldn't even HAVE to tell you this! Half the hams I hear these days barely know how to even solder! WHAT the heck is happening to us? Who lowered the technical knowledge standards? Who said that they could? When did it become no longer required to demonstrate the ability to build and troubleshoot radio equipment? It's truely an embarrassment to amateur radio that this has happened! I honestly know of novices who understand electronics better than extras and extras who act like CB'ers!

111. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <5b3ro0$a4q@newsstand.cit.cornell.edu>
Source record: 20365
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>
Teddy Bear, teddyb@prog1.caprica.com writes:
>I don't remember asking for criticism. I remember asking for a computer
>designed plan. Translate that as this: The only things I was asking
>for was the exact spacing, overall wire legnth, helix diameter and
>reflector demensions, nothing more.

And what were you offering for payment?

You show up presenting a list of requirements like an RFP and expecting
free help, and when someone looks at the requirements and says they might
not be totally realistic, you jump all over them. Well I've built several
helix antennas and read a bunch more on them and I agree with Jims
evaluation of your design conditions.

>
>> Well I can see some advantages to a helix over yagis, and I'm
>> considering one myself for 2m, but I don't see why you don't want them
>> for EME that's your call.
>
>You mean to say that you critiqued my idea when don't even HAVE a 2m
>helical much less built one?
>
>> Maybe if we started with what your goals are, then we could find
>> something more realistic to do. But if you insist on doing it with
your
>> rough specs tehn I can supply the relative cookbook plans. The helix
is
>> not all that complicated to need to go to a computer design.
>
>No thanks, I'll wait for someone who can offer exact formulas or
>mesurements, rather than speculations. My time is valuable and my money
>is sparse. This is not a game to me so I can't just wing it.

I think with your attitude, you're likely to wait a long damn time.

Kevin

112. Re: vhf dummy load

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <32D5E7EE.5CF8@pacbell.net>
Source record: 20366
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.space

Philip Peake wrote:
>
> Charles Mccurdy wrote:
> >
> > Hi all i got a lote of replys about a vhf dummy load
> > Or if not how about a 8 ohm non-inductive resistor 5% 20 watts
> >
> > Please tell me if them will work.
>
>
> This is obviously not what you want in a VHF dummy load.
>
> The "non-inductive" resistors sound like the way tp go to me.
>
> Philip
Phil:

If you need to make a real brute force dummy load, check out surplus outlets for Carborundum Corp silicon carbide resistors. These resistors are often used as industrial heaters or in kilns. They often take the form of a rod or tube, typically 1/2" to 2" diameter and 6" to 24" long. All sorts of resistances. The terminations are a silver fired onto the ceramic body at each end. These babies are tough! And absolutely low inductance. I have used them as sense resistors in lightning pulse generators and as super RF loads. Immerse them in cooling oil, and dissipate away!
The big problem for you is impedance matching. It takes some imagination to configure one of these into a termination that properly matches the RF source. After all, the whole purpose of the dummy load is to transfer and absorb all of the RF, not reflect it. So, you not only have to consider the dissapative element, but the housing around it. Remember that the physical dissapator will act like an antenna if it's left out in the open "electrically". In the VHF range, you can't just hang a resistor on the end of the coax, it should be contained within an extension of the coax shield (otherwise the dummy won't be totally dumb) which doesn't create impedance discontinuities.

113. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.space
Date: 1997-01-09 00:00:00 UTC
From: cipriano@nutecnet.com.br
Message-ID: <32d50f2e.2178709@news.nutecnet.com.br>
Source record: 20367
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Thu, 09 Jan 1997 07:24:25 -0800, AC6V <ac6v@ix.netcom.com> wrote:

>waheeb@scscomm.com wrote:
>>
>> If this post has been sent to wrong place I am very sorry
>>
>> Could anyone explain to me what is packet radio, amateur radio and the
>> difference between them.
>>
>> What sort of equipment do I need
>>
>> Does it work worldwide or do I have to be within a distance of (say a tower
>> or station)
>>
>> Anything extra would be very valuable
>>
>> pls drop me email direct
>> Thanks in advance
>>
>> waheeb
>
` Hi Waheeb...

My name is Carlos Alberto...
I'm amateur radio of Brazil...
I not write english very well, but lets go...
The packet radio is a mode of transmition an reception of
digitals signals..
Amateur radio is a class of people with make conversation from
radio equipment.
We have very others modes.. SSB, CW, RTTY, AMTOR, PACTOR,
GTOR, SSTV, SATELITE....
I hope help you...
See about amateur radio in ALTAVISTA SEARCH in ARRL
Bye Bye...

Carlos Alberto
PY4CEL

114. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: James Leahy <jleahy@norwich.net>
Message-ID: <01bbfee8$8baf2640$2b821cce@jleahy>
Source record: 20222
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hmm, someone who apparently is using a "handle" calling some of us CBers?
IMHO, based on total conjecture, is that since the code was de-emphasised,
we surely haven't gotten flooded with new engineers as we were promised by
the no-code lobby. But we sure have created a boon for the 2 meter rig
manufacturers as many of the 11 meter gang has moved up to the "major
league".

"First Personal Here is....."
--
Jim Leahy K2JL jleahy@norwich.net

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>...
>
> I THOUGHT that these were newsgroups for radio science discussions, based

> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today
would
> rather buy equipment from a store than built it.
.....
> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!
>
> I shouldn't even HAVE to tell you this! Half the hams I hear these days
> barely know how to even solder! WHAT the heck is happening to us? Who
> lowered the technical knowledge standards? Who said that they could? When

> did it become no longer required to demonstrate the ability to build and
> troubleshoot radio equipment? It's truely an embarrassment to amateur
> radio that this has happened! I honestly know of novices who understand
> electronics better than extras and extras who act like CB'ers!

115. After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109235235.20816J-100000@prog1.caprica.com>
Source record: 20223
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Maybe I expected too much of people's ability to give me only what I asked for or to leave the answering to those who CAN.

If my high standards for engaging in scientific discussions seem to be too much for some people who access these newsgroups to handle, I can only apologize for not realizing that. However, I will not apologize for having such high standards for engaging in scientific discussions. The latter is not a sin.

Perhaps I just tend to sometimes forget that ham radio is just a hobby to some people and that said people think that the phrase "just a hobby" is synonymous with the phrase "just a game".

Ham radio cost a lot of money as you all know. I am not a rich man. Therefore I take it much more seriously than most, because I take my money much more seriously than John Q. Deep-Pockets might.

To me ham radio is NOT a game. It is an educational laboratory in which we are supposed to hone our skills as elecronic engineers or something like that. I find that not many people look at it that way. To many, ham radio is just a more respectable version of a citizens band, and these kind of people are everywhere from novice class to extra class in similar percentages from class to class. I find that frustrating sometimes, DEPENDING of the forum. "When in Rome..." you know. Well in THIS forum, the names of these three newsgroups lead me to believe I would be talking to people who are as technically serious as I am. Now I see I may have read too much into the whole thing and thus formed unreal expectations of some of you.

Let me try to make it easier to avoid conflicts in the future:

If you take ham radio and electronics VERY seriously, as I do, then I welcome you to share your studies and knowledge with me, and if you ask, I'll try to do likewise.

But if you are a "weekend warrior" who enjoys a good ragchew discussion, but ham radio is just a high tech game to you, sorry, but I do not come to technical newsgroups for that so ignore my posts because I am not going to be like a friendly puppy and go play frisbee with you in here. I find that annoying and it provokes me into being cold and if you tell me off for being cold then I am going to be very mean and nasty. Thats just the way that I tick, so don't say I didn't warn you.

However, in NON-technical newsgroups I can easily be just one of the guys and be able to kid around and have fun like anyone else, but "I don't mix my peas in my spuds" as they say. I am technical in technical newsgroups

and I am human in non-technical newsgroups and never the twain shall meet. So don't try to make me be like you, running and hopping and skipping without regard to whether I am in a lab or on a playground.

Business is business, pleasure is pleasure and science is science to me and you might like to mix them but I can't and I won't and you will piss me off if you try to force me to be like that. I am the same on the air. In a technical QSO I don't want to hear about what your favorite movie is or what good gumbo your wife can make and in a SOCIAL QSO I don't want to hear about which resistor you put on the emitter of which transistor.

This is not a social newsgroup, it is a technical newsgroup. If it were a social newsgroup I would be in an entirely different mindset. If you don't like the mindset of "Just the FACTS" then PLEASE... leave me alone and I will return the favor! Is that too much to ask? It seems fair to me!

116. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: newsline@ix.netcom.com
Message-ID: <5b62rg$r8b@dfw-ixnews3.ix.netcom.com>
Source record: 20224
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

In <32D283D4.563@one.net> David Ho <davidho@one.net> writes:
>
>N5ZGT de VS6UE/W4 K
>
>How would satellites that are supposed to handle high volume traffic
>sattle with narrow bandwidth like our precious 2m and 70cm?
>
>Analogy:
> Amateur HF RTTY cannot be over 300 bps but in the VHF area can
> go as high as 19.2 kbps. Why? BANDWIDTH!
>
>To accomodate high speed internet traffic, T1 (1.544 mbps) is already
>getting tighter as hours go by. But Satellites are talking about T3
>or even bunch of T4's (if there is anything called T4). How much do
>our 2m and 70cm get to offer?
>
>Don't worry. It seems to me that the microwave regions are more
likely
>to be where they get the bandwidth from.
>
>73!
>
>de VS6UE/W4 (New callsign pending)
>David Ho
>davidho@one.net
>
>SK . .

You are very INCORRECT! LEO Satellites want spectrum in the 130-170
and 440 to 455 MHz range for data-only services. The cost of end-user
equipment is far less than in the GHz range. And the Little LEO's are
not the only entities that want ham bands.

It is purely a matter of economics. 2 meters and 70cm are woth tens of
billions of dollars in corporate profits to any industry that can grab
the bands from hams. We are at war for our survival!

de Bill Pasternak, WA6ITF

117. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6ba2mlg5@news3.microserve.net>
Source record: 20225
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>No further email messages from you are welcome here and WILL be reported to
>your ISP admin as net abuse. THAT IS A PROMISE! I am sure that they, like
>most ISP's have a company policy against harrassment eminating from their
>customers. Learn to PAY ATTENTION TO A WHOLE THREAD before you go
>shooting your mouth off or keep your stupid mouth shut, twit!

Teddybear:
I sure hope you don't expect any more help on your helical antenna after you
pulled this asshole stunt.

Beggars can't be choosy.

Tyler

118. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: jwkelley@e4e.oac.uci.edu
Message-ID: <5b6esp$pjf@news.service.uci.edu>
Source record: 20226
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

In article <5b62rg$r8b@dfw-ixnews3.ix.netcom.com>,
William M. Pasternak <newsline@ix.netcom.com> wrote:

>You are very INCORRECT! LEO Satellites want spectrum in the 130-170
>and 440 to 455 MHz range for data-only services. The cost of end-user
>equipment is far less than in the GHz range. And the Little LEO's are
>not the only entities that want ham bands.

Right. It's the frequency wholesalers who want 'em. There's a chance
they might make a buck or two on resale, so it's worth the gamble. But
it's difficult to see how someone with that as their sole demonstrable
need for the spectrum, could make a persuasive enough argument to the FCC
to displace the amateurs from their most active bands. I'll grant that
just about anything's possible in government, but that by itself doesn't
mean it's necessarily likely to happen.

>It is purely a matter of economics. 2 meters and 70cm are woth tens of
>billions of dollars in corporate profits to any industry that can grab
>the bands from hams. We are at war for our survival!

Yes. But if the corporations did take over the bands, then the
Technicians wouldn't be able to fulfill your prognostication that they
would live out their entire amatuer careers on a single two meter
repeater, and you would finally have to admit being wrong about that. :-(

Jim, AC6XG

>de Bill Pasternak, WA6ITF

119. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: wwhite@southwind.net
Message-ID: <5b6kta$38b@opal.southwind.net>
Source record: 20227
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <32D59A14.41C6@the.net>, Jim <nospam@the.net> says:
>
>Hi all,
>
>
>Well when I read the original post asking for help, the tone of the
>wording and absolute strangness made me think that it might have been a
>troll. Something gave me the impression that this ask for help was more
>than just that. Now it turns out that my sixth sense proved correct and
>this person really seems to not want help or advice, but is more
>interested in a flame war, or is simply a jerk. I'm not sure. It is
>really sad that this person chose to be confrontational when someone
>else was honestly trying to help.
>
>But I'll give it one more shot, since others may learn something about
>helicals and I think that is a good thing.
>

--SNIP--

>Anyways, for an axial mode helix the parameters of the "coil" follow:
>.9 < C (Circumference) < 1.3 wavelengths
>13 < p (pitch) < 17 degrees
>
>
>Typical values are 1 wavelength for C and 14 degrees for p.
>
>Otherwise it degenerates to a normal mode helical or dipole like
>antenna.
>
>The value of S which is the lineal length of on turn is found by:
>
>S = C * tan(p)
>
>Taking C = 1 lamda at 144 MHz = 6.83 ft * tan(14) = 1.70 ft = S

--SNIP--

>It's kinda like the new ham that was asking me to help him with an 80
>meter antanna. He lives in an apartment. He mention that he had heared
>that a quad was a good design, and wanted soem help with that. By your
>demeanor I should have simply told hime the design formulas and left it
>at that. But he was much more thankful that I explained that a 20m on a
>side square plus a long boom would not quite fit in on on his apartment.

--SNIP--

>Jim

Jim,

I for one would like to thank you for taking the time and trouble to make this information available for the rest of us. I am a fairly new ham (1 1/2 yrs) and find the quest for knowledge one of the most rewarding aspects of the hobby. Your explanation of helical antennas has been printed out and will be saved for this spring when I hope to construct several helicals for satelite work. Not all of us are unappreciative of the efforts of others to help us increase our knowledge of this facinating hobby.

As for Teddy Bare, his attitude and outlook are most offensive to me. His kind makes it harder for those of us who are trying to learn and have found this and other ham related newsgroups a valuable asset in achieving that goal. I hope his kind won't keep those with the knowledge to help the rest of us from doing it.

Thanks again Jim.

73

Wayne

120. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32D71823.48FC@erols.com>
Source record: 20228
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Nice troll!!

Teddy Bear wrote:
>
> I THOUGHT that these were newsgroups for radio science discussions, based
> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today would
> rather buy equipment from a store than built it.
>
> Once upon a time iw was WE who invented everything elecronic! Now most of
> us have been reduced to clueless consumers, lead by the nose like dumb
> sheep... a sad legacy indeed to leave to future hams.
>
> When someone asks for calculations, instead they get speculation. But I
> must warn that if you were to try to build things out of speculation,
> you'll soon have a pile of failed projects stacked taller than you are.
>
> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!
>
> I shouldn't even HAVE to tell you this! Half the hams I hear these days
> barely know how to even solder! WHAT the heck is happening to us? Who
> lowered the technical knowledge standards? Who said that they could? When
> did it become no longer required to demonstrate the ability to build and
> troubleshoot radio equipment? It's truely an embarrassment to amateur
> radio that this has happened! I honestly know of novices who understand
> electronics better than extras and extras who act like CB'ers!

121. Atlantis/Mir Visibility: CANADA and NORTHERN U.S.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Manfred Bester <manfred@agate.berkeley.edu>
Message-ID: <5b6hqp$8hi@agate.berkeley.edu>
Source record: 20229
Cross-posted to: sci.space.shuttle,sci.space.tech,rec.radio.amateur.space

Observers in CANADA and the NORTHERN UNITED STATES will have
excellent sighting conditions for Atlantis and Mir during the
STS-81 mission. In some locations (e.g. Vancouver or Calgary)
there will be a visible overhead pass every morning during the
entire mission. For times and circumstances of the passes
check the SatPasses Web Page at:

http://ssl.berkeley.edu/isi_www/satpasses.html

Happy observing!

-Manfred Bester

--
Manfred Bester http://ssl.berkeley.edu
Space Sciences Laboratory manfred@ssl.berkeley.edu
University of California
Berkeley, CA 94720

122. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Reed <radiohead.telis@news.telis.org>
Message-ID: <32D6FF5A.7EE2@news.telis.org>
Source record: 20230
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Pieter Ibelings wrote:
>
> Hi Mr. Teddy bear,
>
> I know this is not the design that you requested, but here it goes.
>
> Due to your "dream like" gain figures for this antenna, I recommend a
> supercooled,
> superconducting bifilar helical antenna. By using superconductive wires,
> you
> should be able to make the resistive losses of the antenna equal to zero.
> This
> should greatly increase the performance of the antenna.
>
> ... or you could use a yagi array. Let's use simple math to calculate the
> number
> of antennas required to achieve 30 dB of gain. For this example we will use
> a
> cushcraft antenna (13B2) with an approximate gain of 14dB. If you were to
> connect n of these antennas together, the gain would increase to 14 + 10
> Log (n).
> If we assume that for every antenna there is a loss of .25 dB in feedline
> and
> splitter losses, the above formula becomes 13.75 + 10Log(n) = 30dB. Solving
> the
> equation for n gives us :
>
> n=10^1.625
> How many antennas do you need?
> 42.17 antennas
> Since antennas come in whole units, I recommend you use 42 cushcraft
> antennas
> and 1 MFJ antenna. This should approximate the requirements. Care should be
> taken
> as to not skew the antenna pattern. I recommend placing the MFJ antenna
> dead center
> of the array. Actual results may vary if you use Radio Shack CB cable.
>
> On a last note,
> If you decide to go with the supercooled, superconducting bifilar helical
> antenna, I
> recomment that you build two of these antennas with opposite polarization.
> This will

> enable you to hear your own echos. See you on EME!
>
> 73's
>
> P.S. You owe me $300 in design fees... Puto!
>

Bien Dicho!

I loved it. I think I'll build one of them liquid cooled helicals!

73's

Reed

> Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> <Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>...
> > On 9 Jan 1997, Pieter Ibelings wrote:
> >
> > > Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> > > <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > > > Duh.
> > >
> > > > That's an old XYL's tale.
> > >
> > > > I expect 25-30 bB.
> > >
> > > > I don't remember asking for criticism. nothing more.
> > >
> > > > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > > > helical much less built one?
> > >
> > > > No thanks, I'll wait for someone who can offer exact formulas or
> > > > mesurements, rather than speculations. My time is valuable and my
> money
> > > > is sparse. This is not a game to me so I can't just wing it.
> > >
> > > You obviously have an attitude ploblem "teddy bear". Someone here is
> trying
> > > to help you and at
> > > the same time you are treating him like an idiot.
> >
> > Since you are addressing this to me more politely than John did, I will
> > reply more politely to you...
> >
> > DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> > CRITICISM, SIR?
> >
> > > How can you expect anybody to help you when you treat people the way
> > > you do?
> >
> > Help MUST be the information that was ASKED FOR in order to qualify AS

> help.
> > Since it was CLEARLY what I had said in advance that I DON'T want, then
> > it is not help.
> >
> > If you are visiting someone working on something and they ask you to pass
>
> > them a screwdriver and instead you pass them a hammer then you are
> > annoying them, not helping them, RIGHT?
> >
> > > If you don't like the help that you are being offered for free then
> > > hire an engineer and pay him consulting fees. I am sure that he will
> put up
> > > with your **** if you pay him enough.
> >
> > With that language, young man, you just threw all politeness right out
> the
> > window. If you can't discuss it without cussing me out, get lost. This is
>
> > not email, it's a public forum and kids DO read the posts here.
> >
> > > By the way, if you are expecting 25-30 bB's of gain you are
> > > just dreaming.
> >
> > WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED
>
> > FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN
> SPECS!
> > IS THAT CLEAR???
> >
> > > Or do your bB's = MFJ dB's?
> >
> > Since you DID ask:
> >
> > MFJ makes crap. They are hung up on using half-wave designs which usually
>
> > ARE crap. When they figure out what a quad is they might have a clue, but
>
> > until then much of what they make is overpriced trash.
> >
> > > 73's
> >
> > What's the purpose of that? Don't tell me "73" after you just cussed me
> out.
> > 73 means best regards and you've displayed contempt, not best regards.
> >
> > TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T
> > WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.
> >
> > If you can't give someone what they asked for then don't annoy them by
> > wasting their time and "bandspace" with unwanted opinions!

> >
> >

123. Test Message - Don't Read!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Mark McGregor <kb9khm@sprynet.com>
Message-ID: <32D6FB45.722E@sprynet.com>
Source record: 20231

```
Test Message!

Mark
```

124. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6av3mlg4@news3.microserve.net>
Source record: 20232
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>This is the second time that you have seemed to make a big point about
>monofilar, big deal. This is by far the more common design compared to
>bifilar and quadrifilar.

I'm trying not to get in the middle of the flame wars here, but I was
wondering what the difference between monofilar, bifilar and quadrifilar is?
Mono is one and bi is two ect... How does this relate to a helical antenna?
TIA

Tyler
N3SPD

125. MIR SAFEX II

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Ralf Mittelstaedt <ralfm@metronet.de>
Message-ID: <32D6538D.3B3@metronet.de>
Source record: 20233

```
MODE 1 (Relay)
Uplink/Downlink 435.750 MHz/437.950 MHz FM FM-CTCSS: 141,3 Hz

MODE 2 (Packet Radio)
Uplink/Downlink 435.775 MHz/437.975 MHz FM 9600 Bd FSK-AX25

MODE 3 (QSO/DVR)
Uplink/Downlink 435.725 MHz/437.925 MHz FM FM-CTCSS: 151,4 Hz
Digitalrecorder DVR

73's Ralf +
```

126. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6br2mlg6@news3.microserve.net>
Source record: 20234
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
>CRITICISM, SIR?

oh yea, I must have missed that with everyone else. I read your original post. I did not see any warning to the following:

WARNING: Anybody who does not give me exactly the answers that I asked for will be flamed!

>> If you don't like the help that you are being offered for free then
>> hire an engineer and pay him consulting fees. I am sure that he will put up
>> with your **** if you pay him enough.

Not likely....I'd tell him to fuck off and find himself another engineer.

>With that language, young man, you just threw all politeness right out the
>window. If you can't discuss it without cussing me out, get lost. This is
>not email, it's a public forum and kids DO read the posts here.

Yea, there are a LOT of kids who like to read Helical design for EME.

>
>> By the way, if you are expecting 25-30 bB's of gain you are
>> just dreaming.
>
>WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED
>FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN SPECS!
>IS THAT CLEAR???

IF YOU DON'T LIKE THE ADVICE GIVEN HERE, DON'T ASK FOR ADVICE HERE.

It's that simple.

Tyler

127. Re: After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32D6980E.1BCB@ccm.ch.intel.com>
Source record: 20235
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
> This is not a social newsgroup, it is a technical newsgroup.

I dunno, Teddy, if this was a technical newsgroup, it probably
wouldn't have 'rec' and 'amateur' in the title. :-) I've found
most of the guys on this group to be downright sociable.

73, Cecil, W6RCA, OOTC

128. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5b5ooa$btv@techsrv1.tech>
Source record: 20236
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

James Leahy (jleahy@norwich.net) wrote:
: Hmm, someone who apparently is using a "handle" calling some of us CBers?
: IMHO, based on total conjecture, is that since the code was de-emphasised,
: we surely haven't gotten flooded with new engineers as we were promised by
: the no-code lobby. But we sure have created a boon for the 2 meter rig
: manufacturers as many of the 11 meter gang has moved up to the "major
: league".

What, and you think that being able to do code makes you an engineer?
I don't think so! Only about 1/10 of our club actually knows code
and over 3/4 of us are engineers. If you actually think that code
is a prerequisite to be an engineer, you should go back to school! CW is
only briefly mentioned in communications classes today.

And as for "Teddy Bear", there are quite a few of us that actually build
stuff yet.

--
/\
\ Michael Long || President /
/ Callsign: KB8WPE || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

129. Wisp32 problems with new year !!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: rossano@database.it
Message-ID: <5b3ksg$oa3@server-b.cs.interbusiness.it>
Source record: 20368

Hello..my WISP32 doesn't track anymore from the 1st Jen 1997....!!!
Someone else have this problem ??
73 de Ros I4wrm e-mail rossano@database.it

130. AMATEUR RADIO AND THE HALE-BOPP COMET!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: thomil@infocom.com
Message-ID: <5b47jb$7af@mips.infocom.com>
Source record: 20369

While awaiting the results of the new Mars missions, I've devoted some

space on my web site, THE MARTIAN ARCHIVES, to the amateur radio
project to monitor HALE-BOPP for possible radio signals. I've
included construction plans for some simple microwave gear,
including schematics, PC board patterns, and a 3 foot dish.
The URL is: http://www.infocom.com/~thomil/

Thomas M. Miller (Mike)
WA8YKN

131. mode S antenna design

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: dbarillo@texas.net
Message-ID: <5b4h7d$9o6@news3.texas.net>
Source record: 20370

does anyone have a good design for a mode S antenna.?
the usual ARRL publications dont seem to cover this band well.
Thanks Dave WA2DNU

132. Re: new mir freq for 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-01-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <32e40b0a.1104293740@news.sci.fi>
Source record: 20371

ke4htm@bluenet.net (Jamie R. Dean) wrote:

>On 2 Jan 1997 15:22:55 GMT, Jeff Griffin <griffinj@admin.tc.faa.gov>
>wrote:
>
>>Jim, I read your message about the change on January 1. I
>>talked to kc5tzq in the morning New Year's day. John said he
>>was glad I got the frequency change. But no one mentioned the
>>fact that the paket frequencies are now the same as voice, no
>>longer simplex that is. So, the new paket freqencies are now
>>145.200 up 145.800 down. Everyone in the group have a Happy and
>>prosperious New Year.
>>
>>73 Jeff
>>
>I think the move to 145.800 was a very bad move for the MIR. With APRS
>operating on 145.790 and has been for a few years there are going to
>be problems. I have already noticed that here the bleed over is
>noticable from station at ranges of 30 miles away. (I'm in the mtns.)
>There may have to be some changes made if this keeps happening either
>on the MIRS side or on the APRS side.

The frequency pair 145.200/145.800 was previously used in IARU Region
1 (Europe and Africa) as repeater channel R8. The use was
discontinued, since it caused interference to the satellite band. The
repeaters on that channel were moved elsewhere. The frequency 145.200
was changed to ordinary simplex S8.

The usage was once more changed. From IARU Region 1 conference
recommendations:

>The following recommendations were adopted at the meeting of the VHF /
>UHF / Microwaves Committee in Vienna, 1995, and have been adopted by the
>Executive Committee of IARU Region 1 at their meeting in April 1995 as
>interim IARU Region 1 policy until ratification at this conference.
>Consequently, Committee C5 recommends to the Plenary meeting of the
>Conference that the following be adopted:
>
>
>
> RECOMMENDATION VIENNA-A
>
>
> In the 145 MHz band plan the frequency 145.200 MHz (formerly channel S8)
> shall be used for simplex NBFM telephony by manned space stations over

> Region 1. For split frequency operation the frequency pair
> (145.200/145.800) can be used.

So, this is originally a Region 1 recommendation and the Mir crew seems to use the same frequency over all regions. The old Mir frequency 145.550 was the most frequently used simplex frequency (after the calling frequency 145.500) causing a lot of mutual interference.

Paul OH3LWR

133. Re: After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: wwhite@southwind.net
Message-ID: <5b6lja$38b@opal.southwind.net>
Source record: 20237
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <Pine.BSF.3.91.970109235235.20816J-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> says:
>
>
>Maybe I expected too much of people's ability to give me only what I
>asked for or to leave the answering to those who CAN.
>
>If my high standards for engaging in scientific discussions seem to be
too
>much for some people who access these newsgroups to handle, I can only
>apologize for not realizing that. However, I will not apologize for
>having such high standards for engaging in scientific discussions. The
>latter is not a sin.
>
>Perhaps I just tend to sometimes forget that ham radio is just a hobby
to
>some people and that said people think that the phrase "just a hobby" is
>synonymous with the phrase "just a game".
>
>Ham radio cost a lot of money as you all know. I am not a rich man.
>Therefore I take it much more seriously than most, because I take my
>money much more seriously than John Q. Deep-Pockets might.
>
>To me ham radio is NOT a game. It is an educational laboratory in which
>we are supposed to hone our skills as elecronic engineers or something
>like that. I find that not many people look at it that way. To many, ham
>radio is just a more respectable version of a citizens band, and these
>kind of people are everywhere from novice class to extra class in
similar
>percentages from class to class. I find that frustrating sometimes,
>DEPENDING of the forum. "When in Rome..." you know. Well in THIS forum,
>the names of these three newsgroups lead me to believe I would be
talking
>to people who are as technically serious as I am. Now I see I may have
>read too much into the whole thing and thus formed unreal expectations
of
>some of you.
>
>Let me try to make it easier to avoid conflicts in the future:
>
>If you take ham radio and electronics VERY seriously, as I do, then I
>welcome you to share your studies and knowledge with me, and if you ask,
>I'll try to do likewise.

>
>But if you are a "weekend warrior" who enjoys a good ragchew discussion,
>but ham radio is just a high tech game to you, sorry, but I do not come
>to technical newsgroups for that so ignore my posts because I am not
>going to be like a friendly puppy and go play frisbee with you in here.
>I find that annoying and it provokes me into being cold and if you tell
>me off for being cold then I am going to be very mean and nasty. Thats
>just the way that I tick, so don't say I didn't warn you.
>
>However, in NON-technical newsgroups I can easily be just one of the
guys
>and be able to kid around and have fun like anyone else, but "I don't
mix
>my peas in my spuds" as they say. I am technical in technical newsgroups
>and I am human in non-technical newsgroups and never the twain shall
>meet. So don't try to make me be like you, running and hopping and
>skipping without regard to whether I am in a lab or on a playground.
>
>Business is business, pleasure is pleasure and science is science to me
>and you might like to mix them but I can't and I won't and you will piss
>me off if you try to force me to be like that. I am the same on the air.
>In a technical QSO I don't want to hear about what your favorite movie
is
>or what good gumbo your wife can make and in a SOCIAL QSO I don't want
to
>hear about which resistor you put on the emitter of which transistor.
>
>This is not a social newsgroup, it is a technical newsgroup. If it were
a
>social newsgroup I would be in an entirely different mindset. If you
don't
>like the mindset of "Just the FACTS" then PLEASE... leave me alone and I
>will return the favor! Is that too much to ask? It seems fair to me!
>

Whatever...

134. Need Instant Track (IT) Fix

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: burkebp@juno.COM
Message-ID: <19970110.202505.3294.6.burkebp@juno.com>
Source record: 20238

My copy of IT is having a problem under win95. It is defaulting to the PST time zone. I have placed SET TZ=CST6CDT in every *.bat file including autoexec.bat. I execute the program from START, then RUN. Outside of moving to the West coast, does anyone have the fix?
Brian/N0iMD

135. Re: Need Instant Track (IT) Fix

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bbff72$00608220$fd1479a8@wave.mindspring.com>
Source record: 20239

Create a new bat file call it.bat using your editor. and place it in the
instatrak directory.
run this file instead of the it.exe file.

73's
Pieter
N4IP

' it.bat file********two bottom lines*************
set tz=cst6cdt
it.exe

Brian P. Burke <burkebp@juno.COM> wrote in article
<19970110.202505.3294.6.burkebp@juno.com>...
> My copy of IT is having a problem under win95. It is defaulting to the
> PST time zone. I have placed SET TZ=CST6CDT in every *.bat file
> including autoexec.bat. I execute the program from START, then RUN.
> Outside of moving to the West coast, does anyone have the fix?
> Brian/N0iMD
>
>

136. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32d720a3.47348205@news.capital.net>
Source record: 20240
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

jwkelley@e4e.oac.uci.edu (James W. KELLEY) wrote:

>In article <5b62rg$r8b@dfw-ixnews3.ix.netcom.com>,
>William M. Pasternak <newsline@ix.netcom.com> wrote:
>
>>You are very INCORRECT! LEO Satellites want spectrum in the 130-170
>>and 440 to 455 MHz range for data-only services. The cost of end-user
>>equipment is far less than in the GHz range. And the Little LEO's are
>>not the only entities that want ham bands.
>
>Right. It's the frequency wholesalers who want 'em. There's a chance
>they might make a buck or two on resale, so it's worth the gamble. But
>it's difficult to see how someone with that as their sole demonstrable
>need for the spectrum, could make a persuasive enough argument to the FCC
>to displace the amateurs from their most active bands. I'll grant that
>just about anything's possible in government, but that by itself doesn't
>mean it's necessarily likely to happen.
>
>>It is purely a matter of economics. 2 meters and 70cm are woth tens of
>>billions of dollars in corporate profits to any industry that can grab
>>the bands from hams. We are at war for our survival!
>
>Yes. But if the corporations did take over the bands, then the
>Technicians wouldn't be able to fulfill your prognostication that they
>would live out their entire amatuer careers on a single two meter
>repeater, and you would finally have to admit being wrong about that. :-(
>
>Jim, AC6XG

Good point, Jim. Pasternak is so full of hot air he has to carry
ballast to keep from floating away.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

137. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b7bcp$4ev$1@news3.microserve.net>
Source record: 20241
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Please take this to the Misc or Policy newsgroups.

Thanks,
Jack WB3U

138. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bbff54$52371d20$fd1479a8@wave.mindspring.com>
Source record: 20242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi Mr. Teddy bear,

I know this is not the design that you requested, but here it goes.

Due to your "dream like" gain figures for this antenna, I recommend a supercooled, superconducting bifilar helical antenna. By using superconductive wires, you should be able to make the resistive losses of the antenna equal to zero. This should greatly increase the performance of the antenna.

... or you could use a yagi array. Let's use simple math to calculate the number of antennas required to achieve 30 dB of gain. For this example we will use a cushcraft antenna (13B2) with an approximate gain of 14dB. If you were to connect n of these antennas together, the gain would increase to 14 + 10 Log (n). If we assume that for every antenna there is a loss of .25 dB in feedline and splitter losses, the above formula becomes 13.75 + 10Log(n) = 30dB. Solving the equation for n gives us :

n=10^1.625
How many antennas do you need?
42.17 antennas
Since antennas come in whole units, I recommend you use 42 cushcraft antennas and 1 MFJ antenna. This should approximate the requirements. Care should be taken as to not skew the antenna pattern. I recommend placing the MFJ antenna dead center of the array. Actual results may vary if you use Radio Shack CB cable.

On a last note,
If you decide to go with the supercooled, superconducting bifilar helical antenna, I recomment that you build two of these antennas with opposite polarization. This will enable you to hear your own echos. See you on EME!

73's

P.S. You owe me $300 in design fees... Puto!

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>...
> On 9 Jan 1997, Pieter Ibelings wrote:
>
> > Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> > <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > > Duh.
> >
> > > That's an old XYL's tale.
> >
> > > I expect 25-30 bB.
> >
> > > I don't remember asking for criticism. nothing more.
> >
> > > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > > helical much less built one?
> >
> > > No thanks, I'll wait for someone who can offer exact formulas or
> > > mesurements, rather than speculations. My time is valuable and my
money
> > > is sparse. This is not a game to me so I can't just wing it.
> >
> > You obviously have an attitude ploblem "teddy bear". Someone here is
trying
> > to help you and at
> > the same time you are treating him like an idiot.
>
> Since you are addressing this to me more politely than John did, I will
> reply more politely to you...
>
> DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> CRITICISM, SIR?
>
> > How can you expect anybody to help you when you treat people the way
> > you do?
>
> Help MUST be the information that was ASKED FOR in order to qualify AS
help.
> Since it was CLEARLY what I had said in advance that I DON'T want, then
> it is not help.
>
> If you are visiting someone working on something and they ask you to pass

> them a screwdriver and instead you pass them a hammer then you are
> annoying them, not helping them, RIGHT?
>
> > If you don't like the help that you are being offered for free then
> > hire an engineer and pay him consulting fees. I am sure that he will
put up
> > with your **** if you pay him enough.

>
> With that language, young man, you just threw all politeness right out
the
> window. If you can't discuss it without cussing me out, get lost. This is

> not email, it's a public forum and kids DO read the posts here.
>
> > By the way, if you are expecting 25-30 bB's of gain you are
> > just dreaming.
>
> WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED

> FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN
SPECS!
> IS THAT CLEAR???
>
> > Or do your bB's = MFJ dB's?
>
> Since you DID ask:
>
> MFJ makes crap. They are hung up on using half-wave designs which usually

> ARE crap. When they figure out what a quad is they might have a clue, but

> until then much of what they make is overpriced trash.
>
> > 73's
>
> What's the purpose of that? Don't tell me "73" after you just cussed me
out.
> 73 means best regards and you've displayed contempt, not best regards.
>
> TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T
> WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.
>
> If you can't give someone what they asked for then don't annoy them by
> wasting their time and "bandspace" with unwanted opinions!
>
>

139. Re: After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Jim Leahy <jleahy@norwich.net>
Message-ID: <01bbffa9$6eb174a0$2c821cce@jleahy.norwich.net>
Source record: 20243
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Forgive us, oh Great One, for we are not worthy.
--
Jim Leahy K2JL
jleahy@norwich.net

140. Re: Facts vs Opinions - Teddys opinion...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7D34E.112E@izzy.net>
Source record: 20244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
>
> I THOUGHT that these were newsgroups for radio science discussions, based
> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today would
> rather buy equipment from a store than built it.

Oh I see Teddy, now I'm curious about this connection between rewarding CW skills and unsolicited opinions and conjecture. Do you have some research showing this connection or is this just YOUR UNSOLICITED OPINION?

Additionally I'd love to see what FACTUAL INFORMATION you have showing why hams build or buy. According to you, they buy because we have emphasized CW instead of engineering. For the record I have no formal education and my entire ham shack is either kit or homebrew. Was this just YOUR UNSOLICITED OPINION?

> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

It's not defined as a science by the FCC, they are the folks who issue licences.
They call it a SERVICE.

Teddy, the hobby or "science" as you prefer has changed. Sorry! And again thanks for sharing your PERSONAL UNSOLICITED OPINIONS on why hams buy instead of build and why emphasis on CW has caused unsolited opinions based on conjecture. Very interesting observation.

Sheeesh, go design a tranciever or something. I need a new winter project.

72,

Tim Hynde, ka8ddz

141. Re: After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7DA63.644D@izzy.net>
Source record: 20245
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:

> Ham radio cost a lot of money as you all know. I am not a rich man.

Oooh, more FACTUAL information from Teddy. I'm getting ready to build a 4 watt 30m tranciever from the NorCal radio club. It cost me $25 + $3.50 S/H, yep that sure is alot of moola Teddy. Of course my 40m DC reciever I built cost me almost $30 so, yea, I guess thats getting up there.

> This is not a social newsgroup, it is a technical newsgroup. If it were a
> social newsgroup I would be in an entirely different mindset.

By the way Teddy who are YOU to make the descision that this is not a social newsgroup? First, you've posted this to several groups so I'm not sure which one your talking about but you'll notice they all begin with REC. (recreation, get it?)

Your problem is your wound just a little too tight regarding this "technical discussion" thing. Unfortunatly your going to cheat yourself out of learning something new because the teacher at the other end may not take this as seriously as you do. There are alot of very smart people who hang out here, but along with the technical discussion there is alot of ribbing too. Lighten up a bit Teddy, it gets easier as you go along.

Tim, ka8ddz

142. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970111104142.4787D-100000@prog1.caprica.com>
Source record: 20246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Fri, 10 Jan 1997, tyler wrote:

> Teddybear:
> I sure hope you don't expect any more help on your helical antenna after you
> pulled this asshole stunt.
>
> Beggars can't be choosy.

WHAT makes me a damn begger? I have info to give on other topics pal!
Fair exchange is not robbery as the old saying goes. So get off your high
horse because you do not have a corner on knowledge and even though I dont
know it all, I certainly am not knowledgabley bankrupt!

And AGAIN if I ask for a screwdriver and you give me a hammer then your
idea of "help" is not help at all!

What is so hard to understand about that? IT HAPPENS TO BE TRUE!

143. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7EFDE.5510@izzy.net>
Source record: 20247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

The Ted-ster wrote:

> DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> CRITICISM, SIR?

Uh, actually no Teddy you did not. Are you forgetting what your original post said?
Where exactly is the warning? Your starting to drift on us Teddy...

I bet your the kind of guy someone could give a million dollars to and you'd bitch cause you had to pay the taxes on it!!

Can ANYONE here give me a computer-designed plan to make a beam antenna that
fits the following "rough-draft" parameters?

A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
antenna for 144.3 MHz, on a manually-swiveling rear-mount boom,(made of 2" OD Aluminum tubing), with a mono-filar element,(made of bare #6 solid copper wire, commonly used by electricians as ground wire for a building's
main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass
rods or wood dowels).

My idea is to mount the boom vertically on a universal joint, which itself is mounted atop a 10' mast,(5' of the mast actually being below ground level in concrete), and to use pullies and counter-weights with the
non-conductive guy ropes to actually TILT the antenna at the moon,(using a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks
I can track the movement of the moon manually anywhere in it's path anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly vertical position). The mechanics of it are much the same as those of the
older mobile cranes they used to use on rural construction sites.

BTW: I am not open to the idea of using a yagi, so please don't suggest it.

Please reply via both, the newsgroup and email.

Thank you.

144. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <32d8c962.3829725@news.tfs.net>
Source record: 20248
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

newsline@ix.netcom.com(William M. Pasternak) wrote:

>You are very INCORRECT! LEO Satellites want spectrum in the 130-170
>and 440 to 455 MHz range for data-only services. The cost of end-user
>equipment is far less than in the GHz range. And the Little LEO's are
>not the only entities that want ham bands.
>
>It is purely a matter of economics. 2 meters and 70cm are woth tens of
>billions of dollars in corporate profits to any industry that can grab
>the bands from hams. We are at war for our survival!
>
>de Bill Pasternak, WA6ITF

Bill;

Tens of billions of dollars??! And what fine piece of analysis work do you base this claim on? This is pure hysterics, IMHO, just more Chicken Little-like "Sky is Falling" crap with no supporting evidence to back it up.

Are there people and organizations out there that would like to grab up our spectrum for their own use? You bet there are. But if it were really worth "tens of billions of dollars" we'd have lost that fight long, long ago.

Our tiny chunk of spectrum at 2m and 70cm is barely usable by modern data communications standards. Any organization that can afford to get its own LEO bird on-orbit can easily afford SHF gear to communicate with it much more reliably than with VHF/UHF links. I think our claims to bandwidth at 2 GHz and above are far more at risk from these sorts of operators.

Bob

145. FS Quorum Voyager

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Jeff Kelly <jkelly@bellatlantic.net>
Message-ID: <32D8047D.521A@bellatlantic.net>
Source record: 20249

```
For Sale: Quorum Voyager APT, WEFAX demodulator and software.
External unit good for desktops or laptops.
Purchased in August for a project in Europe. Perfect condition.
$500.00

Jeff Kelly KT2K
jkelly@bellatlantic.net
```

146. Re: After some consideration...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D71862.7E4C@erols.com>
Source record: 20250
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Jim Leahy wrote:
>
> Forgive us, oh Great One, for we are not worthy.
> --
> Jim Leahy K2JL
> jleahy@norwich.net

Or is that O Grate One?
(lighten up, TB; it's only a hobby! it's supposed to be FUN!)
Bob Koblish N3HAT

147. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32d80960.20970424@news.capital.net>
Source record: 20251
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear <teddyb@prog1.caprica.com> wrote:

>On Fri, 10 Jan 1997, tyler wrote:
>
>> Teddybear:
>> I sure hope you don't expect any more help on your helical antenna after you
>> pulled this asshole stunt.
>>
>> Beggars can't be choosy.
>
>WHAT makes me a damn begger? I have info to give on other topics pal!
>Fair exchange is not robbery as the old saying goes. So get off your high
>horse because you do not have a corner on knowledge and even though I dont
>know it all, I certainly am not knowledgabley bankrupt!
>
>And AGAIN if I ask for a screwdriver and you give me a hammer then your
>idea of "help" is not help at all!
>
>What is so hard to understand about that? IT HAPPENS TO BE TRUE!
>
>
After reading some of your ravings, Teddy-poo, I think you should go
back on your medication.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

148. ARLK003 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk003.1997@arrl.org>
Source record: 20252
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK003
ARLK003 Keplerian data

ZCZC SK03
QST de W1AW
Keplerian Bulletin 3 ARLK003
From ARRL Headquarters
Newington, CT January 11, 1997
To all radio amateurs

SB KEP ARL ARLK003
ARLK003 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97007.11912897 .00000009 00000-0 -63877-5 0 3064
2 18129 82.9241 357.7918 0011040 316.8270 43.1999 13.72372994478148
UO-11
1 14781U 84021B 97009.92895521 .00000098 00000-0 24304-4 0 9424
2 14781 97.8163 357.6587 0011667 143.7340 216.4673 14.69514947688013
RS-12/13
1 21089U 91007A 97008.53102746 .00000027 00000-0 12124-4 0 9475
2 21089 82.9219 37.0616 0030457 24.1735 336.0845 13.74076143297235
UO-14
1 20437U 90005B 97007.23206924 .00000004 00000-0 18270-4 0 2383
2 20437 98.5327 92.3040 0010944 326.2681 33.7799 14.29945002363215
RS-15
1 23439U 94085A 97007.18278706 -.00000039 00000-0 10000-3 0 1897
2 23439 64.8167 53.1951 0154486 162.6777 197.9488 11.27527418 83783
AO-16
1 20439U 90005D 97010.26102946 -.00000052 00000-0 -32932-5 0 375
2 20439 98.5485 97.8725 0010980 318.3514 41.6831 14.29994877363667
DO-17
1 20440U 90005E 97010.26270389 .00000015 00000-0 22695-4 0 386
2 20440 98.5512 98.6306 0011393 317.3547 42.6749 14.30137655363695
```

```
WO-18
1 20441U 90005F 97010.32699154 -.00000032 00000-0 43559-5 0 416
2 20441 98.5516 98.6134 0012025 317.6069 42.4184 14.30105964363705
LO-19
1 20442U 90005G 97010.23687208 -.00000048 00000-0 -16245-5 0 379
2 20442 98.5540 99.1126 0012412 318.1174 41.9057 14.30217932363716
FO-20
1 20480U 90013C 97010.07319954 .00000011 00000-0 97092-4 0 9344
2 20480 99.0217 1.5491 0541300 15.6413 346.0701 12.83236382324421
AO-21
1 21087U 91006A 97010.82708874 .00000094 00000-0 82657-4 0 7774
2 21087 82.9403 168.0356 0035785 349.6818 10.3599 13.74577102298533
UO-22
1 21575U 91050B 97007.19925715 .00000020 00000-0 20921-4 0 7434
2 21575 98.3281 73.2520 0008452 19.1220 341.0283 14.37051971287361
KO-23
1 22077U 92052B 97007.42390446 -.00000037 00000-0 10000-3 0 6320
2 22077 66.0773 121.8350 0014838 250.6372 109.3042 12.86300303207079
KO-25
1 22828U 93061F 97007.77047602 -.00000008 00000-0 14024-4 0 5065
2 22828 98.5601 85.7143 0010985 341.3616 18.7160 14.28164739139313
IO-26
1 22826U 93061D 97008.25840935 -.00000025 00000-0 73957-5 0 5269
2 22826 98.5646 86.1213 0010297 356.0149 4.0945 14.27823228171266
AO-27
1 22825U 93061C 97007.85723758 -.00000117 00000-0 -29885-4 0 5281
2 22825 98.5643 85.5207 0008961 357.3108 2.7906 14.27713272171193
FO-29
1 24278U 96046B 97007.18262385 -.00000019 00000-0 19707-4 0 491
2 24278 98.5630 70.2024 0350572 243.4011 113.0807 13.52628360 19352
Mir
1 16609U 86017A 97010.85635943 .00002802 00000-0 39949-4 0 9534
2 16609 51.6520 156.9962 0007803 254.6685 105.3415 15.60223486622461

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
January 14, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

149. STS-81 Launch Information/IRC Chat

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <32D873D9.769@erols.com>
Source record: 20253

SATELLITE LISTENING POST BULLETIN - Saturday - 1/11/97

CURRENT STATUS - 0037Z (7:37 p.m. eastern time)

Perform inertial measurement unit preflight calibration. Align Merritt Island Launch Area (MILA) tracking antennas. Perform open loop test with Eastern Test Range. Conduct gimbal profile checks of orbital maneuvering system engines.

Name: STS-81
Launch Agency: NASA
Launch Site: Kennedy Space Center, FL, Pad 39B
Launch Azimuth: 42.88 degrees
Launch Time: Sunday, 12 Jan 97, 0927Z
Launch Vehicle: Space Shuttle Atlantis

The 200 nautical mile circular orbit will be included 51.65 degrees from the equator using the direct ascent technique. This will carry the external tank's impact near -0.3 N. Latitude and -125.5 deg E.

Space Shuttle Downlink Frequency List

VHF-band 139.208 MHz Shuttle/Mir Docking Operations
UHF-band 240.0 or 242.0 Mhz SRB
UHF-band 243.000 Mhz AM (Emergency Voice Channel)
UHF-band 259.700 Mhz AM (Primary Voice Channel)
UHF-band 279.000 Mhz AM (EVA Voice Channel)
UHF-band 296.800 Mhz AM (Backup Voice Channel)
S-band 2217.500 Mhz (Data)
S-band 2250.000 Mhz (Data)
S-band 2287.500 Mhz (Data)
C-band 5400-5900 Mhz (Data)

Significant Events

Event	HH:MM:SS
Liftoff	0:00:00
SRB Separation	0:02:03
MECO	0:08:31
MECO Zero Thrust	0:08:39
ET Separation	0:08:51
OMS 2 Ignition	0:40:40
OMS-2 T/O	0:42:48
ET Splash	1:27:00
PLB Doors Open	1:30:00

NC-1 thru TI (3-27) 2H:14M - 2/15:42
Mir Hard Dock (29) 2/18:23:00
Mir Undock (106) 7/16:45:00
Post Sep Burn (107) 7/18:30:00
Landing-1 Day KSC (145) (21/1510Z)
Landing-1 Day EDW (161) (22/1530Z)
Deorbit TIG (158) 10/02:30
Deorbit T/O (158) 10/06:30

Everybody is invited to join a "LIVE" Internet Relay Chat beginning
at 3:45 a.m. eastern time (0845Z), January 12th during the STS-81
launch. Here are the parameters to use with your IRC software;

Server: irc.stetson.edu (World Wide Freenet IRC Network, WWFIN)
Port#: 6667
Channel: #hearsat

Keith Stein
Woodbridge, VA
http://www.newspace.com/casr

150. Dipswitch ERS2240 settsatelite

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: scaruso@freenet.columbus.oh.us
Message-ID: <5b9k9g$n0s@login.freenet.columbus.oh.us>
Source record: 20254

looking for dipswitch settings for satelite reveiver ers2240 made by DRAKE.
--
In Italy, a caruso is a little boy that works in the sulphur mine.
VVVVVVVVVVVVVVVVVVV
~~~~~~
~~~~~~

151. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: Neil Spokes <spokes@mnsinc.com>
Message-ID: <32D831FE.98@mnsinc.com>
Source record: 20255
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space

William M. Pasternak wrote:
>
> In <32D283D4.563@one.net> David Ho <davidho@one.net> writes:
> >
> >N5ZGT de VS6UE/W4 K
> >
> >How would satellites that are supposed to handle high volume traffic
> >sattle with narrow bandwidth like our precious 2m and 70cm?
> >
> >Analogy:
> > Amateur HF RTTY cannot be over 300 bps but in the VHF area can
> > go as high as 19.2 kbps. Why? BANDWIDTH!
> >
> >To accomodate high speed internet traffic, T1 (1.544 mbps) is already
> >getting tighter as hours go by. But Satellites are talking about T3
> >or even bunch of T4's (if there is anything called T4). How much do
> >our 2m and 70cm get to offer?
> >
> >Don't worry. It seems to me that the microwave regions are more
> likely
> >to be where they get the bandwidth from.
> >
> >73!
> >
> >de VS6UE/W4 (New callsign pending)
> >David Ho
> >davidho@one.net
> >
> >SK . .
>
> You are very INCORRECT! LEO Satellites want spectrum in the 130-170
> and 440 to 455 MHz range for data-only services. The cost of end-user
> equipment is far less than in the GHz range. And the Little LEO's are
> not the only entities that want ham bands.
>
> It is purely a matter of economics. 2 meters and 70cm are woth tens of
> billions of dollars in corporate profits to any industry that can grab
> the bands from hams. We are at war for our survival!
>
> de Bill Pasternak, WA6ITF================================

This may not be entirely true. The ever modest Wayne Green in a 73
article many years ago reported on an interview with Gen. Curtis LeMay

the following: Le May is reported to have said (with many expletives deleted) that (the military) want the hams to keep their bands because in time of conflict we (the military) can quickly take back the ham bands, but the commercial people will fight tooth and nail to keep their frequencies. ...So you see, we may have more friends in power than the commercial interests. Perhaps we need to remind the military of this from time to time and keep them on our side. If you know military hams, advise them of this point if you think it is correct. Sgd. Neil AB4YK.

152. !Free Amateur Radio Classifieds, Add Links & Special Event Info

Newsgroup: rec.radio.amateur.space
Date: 1997-01-11 00:00:00 UTC
From: PushRod <pushrod@htomail.com>
Message-ID: <01bbffff$4ee20800$caabe6cd@ADMIN1.BIS>
Source record: 20256

CQCQCQ Calling All Amateurs, SWL'ers, Scanner And Other Radio Buffs!

!!! GRAND OPENING !!!

Point your Web Browser to http://www.hamtrader.com and use our custom
search engine to sell trade and search for Amateur related gear.

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Post A Free Bulletin About Your Special Event!

73, The HamTrader

http://www.hamtrader.com
support@hamtrader.com

153. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: kt4wz <kt4wz@hotcc.com>
Message-ID: <01bc002f$c0521900$249a81cd@993137520WORLDNET>
Source record: 20257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

a-men to what he said,I am a V.E. and I see it every test session. what can
we as a
group do about it??I love to build and experiment but all to often our
fellow hams don't
have a clue as to which end to solder to what ,but fear not with the
younger generation, I have seen a renewed interest in hard core electronics
experimentation
so it will come back around ,I just hope its not too late....73's all
kt4wz

154. WANTED: WRITERS!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: Ted Denver <Ted1@idt.net>
Message-ID: <5b9idu$d65@guyana.earthlink.net>
Source record: 20258
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.policy

SUBJECT: AUTHORS SEEKING PUBLICATION

EXPANDING: NEW YORK CITY LITERARY AGENCY

Accepting new (and previously published) writers.
Our offices are located in New York City,
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Please do not submit your complete manuscript unless invited.
International Literary Agency
33-29 58 Street
Woodside, NY--11377
(718) 651-8145

155. Re: new mir freq for 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: mayrosec@aol.com
Message-ID: <19970112060700.BAA13048@ladder01.news.aol.com>
Source record: 20259

Are these freqs for voice or packet.

I am a newby to the MIR experience

Clay Mayrose, WA6LBU

156. Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: mayrosec@aol.com
Message-ID: <19970112063600.BAA13898@ladder01.news.aol.com>
Source record: 20260

I have had a scanner set to the MIR repeater downlink freqs for about a week and have heard nothing. The freq I've been listening to is 437.950, is this correct?

The second question, what happened to Oscar 21? I used to hear the 2 meter FM down link all the time. I haven't heard the bird for several months. What's up.

Thanks for the info,

Clay Mayrose, WA6LBU
wa6lbu@aol.com

157. FS HF module for FT 726r

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: paulc@snet.net
Message-ID: <32d9115b.675687@news.snet.net>
Source record: 20261

Hello Folks

I have a HF module forsale for the FT 726r radio I am asking $275.

If interested email me at PaulC@snet.net

Thank you

158. Sat.packet system

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: nsallay@internext.COM.BR
Message-ID: <32D8EC64.1636@internext.com.br>
Source record: 20262

Hello and good morning,
My Name is Nicolau,ARS PP8DA,FI96XX.
-I interested to know how to set up a well worcking,but not to sofisticated(and expensive)packed station to work on 9600 Bps Pacsat.
-My present set up is:
Kenwood TS-790A (to be modified for 9600Bps)
Amplifier 2m,B2516G Mirage;70cm Rfc 4-310 Rfconcept
Preamp.Toky Hy-power mod HRA/2 20 dB gain
Antennas Crushcraft AOP-10;Yaesu G-5600B Rot.controller
Cable Belden 9913
Sattelite tracking softer Nova V1.1b (DOS)
Sasi-Y ant.positioning device and doppler control in above softer.
Modem only the conventional 300/1200bps for my F6FBB bbs sys.(Kantronics Kam Plus)
-I`m thinging about buying a AEA PK-96 for Pacsat,your opinions and recommendations please
-Further,will the Nova V1.1b do the job,and what kind of decoding program you suggest for ease of work and reliability.
-I hope I have put the questions clearly and thank you in advance for any reply.

73 de
Nicolaus Sallay
ARS PP8DA
reply via this mirror or
e-mail:nsallay@internext.com.br
+

159. Re: Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: kf8bex@oeonline.com
Message-ID: <32d8f769.1335165@s0a.oeonline.com>
Source record: 20263

mayrosec@aol.com (Mayrosec) wrote:

>I have had a scanner set to the MIR repeater downlink freqs for about a
>week and have heard nothing. The freq I've been listening to is 437.950,
>is this correct?
>

Yes, this is correct, except that the Mir repeater went off the air a few
weeks ago and hasn't been on since. And nobody knows why.

>The second question, what happened to Oscar 21? I used to hear the 2
>meter FM down link all the time. I haven't heard the bird for several
>months. What's up.
>

AO-21 was shut off a few years ago. During the changeover from Socialism to
Democracy, Russia had to make many budget-cutting decisions, and the main
satellite that AO-21 was attached to was shut down as a result. There is no
chance of turning it back on, since much of the controls have been damaged by
temperature extremes it endured while it was shut off. Too bad. that was a
nice satellite.

Mike
kf8bex@oeonline.com

160. Re: Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5bb67m$mg3@sjx-ixn6.ix.netcom.com>
Source record: 20264

In <19970112063600.BAA13898@ladder01.news.aol.com> mayrosec@aol.com (Mayrosec) writes:
>
>I have had a scanner set to the MIR repeater downlink freqs for about a
>week and have heard nothing. The freq I've been listening to is 437.950,
>is this correct?
>
>The second question, what happened to Oscar 21? I used to hear the 2
>meter FM down link all the time. I haven't heard the bird for several
>months. What's up.
>
>Thanks for the info,
>
>Clay Mayrose, WA6LBU
>wa6lbu@aol.com

Re: AO-21
The Russians (who own the space frame) turned off the bird several years ago. The amateur repeater failed soon after. I have heard opiions that it is terminal and others that it could be brought back up but for now it is gone.

161. wanted: Mir frequenties

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: ON1DCV@dma.BE
Message-ID: <199701121742.SAA18968@www.dma.be>
Source record: 20265

Hello'

Can somebody tell me the up-and downfrequentie from the Mir station??
Can I still work Mir on VHF in packet and fm??
Please let me know,
73'
on1dcv,Marc

162. sat-track program for Mac wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: ON1DCV@dma.BE
Message-ID: <199701121742.SAA18972@www.dma.be>
Source record: 20266

Hi'

I'm looking for a sat-track program for a macintosh se computer.(1mb)
Can somebody send it to me via E-mail?I don't have an access on the internet.

thanks.73' de on1dcv
ps: the satellites i want to track are the HaM sat's!!
see you!

163. Re: Air Pollution Really Sucks

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: dwittich@concentric.net
Message-ID: <32d70be8.14290693@news.concentric.net>
Source record: 20267

Jeff Griffin <griffinj@admin.tc.faa.gov> wrote:

>I finally get my station tuned up to where I can post on Mir
>reliably, and with the frequency changes, here comes APRS. Is
>it true that APRS is on the satellite band as an experiment? If
>so we should try to collectively voice our opinions to the
>parties responsible for this temporary frequency allocation. We
>should lobby for a move of APRS off the satellite band. I'm

It is a sympathetic situation. But there are many solutions. AMSAT
was instrumental in picking the APRS frequency. They are of course
interested in MIR contact. There is much desire on all sides to
resolve. Some ideas:

1) listen for MIR on 805 on the rise. You'll hear a lot less of APRS,
and catch MIR fine on the doppler shift. Of course, you need to
tune down to 800 during the pass, and those that lose the last third
of the pass will still have that problem.

2) Mir could send a signal to the APRS net that will quiet APRS for 8
minutes. The APRSDos already has the code in it to handle this.
the APRSSIG has had some discussion.

Everyone is interested in working this out. It's a shame that it's
so good for the Europeans, as that makes a change for MIR real tough
to sell.

dw

164. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan12.182923.19353@ke4zv.atl.ga.us>
Source record: 20268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

In article <32d8c962.3829725@news.tfs.net> chainsaw.at.tfs.net writes:
>newsline@ix.netcom.com(William M. Pasternak) wrote:
>
>>You are very INCORRECT! LEO Satellites want spectrum in the 130-170
>>and 440 to 455 MHz range for data-only services. The cost of end-user
>>equipment is far less than in the GHz range. And the Little LEO's are
>>not the only entities that want ham bands.
>>
>>It is purely a matter of economics. 2 meters and 70cm are woth tens of
>>billions of dollars in corporate profits to any industry that can grab
>>the bands from hams. We are at war for our survival!
>>
>>de Bill Pasternak, WA6ITF
>
>Bill;
>
> Tens of billions of dollars??! And what fine piece of analysis work
>do you base this claim on? This is pure hysterics, IMHO, just more
>Chicken Little-like "Sky is Falling" crap with no supporting evidence
>to back it up.

The "common wisdom" in the commercial world is that spectrum is worth
about 1 billion per megahertz as a capital asset. That may be optimistic
in some cases, but lets work some numbers. A commercial two-way channel
can bring in rental income in excess of $1000 a month, or $12,000 a year.
50 such channels can be fitted in a megahertz using today's NBFM technology.
So a megahertz brings in about $600,000 a year. Prorated over a 20 year
capital asset cycle, that's $12,000,000 for one local coverage area of
about 314 square miles. If we take that to represent one US MSA (Metropolitan
Statistical Area), then the top 100 MSAs in the US would bring in over
$1.2 billion over the prorated life of the asset. So a company which could
control 1 megahertz of spectrum nationwide would consider it a billion
dollar asset. Multiply that by the 34 MHz amateurs have at 2m and 70cm,
and you're looking at an asset worth $35.2 billion to a company which
controlled it.

Of course some uses could bring in much more per megahertz than the
two way industry does. For example, cellular phone reuses the frequencies
much more intensely. And other methods, such as SS, can also get substantially
more use out of a megahertz than plain old NBFM. Even paging services use
their spectrum more intensely, so this is likely a lower bound to the
value of a megahertz of spectrum.

> Are there people and organizations out there that would like to grab
>up our spectrum for their own use? You bet there are. But if it were
>really worth "tens of billions of dollars" we'd have lost that fight
>long, long ago.

No, because long long ago there wasn't enough *demand* for wireless
services to consume all the available spectrum. Today there is.
Advances in technology, and our increasingly mobile society, have
caused an explosion of demand for wireless services that didn't
even exist 20, or even 10, years ago. Vehicle tracking systems,
both for shippers and for consumers, IE LowJack, didn't exist
20 years ago. Today they are big business, and getting bigger.
Wireless meter reading didn't exist 20 years ago, today it is
big business, and growing. There appears to be an ever expanding
desire for paging services, including nationwide paging, today.
20 years ago only doctors and plumbers wanted pagers. And of
course there is the wireless internet. The internet itself didn't
exist 20 years ago. Today we have services like Ricochet delivering
the net to our laptops. All of these uses, and many more, want more
spectrum to service their growing customer bases.

> Our tiny chunk of spectrum at 2m and 70cm is barely usable by modern
>data communications standards. Any organization that can afford to
>get its own LEO bird on-orbit can easily afford SHF gear to
>communicate with it much more reliably than with VHF/UHF links. I
>think our claims to bandwidth at 2 GHz and above are far more at risk
>from these sorts of operators.

There will be pressures above 2 GHz, but for vehicle tracking from
orbit, nationwide paging services, and low rate data services such
as meter reading and Email delivery, our 2m and 70cm spectrum is
nearly ideal. That's because the cost of customer equipment is low,
so many many customers will sign up, and because directional antennas
at the customer location are not needed, IE ideal for mobile users.
High rate and bulk data delivery, such as DSS and other point to point
services, and point-multipoint broadcast services, will likely be above
2 GHz, but there are plenty of low rate uses which are also lucrative
and ideally suited for our spectrum.

Teledesic is not a threat to our VHF spectrum. They have their own
microwave spectrum already assigned for their high rate service. If
they grow as much as they hope, however, they may pose a threat to
our above 2 GHz spectrum in years to come. The immediate threat to our
2m and 70cm spectrum comes from outfits like Orbcomm who are already
using VHF for low rate LEO supplied services, and who need more spectrum
to expand those services.

Note, the little LEOs are not without competition in wide area low
rate data services. Globe Wireless is installing a global network
for vehicle tracking and Email delivery *on HF*. This service is
cost competitive because it doesn't require costly satellites or
costly satellite launches. It probably has less potential for growth
than the little LEOs, but then there is less HF spectrum to grow

in as well. So we may see pressure on HF resources in the future from operations like this which have to have lots of frequencies so they can follow the MUF. And then there is the spectre of compatible digital AM which may be an attractive alternative for SW broadcasters instead of moving to satellite DAB. That too could put more pressure on HF frequencies in the future.

None of our spectrum should be assumed to be safe. There are companies out there with viable business plans looking at all of it. Improvements in technology have made this possible, and growth in demand for wireless services has made it potentially very profitable.

FCC Commissioner Ness has said that the FCC will no longer tolerate spectrum warehousing, and Congress passed a law requiring the FCC to give preference to new technologies and new uses of spectrum. We are entering a time of great changes, and every Hertz of spectrum we now hold will come under scrutiny to see if we are putting it to its best use. If we aren't, the FCC is mandated to assign it to those who will.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
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534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

165. Re: Wisp32 problems with new year !!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: smcneill@ibm.net
Message-ID: <32d9409c.3867036@news-s01.ny.us.ibm.net>
Source record: 20269

On Fri, 10 Jan 1997 20:36:03 GMT, rossano@database.it (rossano) wrote:

>Hello..my WISP32 doesn't track anymore from the 1st Jen 1997....!!!
>Someone else have this problem ??
>73 de Ros I4wrm e-mail rossano@database.it
>

Get a set of 1997 epoch satellite elements and the problem will go
away for a while. The problem is know and I understand it will be
looked at sometime in the near-ish future.

73
Stephen ZL4HG

166. Re: vhf dummy load

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <i1HFkAA0DM2yEwnj@ifwtech.demon.co.uk>
Source record: 20270
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.space

Ed Price wrote:
>
>If you need to make a real brute force dummy load, check out surplus
>outlets for Carborundum Corp silicon carbide resistors. These resistors
>are often used as industrial heaters or in kilns. They often take the
>form of a rod or tube, typically 1/2" to 2" diameter and 6" to 24" long.
>All sorts of resistances. The terminations are a silver fired onto the
>ceramic body at each end. These babies are tough! And absolutely low
>inductance. I have used them as sense resistors in lightning pulse
>generators and as super RF loads. Immerse them in cooling oil, and
>dissipate away!

>The big problem for you is impedance matching

The good news is that for monoband use, impedance matching is not a problem. Provided that the impedance is anywhere near reasonable, you can design a fixed stub tuner in coax cable to match the load to 50 ohms within a single VHF/UHF amateur band. It doesn't even have to be a 50 ohm resistor - which might also bring the price down.

I use a commercial 50 ohm 1kW HF dummy load. On its own, it's OK up to 30MHz, or 50MHz at a push, but it's poor at 144MHz and hopeless at 432. With add-on matching networks it's fine on 144 and 432 as well.

Before you can start to design the matching networks, you do need an accurate impedance measurement (resistance and reactance separately) on each VHF/UHF band. A friend with access to a vector network analyser can usually oblige. Once you know the impedance to be matched, it's a classic Smith-chart problem to determine the lenths of the series and parallel coaxial stubs. If you're patient and really know your way around a Smith chart, you could probably do the whole thing by cut-and-try in RG-58, before stepping up to larger coax such as LDF2 and LDF4.

Apart from extra PK screws in the box to avoid RF leakage at the hoigher frequencies, the only major modifications to the existing dummy load were to make conical transitions out of copper foil to contact the whole silvered band around each end of the resistor. These are not for impedance matching, but to avoid hot-spots. Hot-spots are the main limitation on power dissipation at VHF and above, which is not surprising because the resistor is a significant fraction of a wavelength long.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:

IFW Technical Services Clear technical English - world-wide.

167. Space Shuttle Information

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: Practice<unk> <Eckart@usa.net>
Message-ID: <01bc00cc23685620b84d2299@eckart>
Source record: 20271
Cross-posted to: rec.radio.amateur.space,sci.space.shuttle

```
Space Shuttle Information
http://shuttle.nasa.gov
```

168. Re: mode S antenna design

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970112161356.14963A-100000@oso.slonet.org>
Source record: 20272

Best to obtain a copy of the the "Mode S Handbook" by Ed Krome from AMSAT.
There is some practical info there.., Cliff K7RR

On Fri, 10 Jan 1997, Dave wrote:

> does anyone have a good design for a mode S antenna.?
> the usual ARRL publications dont seem to cover this band well.
> Thanks Dave WA2DNU
>
>
>

169. WTB: AR3000A PLUS

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: "Jimmy D. Burrell" <jburrell@inst.com>
Message-ID: <01bc00e2$ed289540$c229e5cd@bigboy>
Source record: 20273

Hello,

I am interested in buying an AR3000A PLUS (the modified AR3000A which
includes a switch for wefax reception). Please let me know if you have one
of these and would like to sell it.

Thank you,

Jim
jburrell@inst.com

170. Re: Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5ba13scnh4@news.mhv.net>
Source record: 20274

In article <19970112063600.BAA13898@ladder01.news.aol.com>, mayrosec@aol.com (Mayrosec) wrote:
>I have had a scanner set to the MIR repeater downlink freqs for about a
>week and have heard nothing. The freq I've been listening to is 437.950,
>is this correct?

John Blaha confirmed the repeater has been down. Didn't hear why and he said he wasn't sure what's up. You have the freq. correct.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

171. Re: new mir freq for 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-01-12 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5ba15ncnh5@news.mhv.net>
Source record: 20275

In article <19970112060700.BAA13048@ladder01.news.aol.com>, mayrosec@aol.com (Mayrosec) wrote:
>Are these freqs for voice or packet.
>
>I am a newby to the MIR experience
>
>Clay Mayrose, WA6LBU

The freqs for 2 meters are for both voice AND packet.
145.800 down, 145.200 up.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

172. Internet Fax Service

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: info@mage.com
Message-ID: <5bbtvv$3h0@nntp1.best.com>
Source record: 20276

---------- Internet Fax Service ----------
---------- Save Your Long distance charges ----------
---------- HT-Net Internet International Fax Network ----------

For the mobile workers, accessing and managing your faxes from a remote location. Long distance or international telecommunications can be very expensive and until now there has been no simple way to manage faxes from a distance.

Check HT-Net at http://www.twsp.com

173. Re: Rad-hard circuit design

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: alanb@sr.hp.com
Message-ID: <5bc4a8$aj3@canyon.sr.hp.com>
Source record: 20277

Thanks Harri. That's just the kind of general info I needed.

Al N1AL

174. Source for updates MIR status?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: lakki@walrus.megabaud.fi
Message-ID: <5bc1ak$dj@news.microdata.fi>
Source record: 20278

Is there any oficial source for the status of the radio amateur operation onboard the MIR spacecraft? I have been monitoring the UHF frequencies (437MHz) and heard nothing for the past two weeks.

Erik
--
Erik Finskas OH2LAK / M1AAJ
Email lakki@megabaud.fi

175. FO-20 elmering please.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: seven@datasync.com
Message-ID: <5bcvl9$8o8@osh2.datasync.com>
Source record: 20279

Can someone tell me what schedule FO-20 is on?
I tried the satellite tonite and not only did not hear my signal, but
I heard absolutly nothing.
HELP!

KC5WCP
Eric

176. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5bd589$2nl@camel0.mindspring.com>
Source record: 20280
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear (teddyb@prog1.caprica.com) wrote:

: I THOUGHT that these were newsgroups for radio science discussions, based
: upon factual information. But mostly all I see here are people's
: unsolicited opinions based upon conjecture.

This fellow is trolling ....
Much like keying up on ch19 (CB) and yelling 'All truckers are idiots'
at which point, 30 key up and prove him right

The more you raise sand and respond, the more he enjoys it. --Bobby

177. Re: Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E3y7oD.9oJ@pe1chl>
Source record: 20281

In <19970112063600.BAA13898@ladder01.news.aol.com> mayrosec@aol.com (Mayrosec) writes:

>The second question, what happened to Oscar 21? I used to hear the 2
>meter FM down link all the time. I haven't heard the bird for several
>months. What's up.

It has been closed down for (mostly) financial reasons at the control
station.
(the mission of the host satellite has ended)

Rob
--
+-----------------------------------+---------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+-----------------------------------+---------------------------------------+

178. NORAD Two-Line Orbital Element Sets (TLE929)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5befaq$gjl@blackbird.afit.af.mil>
Source record: 20282

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #929 -
Alouette 1
1 00424U 62049A 97010.58590705 .00000025 00000-0 19134-4 0 2595
2 00424 80.4651 79.1122 0022385 219.6195 140.3317 13.67885248710695
ATS 1
1 02608U 66110A 97006.24130534 -.00000141 00000-0 10000-3 0 9962
2 02608 14.5647 350.6394 0006867 101.2738 258.8319 1.00289484 26903
ATS 3
1 03029U 67111A 97011.28049547 -.00000119 00000-0 10000-3 0 6035
2 03029 14.9136 357.5450 0011272 268.4062 200.6192 1.00273150106859
Starlette
1 07646U 75010A 97012.13688247 -.00000100 00000-0 32704-4 0 267
2 07646 49.8276 44.1585 0206235 200.5125 158.7405 13.82192129107861
LAGEOS
1 08820U 76039A 97012.12329613 .00000007 00000-0 00000+0 0 2561
2 08820 109.8472 97.6031 0043554 83.1138 277.4600 6.38664734227174
ETS-2
1 09852U 77014A 97008.26564362 .00000032 00000-0 10000-3 0 935
2 09852 13.4721 30.5892 0005778 151.6090 208.4467 1.00019180 19696
GOES 2
1 10061U 77048A 97011.52340581 .00000046 00000-0 10000-3 0 7879
2 10061 12.6425 34.7456 0010707 136.6319 311.7409 1.00285500 16534
IUE
1 10637U 78012A 97011.57751691 .00000034 00000-0 10000-3 0 3438
2 10637 35.7972 80.2290 1342805 63.3006 37.1878 1.00063163 22024
GOES 3
1 10953U 78062A 97012.40214780 -.00000117 00000-0 10000-3 0 7639
2 10953 11.6467 37.6656 0003060 196.5803 277.7196 1.00264626 21154

```
SeaSat 1
1 10967U 78064A 97009.74412023 -.00000065 00000-0 22940-4 0 5445
2 10967 107.9919 242.1608 0001772 289.1125 70.9822 14.38144058971147
Nimbus 7
1 11080U 78098A 97010.15600564 -.00000081 00000-0 -36314-4 0 6412
2 11080 98.9193 228.0225 0009207 125.3683 234.8335 13.83686484919792
GOES 5
1 12472U 81049A 97009.21677831 .00000084 00000-0 10000-3 0 9769
2 12472 8.5207 48.1127 0003964 80.6090 279.4533 1.00299102 15168
Cosmos 1383
1 13301U 82066A 97010.22841364 .00000029 00000-0 16533-4 0 5570
2 13301 82.9295 341.9858 0028869 31.3353 328.9508 13.68080286725689
LandSat 4
1 13367U 82072A 97013.14759755 .00000026 00000-0 15438-4 0 378
2 13367 98.0457 63.3618 0005971 200.3774 159.7189 14.57194794771115
DMSP B5D2-1
1 13736U 82118A 97011.57808005 -.00000010 00000-0 14061-4 0 1531
2 13736 98.6221 202.6007 0008654 135.4371 224.7503 14.25816442730767
IRAS
1 13777U 83004A 97013.15837695 .00000359 00000-0 27731-3 0 5484
2 13777 98.9646 200.2204 0011533 234.3638 125.6452 13.99267281382737
Cosmos 1447
1 13916U 83021A 97013.10993157 .00000015 00000-0 10210-6 0 6509
2 13916 82.9420 35.7756 0037033 289.2204 70.4946 13.74350015692571
TDRS 1
1 13969U 83026B 97011.54179549 -.00000301 00000-0 00000+0 0 6923
2 13969 9.2814 41.6708 0002287 249.7027 325.9242 1.00270850 23476
GOES 6
1 14050U 83041A 97012.59214102 -.00000069 00000-0 10000-3 0 6031
2 14050 7.3711 51.6694 0001697 42.1231 121.2764 1.00218030108296
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97009.78530892 -.00000021 00000-0 57009-5 0 5820
2 14780 98.3078 73.3090 0003205 27.8612 332.2750 14.57062106684041
UO-11
1 14781U 84021B 97009.92895521 .00000098 00000-0 24304-4 0 9424
2 14781 97.8163 357.6587 0011667 143.7340 216.4673 14.69514947688013
Cosmos 1574
1 15055U 84062A 97013.25057072 .00000010 00000-0 -54551-5 0 8495
2 15055 82.9581 91.0304 0028605 115.0015 245.4109 13.73643306629820
Cosmos 1602
1 15331U 84105A 97010.21212485 .00000154 00000-0 15269-4 0 5312
2 15331 82.5344 279.0555 0020408 348.8980 11.1784 14.84827273663696
ERBS
1 15354U 84108B 97009.81920127 -.00000131 00000-0 96819-5 0 2485
2 15354 56.9947 272.4514 0004356 153.2859 206.8363 14.95010212667749
NOAA 9
1 15427U 84123A 97012.97224720 -.00000003 00000-0 22200-4 0 9959
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2 15427 98.9246 83.7506 0015984 79.5606 280.7367 14.13829743623273
Mir
1 16609U 86017A 97012.64976432 .00002995 00000-0 42239-4 0 9577
2 16609 51.6500 147.9775 0007729 267.1437 92.8527 15.60240415622748
SPOT 1
1 16613U 86019A 97012.27986488 -.00000045 00000-0 00000+0 0 239
2 16613 98.8151 85.6803 0001208 52.8662 307.2628 14.19995405249988
Cosmos 1766
1 16881U 86055A 97011.91057937 .00000207 00000-0 22047-4 0 4462
2 16881 82.5172 335.1116 0020645 12.3827 347.7888 14.83799620564796
EGP
1 16908U 86061A 97010.22077202 -.00000083 00000-0 10000-3 0 1453
2 16908 50.0063 80.4870 0011652 180.5937 179.4884 12.44415526142186
NOAA 10
1 16969U 86073A 97012.93293958 .00000016 00000-0 25092-4 0 9250
2 16969 98.5332 10.1015 0014105 99.1686 261.1091 14.25016366536470
MOS-1
1 17527U 87018A 97012.20537188 -.00000043 00000-0 00000+0 0 5059
2 17527 98.9094 75.3783 0020178 100.9552 259.3881 14.00438400504241
GOES 7
1 17561U 87022A 97012.40862916 -.00000172 00000-0 10000-3 0 2295
2 17561 3.4771 67.9844 0002555 276.1326 180.8745 1.00275021 19401
Kvant-1
1 17845U 87030A 97012.84192654 .00003700 00000-0 50702-4 0 8673
2 17845 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445556886
DMSP B5D2-3
1 18123U 87053A 97012.96820077 .00000015 00000-0 29922-4 0 7628
2 18123 98.7637 205.7844 0014795 18.8932 341.2788 14.15463958494178
RS-10/11
1 18129U 87054A 97011.56647883 .00000037 00000-0 23934-4 0 3078
2 18129 82.9239 354.5036 0010675 303.5473 56.4659 13.72373404478756
Meteor 2-16
1 18312U 87068A 97010.57753799 .00000039 00000-0 21776-4 0 5369
2 18312 82.5552 187.5813 0013198 4.3007 355.8263 13.84090352474869
Meteor 2-17
1 18820U 88005A 97012.58162005 .00000044 00000-0 25935-4 0 1499
2 18820 82.5416 240.5198 0018203 58.5724 301.7218 13.84767958452507
DMSP B5D2-4
1 18822U 88006A 97012.12942682 -.00000009 00000-0 14209-4 0 4362
2 18822 98.3795 200.2094 0006847 110.0786 250.1129 14.23212632464290
Glonass 34
1 19163U 88043A 97011.40886816 -.00000004 00000-0 10000-3 0 1476
2 19163 65.3523 78.8254 0008512 133.7889 226.3525 2.13102397 66673
Glonass 36
1 19165U 88043C 97009.11969598 .00000003 00000-0 10000-3 0 5564
2 19165 65.3199 78.8519 0004575 344.5884 15.4662 2.13102087 67249
METEOSAT 3
1 19215U 88051A 97010.88525259 -.00000145 00000-0 10000-3 0 2999
2 19215 3.6780 66.6135 0006018 131.4129 228.5257 0.96948669 19195
OKEAN 1
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1 19274U 88056A 97010.66525532 .00000190 00000-0 20637-4 0 1467
2 19274 82.5146 77.3905 0020082 155.7467 204.4692 14.82561818460112
Meteor 3-2
1 19336U 88064A 97012.08479918 .00000051 00000-0 10000-3 0 5427
2 19336 82.5387 18.6051 0018649 73.3841 286.9273 13.16980434406974
Glonass 39
1 19503U 88085C 97010.08890743 -.00000034 00000-0 10000-3 0 4383
2 19503 65.5019 317.7423 0002986 138.2287 221.8069 2.13101786 64758
NOAA 11
1 19531U 88089A 97012.95808109 .00000032 00000-0 42172-4 0 8153
2 19531 99.1691 42.3716 0012284 16.1871 343.9697 14.13118039428073
TDRS 3
1 19548U 88091B 97006.66746580 -.00000185 00000-0 10000-3 0 2641
2 19548 2.9000 70.8583 0006845 162.4844 198.4531 1.00276126 17579
Glonass 40
1 19749U 89001A 97011.53405139 -.00000006 00000-0 10000-3 0 6512
2 19749 65.2970 78.3303 0006975 255.6675 104.3252 2.13101473 62296
Glonass 41
1 19750U 89001B 97012.52734443 -.00000015 00000-0 10000-3 0 5572
2 19750 65.3074 78.3711 0008452 229.5648 130.4258 2.13101784 62335
GPS BII-01
1 19802U 89013A 97008.56130466 -.00000016 00000-0 00000+0 0 3425
2 19802 55.4239 102.4579 0019138 183.2223 176.7889 2.00560479 57833
Akebono
1 19822U 89016A 97011.88896458 .00008188 00000-0 41196-3 0 8448
2 19822 75.1019 2.3430 3729486 308.2916 23.6825 7.95616793183255
Meteor 2-18
1 19851U 89018A 97010.77656114 .00000057 00000-0 37440-4 0 5354
2 19851 82.5207 115.5676 0015283 110.5852 249.6952 13.84423708397558
MOP-1
1 19876U 89020B 97012.52136189 -.00000144 00000-0 00000+0 0 2402
2 19876 2.4132 71.0592 0017167 280.2746 79.2364 0.97110288 8656
TDRS 4
1 19883U 89021B 97008.50016387 -.00000263 00000-0 00000+0 0 3000
2 19883 0.2910 87.4539 0004925 189.6775 330.0226 1.00269168201161
GPS BII-02
1 20061U 89044A 97010.89465170 -.00000007 00000-0 10000-3 0 3379
2 20061 54.0608 277.8196 0164320 222.6883 136.0846 2.00562589 55624
Nadezhda 1
1 20103U 89050A 97012.88354291 -.00000001 00000-0 -17086-4 0 357
2 20103 82.9616 314.0189 0036672 187.7584 172.3006 13.73872137377479
GPS BII-03
1 20185U 89064A 97010.58876664 -.00000009 00000-0 10000-3 0 3796
2 20185 55.2294 102.7985 0016056 339.2576 18.7381 2.00551870 54195
GMS 4
1 20217U 89070A 97 9.56805051 .00000000 00000-0 10000-3 0 5205
2 20217 2.2124 73.4893 0003386 320.7376 39.2420 1.00266075 27496
INTERCOSMOS 24
1 20261U 89080A 97008.90152946 .00000115 00000-0 35301-4 0 5579
2 20261 82.5924 139.3410 1240793 293.9349 53.6714 12.47374960331555
```

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GPS BII-04
1 20302U 89085A 97006.77320333 .00000100 00000-0 10000-3 0 3604
2 20302 53.1953 217.7168 0025986 180.1288 179.9309 2.00571452 52916
Meteor 3-3
1 20305U 89086A 97012.90824517 .00000044 00000-0 10000-3 0 7312
2 20305 82.5513 339.5914 0008559 148.2917 211.8849 13.04433116345549
COBE
1 20322U 89089A 97011.12233046 -.00000145 00000-0 -64930-4 0 2746
2 20322 98.9333 28.7882 0008348 173.2691 186.8590 14.03456202366091
Kvant-2
1 20335U 89093A 97012.84192654 .00003700 00000-0 50702-4 0 7907
2 20335 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445405898
GPS BII-05
1 20361U 89097A 97009.28528127 -.00000028 00000-0 10000-3 0 1633
2 20361 56.1166 45.1378 0091225 140.7132 220.0164 2.00565939 42442
COSMOS 2054 (Altair-1)
1 20391U 89101A 97009.04273852 -.00000134 00000-0 00000+0 0 4915
2 20391 4.2307 62.1452 0002941 179.0746 226.7605 1.00275183 26062
SPOT 2
1 20436U 90005A 97013.39483798 -.00000044 00000-0 00000+0 0 1754
2 20436 98.7436 90.1331 0001748 79.8947 280.2409 14.20019625361673
UO-14
1 20437U 90005B 97011.29048555 -.00000012 00000-0 12054-4 0 2393
2 20437 98.5328 96.2816 0010784 313.9915 46.0376 14.29945145363794
AO-16
1 20439U 90005D 97010.26102946 -.00000052 00000-0 -32932-5 0 375
2 20439 98.5485 97.8725 0010980 318.3514 41.6831 14.29994877363667
DO-17
1 20440U 90005E 97010.26270389 .00000015 00000-0 22695-4 0 386
2 20440 98.5512 98.6306 0011393 317.3547 42.6749 14.30137655363695
WO-18
1 20441U 90005F 97010.32699154 -.00000032 00000-0 43559-5 0 416
2 20441 98.5516 98.6134 0012025 317.6069 42.4184 14.30105964363705
LO-19
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2 20478 99.1089 83.9359 0005949 48.0794 312.0881 13.93969671273532
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NOAA 12
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TDRS 5
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Meteor 3-5
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Glonass 55
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FREJA
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UFO F2
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STELLA
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GOES 8
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STRV-1B
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NOAA 14
1 23455U 94089A 97012.94802108 .00000090 00000-0 74241-4 0 8989
2 23455 98.9713 324.0500 0010395 15.0520 345.0956 14.11639593105047
Glonass 71
1 23511U 95009A 97012.07042083 -.00000036 00000-0 00000+0 0 2866
2 23511 64.5884 316.8754 0006480 232.2248 127.7275 2.13103791 14423
Glonass 72
1 23512U 95009B 97010.31423535 -.00000035 00000-0 00000+0 0 2901
2 23512 64.5769 316.9399 0007762 316.2138 43.7295 2.13101670 14385
Glonass 73
1 23513U 95009C 97011.54370521 -.00000035 00000-0 00000+0 0 3118
2 23513 64.5814 316.9140 0013170 210.0883 149.8430 2.13103107 14419
GMS 5
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1 23522U 95011B 97011.51013681 -.00000290 00000-0 10000-3 0 1968
2 23522 0.4982 30.9051 0000154 44.8926 358.9772 1.00271906 6542
DMSP B5D2-8
1 23533U 95015A 97012.93107777 .00000000 00000-0 23682-4 0 8259
2 23533 98.8437 18.7351 0007050 174.4661 185.6595 14.12770423 93241
OSC 1
1 23545U 95017A 97011.19122161 -.00000064 00000-0 -11397-5 0 1925
2 23545 69.9795 47.4545 0016473 254.6706 105.2606 14.45461433 93711
OSC 2
1 23546U 95017B 97010.53322691 .00000271 00000-0 93952-4 0 2265
2 23546 69.9780 49.1783 0016152 246.8489 113.0939 14.45478560 93629
Microlab 1
1 23547U 95017C 97010.53695858 .00000168 00000-0 64471-4 0 1644
2 23547 69.9781 48.8476 0016335 249.0579 110.8821 14.45637561 93638
OFEQ 3
1 23549U 95018A 97013.12685659 .00019043 00000-0 44863-3 0 4190
2 23549 143.3648 72.3274 0204772 112.4560 249.7999 15.20725175 98269
GFZ-1
1 23558U 86017JE 97012.56961110 .00004092 00000-0 48897-4 0 2003
2 23558 51.6478 136.0536 0004975 292.1094 67.9383 15.63595372622756
ERS-2
1 23560U 95021A 97011.25456570 -.00000031 00000-0 46224-5 0 3201
2 23560 98.5484 88.3137 0001080 55.8951 304.2335 14.32248425 90350
Spektr
1 23579U 95024A 97012.84192654 .00003700 00000-0 50702-4 0 5437
2 23579 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445 94200
GOES 9
1 23581U 95025A 97012.61105367 .00000075 00000-0 10000-3 0 3033
2 23581 0.0305 89.8579 0003872 212.6298 254.6400 1.00282247 6020
Helios 1A
1 23605U 95033A 97011.55775017 .00000082 00000-0 24756-4 0 3915
2 23605 98.1416 310.4583 0001510 54.4682 305.6664 14.63837389 81042
UPM SAT 1
1 23606U 95033B 97012.87652705 .00000124 00000-0 30506-4 0 2444
2 23606 98.1217 313.5020 0006579 245.5191 114.5328 14.67337934 81465
CERISE
1 23607U 95033C 97011.82803243 .00000077 00000-0 22468-4 0 1460
2 23607 98.1224 312.2513 0005100 244.7306 115.3372 14.66992162 81327
TDRS 7
1 23613U 95035B 97011.46581109 .00000090 00000-0 00000+0 0 2844
2 23613 1.1113 81.9236 0001773 208.3448 177.1568 1.00271460 5472
Glonass 74
1 23620U 95037A 97010.38897248 .00000085 00000-0 00000+0 0 2325
2 23620 64.8163 197.0431 0018629 162.4177 197.6677 2.13102797 11425
Glonass 75
1 23621U 95037B 97011.97463074 .00000079 00000-0 00000+0 0 2422
2 23621 64.8295 196.9972 0018105 173.5814 186.4542 2.13102292 11450
Glonass 76
1 23622U 95037C 97012.97114739 .00000081 00000-0 00000+0 0 2473
2 23622 64.8190 196.9615 0036976 162.9349 197.1999 2.13102368 11471
```

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Prognoz-M2
1 23632U 95039A 97015.79525280 -.00000095 00000-0 00000+0 0 1055
2 23632 70.7050 248.4410 7696248 327.1170 18.9780 0.26363500 1417
SICH-1
1 23657U 95046A 97013.10066253 .00000122 00000-0 15247-4 0 1383
2 23657 82.5306 7.3391 0029617 87.3901 273.0648 14.73522860 73744
RADARSAT
1 23710U 95059A 97011.57283574 .00000142 00000-0 72025-4 0 2260
2 23710 98.5794 21.2900 0001136 63.9060 296.2237 14.29993222 62020
Glonass 79
1 23734U 95068A 97010.74292967 .00000082 00000-0 00000+0 0 2194
2 23734 64.8238 196.9515 0017174 328.0075 31.9072 2.13102291 8396
Glonass 78
1 23735U 95068B 97009.05647619 .00000097 00000-0 00000+0 0 2124
2 23735 64.8179 196.9977 0006185 201.0996 158.9048 2.13125200 8359
Glonass 77
1 23736U 95068C 97010.03885052 .00000087 00000-0 00000+0 0 1926
2 23736 64.8092 196.9756 0007145 186.1515 173.8678 2.13102204 8372
XTE
1 23757U 95074A 97012.50747265 .00000588 00000-0 20147-4 0 1142
2 23757 22.9793 66.8191 0013333 46.9022 313.2583 14.97756792 56884
Polar
1 23802U 96013A 97 8.89750293 -.00000037 00000-0 10000-3 0 986
2 23802 86.2733 23.9230 6533669 276.1928 18.3790 1.36266605 4375
1996010E
1 23824U 96010E 97012.42514292 .00098512 00000-0 97081-2 0 1571
2 23824 47.4350 193.6393 7047685 82.0590 349.1431 2.60222798 7379
GPS BIIA-25
1 23833U 96019A 97012.30146202 -.00000066 00000-0 00000+0 0 1311
2 23833 54.6435 339.4971 0030049 155.1508 204.9928 2.00564454 5879
Priroda
1 23848U 96023A 97012.84192654 .00003700 00000-0 50702-4 0 2310
2 23848 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445 41290
MSX
1 23851U 96024A 97013.01077201 -.00000047 00000-0 00000+0 0 1700
2 23851 99.4001 2.8799 0004916 295.9774 64.0875 13.97453677 36801
SAX
1 23857U 96027A 97006.03444621 .00001422 00000-0 64711-4 0 482
2 23857 3.9552 74.7294 0013557 51.7931 308.2972 14.91701731 37488
MSTI 3
1 23868U 96031A 97011.60398987 -.00001003 00000-0 -18372-4 0 1032
2 23868 97.1142 204.4557 0010712 129.3551 230.8647 15.46666961 37029
TOMS-EP
1 23940U 96037A 97012.18957300 .00002456 00000-0 11105-3 0 758
2 23940 97.4323 281.0543 0012538 339.2095 20.8633 15.21815260 29410
GPS BIIA-26
1 23953U 96041A 97011.22021795 -.00000012 00000-0 00000+0 0 1049
2 23953 55.1349 99.9656 0016591 352.8042 7.2103 2.00560120 3643
ADEOS
1 24277U 96046A 97013.22428825 -.00000044 00000-0 00000+0 0 1316
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2 24277 98.6123 93.1464 0000626 151.3068 208.8151 14.27636542 21253
FO-29
1 24278U 96046B 97011.69485032 -.00000012 00000-0 26395-4 0 504
2 24278 98.5629 74.1102 0350619 231.6674 125.2476 13.52628416 19962
Soyuz TM-24
1 24280U 96047A 97012.84192654 .00003700 00000-0 50702-4 0 1350
2 24280 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445 23190
FAST
1 24285U 96049A 97012.29913282 .00001230 00000-0 12731-3 0 527
2 24285 82.9894 111.5161 2205766 268.1290 66.7867 10.81698715 15568
Microsat
1 24291U 96050A 97011.78479588 .00049839 64374-5 33126-3 0 1095
2 24291 62.7923 292.3003 0601250 127.1796 238.5786 14.69339520 19848
MO-30
1 24305U 96052B 97012.28016460 .00000203 00000-0 20364-3 0 615
2 24305 82.9262 109.7865 0031093 285.7944 73.9706 13.73089638 17666
GPS BIIA-27
1 24320U 96056A 97009.08892930 -.00000002 00000-0 00000+0 0 545
2 24320 54.6874 280.1162 0052506 113.2235 247.4718 2.00569272 2268
SAC-B/HETE
1 24645U 96061A 97013.24337793 .00000567 00000-0 35687-4 0 375
2 24645 37.9752 68.1269 0046710 135.7195 224.7320 15.14827571 10559
Progress M-33
1 24663U 96066A 97012.84192654 .00003700 00000-0 50702-4 0 489
2 24663 51.6524 147.0117 0007777 266.1274 93.9366 15.60240445 8435
INMARSAT III F3
1 24674U 96070A 97012.48807491 -.00000148 00000-0 00000+0 0 203
2 24674 2.6291 286.5262 0022493 122.6798 35.8082 1.00261734 247
1996070B
1 24675U 96070B 97012.88611348 -.00000125 00000-0 00000+0 0 151
2 24675 22.6129 277.1193 7016424 194.9236 122.4204 2.22355658 571
Cosmos 2336
1 24677U 96071A 97010.86813954 .00000015 00000-0 00000+0 0 97
2 24677 82.9388 202.3345 0022933 200.0970 159.9285 13.71047384 2955
1996071B
1 24678U 96071B 97012.08171530 .00000015 00000-0 00000+0 0 226
2 24678 82.9286 201.3874 0023640 172.0032 188.1487 13.72694159 3129
BION 11
1 24701U 96073A 97007.63261992 .00018249 79897-5 30000-4 0 223
2 24701 62.7988 196.4152 0115614 109.2892 252.6962 15.93127811 2241
1996073B
1 24702U 96073B 97013.21574515 .00562468 82113-5 50846-3 0 550
2 24702 62.7863 174.1055 0081173 105.4920 255.5162 16.05277069 3140
1996073C
1 24706U 96073C 97013.21540407 .00211704 80217-5 29152-3 0 101
2 24706 62.8026 174.6680 0108223 109.7848 251.3935 15.95226653 3139
1996073D
1 24707U 96073D 97013.21990349 .00228916 00000-0 19641-2 0 84
2 24707 62.8158 175.8219 0109731 33.8272 326.9442 15.60917295 916
1996073E
```

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1 24708U 96073E 97012.54806472 .00253065 00000-0 16614-2 0 72
2 24708 62.8156 178.0234 0085167 45.6394 315.1810 15.69788567 814
1996073F
1 24709U 96073F 97013.13182217 .00883573 81762-5 84697-3 0 173
2 24709 62.8050 174.7988 0081509 111.2276 249.7451 16.04411267 949
1996073G
1 24710U 96073G 97007.63361194 .04116145 23158-1 87401-2 0 13
2 24710 62.7524 196.2880 0097403 87.1067 274.1192 15.93596631 46
STS 81
1 24711U 97001A 97013.27083333 -.00000265 11361-4 55873-5 0 41
2 24711 51.6512 145.2987 0037461 27.6359 15.6085 16.00642075 136
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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179. NORAD Two-Line Orbital Element Set: Space Shuttle (97012.64976432)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5bef04$gj4@blackbird.afit.af.mil>
Source record: 20283

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97012.64976432 .00002995 00000-0 42239-4 0 9577
2 16609 51.6500 147.9775 0007729 267.1437 92.8527 15.60240415622748
STS 81
1 24711U 97001A 97013.27083333 -.00000265 11361-4 55873-5 0 41
2 24711 51.6512 145.2987 0037461 27.6359 15.6085 16.00642075 136
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

180. FS: SASI Satracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <kg2ic@amsat.org>
Message-ID: <32DA2FCB.3511@amsat.org>
Source record: 20284

I have for sale a SASI Satracker Rotor controller.

Unit is designed for satellite use, but could also be used for terrestial work.

Controls both EL and AZ with the Yaesu GB5400, Kenpro 5400 series rotors, maybe others.

Comes with tracking software, manuals, connecting cables and all paperwork.

Unit works great with major satellite tracking programs.

Uses parallel port so serial ports are left free! Great for laptop or field day use.

In perfect condition, both cosmetic and electrical.

Cost almost $300 new, I am asking $150 or best offer.

Respond to mail kg2ic@amsat.org or call (716) 689-6727 evenings.

73,

Bruce J. Howes KG2IC

181. MIR was talking

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: Erik Finskas <lakki@clinet.fi>
Message-ID: <5beg4a$g5q@news.clinet.fi>
Source record: 20285

This morning about 06 UTC MIR passed by and I copied the service frequency 143.625MHz with an average signal. The conversation was simplex, the transmitter was keyed an unkeyed, like to save battery (??) Previously as I have heard this service frequency, they latch the ptt as the transmission is full duplex. At the same time, MIR was operating packet on 145.800MHz.

So there is life onboard MIR...

The Shuttle mission commentators told that the shuttle crew are equipped with portable VHF radios to communicate air to air directly with the crew on MIR space station at the time of docking the shuttle to the MIR. Anyone have a clue of the frequencies? It could be a exotic signal to copy.

Erik
--
Erik Finskas OH2LAK & M1AAJ
Email Lakki@clinet.fi

182. Re: STS-81 Launch Information/IRC Chat

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970113204820.4579D-100000@prog1.caprica.com>
Source record: 20286

I might not be the only one who wishes this were posted a 3 or 4 more days
in advance.

On Sat, 11 Jan 1997, Keith Stein wrote:

>
> SATELLITE LISTENING POST BULLETIN - Saturday - 1/11/97
>
> CURRENT STATUS - 0037Z (7:37 p.m. eastern time)
>
> Perform inertial measurement unit preflight calibration. Align
> Merritt Island Launch Area (MILA) tracking antennas. Perform open
> loop test with Eastern Test Range. Conduct gimbal profile checks of
> orbital maneuvering system engines.
>
> Name: STS-81
> Launch Agency: NASA
> Launch Site: Kennedy Space Center, FL, Pad 39B
> Launch Azimuth: 42.88 degrees
> Launch Time: Sunday, 12 Jan 97, 0927Z
> Launch Vehicle: Space Shuttle Atlantis
>
> The 200 nautical mile circular orbit will be included 51.65
> degrees from the equator using the direct ascent technique. This
> will carry the external tank's impact near -0.3 N. Latitude and
> -125.5 deg E.
>
> Space Shuttle Downlink Frequency List
>
> VHF-band 139.208 MHz Shuttle/Mir Docking Operations
> UHF-band 240.0 or 242.0 Mhz SRB
> UHF-band 243.000 Mhz AM (Emergency Voice Channel)
> UHF-band 259.700 Mhz AM (Primary Voice Channel)
> UHF-band 279.000 Mhz AM (EVA Voice Channel)
> UHF-band 296.800 Mhz AM (Backup Voice Channel)
> S-band 2217.500 Mhz (Data)
> S-band 2250.000 Mhz (Data)
> S-band 2287.500 Mhz (Data)
> C-band 5400-5900 Mhz (Data)
>
> Significant Events
>
> Event HH:MM:SS
> ---------------------- ----------
> Liftoff 0:00:00

> SRB Separation 0:02:03
> MECO 0:08:31
> MECO Zero Thrust 0:08:39
> ET Separation 0:08:51
> OMS 2 Ignition 0:40:40
> OMS-2 T/O 0:42:48
> ET Splash 1:27:00
> PLB Doors Open 1:30:00
> NC-1 thru TI (3-27) 2H:14M - 2/15:42
> Mir Hard Dock (29) 2/18:23:00
> Mir Undock (106) 7/16:45:00
> Post Sep Burn (107) 7/18:30:00
> Landing-1 Day KSC (145) (21/1510Z)
> Landing-1 Day EDW (161) (22/1530Z)
> Deorbit TIG (158) 10/02:30
> Deorbit T/O (158) 10/06:30
>
> Everybody is invited to join a "LIVE" Internet Relay Chat beginning
> at 3:45 a.m. eastern time (0845Z), January 12th during the STS-81
> launch. Here are the parameters to use with your IRC software;
>
> Server: irc.stetson.edu (World Wide Freenet IRC Network, WWFIN)
> Port#: 6667
> Channel: #hearsat
>
>
> Keith Stein
> Woodbridge, VA
> http://www.newspace.com/casr
>
>

183. Stand Alone Rotor and Radio Control Hardware

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5be3it$ips@tilde.csc.ti.com>
Source record: 20287

Can someone post a list of the tracking systems that
don't require the use of computer ports for operation?
I am not interested in a kit or in hardware that is no
longer being manufactured. There was some information
here about a year ago that I failed to save. The box should
be capable of running a 5400 rotor and FT736 radio.

Thanks, Ken Durham K5MBV mbv@flash.net and mbv@ti.com

184. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: Mark Johnson <mark.johnson@symbios.com>
Message-ID: <32DA8F40.4DA1@symbios.com>
Source record: 20288
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Gary Coffman wrote:

> Teledesic is not a threat to our VHF spectrum. They have their own
> microwave spectrum already assigned for their high rate service. If
> they grow as much as they hope, however, they may pose a threat to
> our above 2 GHz spectrum in years to come. The immediate threat to our
> 2m and 70cm spectrum comes from outfits like Orbcomm who are already
> using VHF for low rate LEO supplied services, and who need more spectrum
> to expand those services.

The original context where I saw the threat to 2m/70cm actually
came from a Motorola ad for their "Iridium" system in Aviation Week
about 3-4 years back; the fine print noted that their LEO up/downlink
frequency plans included 146-148 MHz...at which point I nearly had
a stroke!

ObLightheartedness: Since Iridium has been redesigned to use
a constellation of 66 satellites rather than 77, shouldn't it be
renamed "Dysprosium?"

> None of our spectrum should be assumed to be safe. There are
> companies out there with viable business plans looking at all
> of it. Improvements in technology have made this possible, and
> growth in demand for wireless services has made it potentially
> very profitable.

I think this is absolutely correct. If we can't demonstrate that
amateur radio is a service, not just a hobby, the new policies
regarding spectrum usage will likely flush us right down the
bowl.

--
Mark Johnson WB9QLR USnail: Symbios Logic, Inc
E-mail: Mark.Johnson@symbios.com MetaStor Business Team
Voice: (316) 636-8189 [V+654-8189] 3718 N. Rock Rd.
Visit our web page: http://www.symbios.com Wichita, KS 67226

185. Pactor via AO-10

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: Chris Muir <cmuir@ihug.co.nz>
Message-ID: <32D940FA.4910@ihug.co.nz>
Source record: 20289

I am intewrested in setting up a sked to try a Pactor contact via AO-10. Anyone interested? We would need to
operate whilst the (there and back) distance is less than 40,000 kms.

73, Chris Muir ZL1BOE AUCLAND NZ

186. Re: Mir & AO-21

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: Rainer.Redweik@t-online.de
Message-ID: <5be105$rlh@news00.btx.dtag.de>
Source record: 20290

12-Jan-97 07:38:03: Mayrosec has written to the theme
"Mir & AO-21":

> I have had a scanner set to the MIR repeater downlink freqs for about a
> week and have heard nothing. The freq I've been listening to is 437.950,
> is this correct?

> The second question, what happened to Oscar 21? I used to hear the 2
> meter FM down link all the time. I haven't heard the bird for several
> months. What's up.

> Thanks for the info,

> Clay Mayrose, WA6LBU
> wa6lbu@aol.com

Hello Clay,

try 143.625 MHz and 145.800 MHz (+- doppler-shift).

It is meaningful to use a SatTrack-programm which shows, on
which time MIR is in range. The hearing-window is abround 10 min.

Ha det bra !

Rainer

--
Der Himmel in der Ferne sah aus, als habe jemand ein Stï¿½ck rohe Leber
ï¿½ber den Horizont geschleift.
Douglas Adams

187. Re: wanted: Mir frequenties

Newsgroup: rec.radio.amateur.space
Date: 1997-01-13 00:00:00 UTC
From: kd7aat@ior.com
Message-ID: <32dabffc.632126@nntp.ior.com>
Source record: 20291

ON1DCV@dma.BE (Boiy Marc) wrote:

>Can somebody tell me the up-and downfrequentie from the Mir station??
>Can I still work Mir on VHF in packet and fm??

I worked the packet station on Mir using the following........

Monitor 145.800 - offset

Which means listen on 145.800 and transmit on 145.200. This is the
packet plan now and also the voice.......

P.S. To see the QSL from Mir I got, check out my web page using this
just for the picture. www.ior.com/kd7aat/mirqsl.jpg or the one below
for the whole page......
73

Bus Driver Mobile KD7AAT "John"
http://www.ior.com/kd7aat

188. FM Mic

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: nkysk@pc.jaring.my
Message-ID: <32db5fec.2224737@news.jaring.my>
Source record: 20292

Hi !

Anybody have long rang (about 1KM) FM transmitter ?
Working at 12V are preferable.

All reply are be appreciate.

NKY

189. Orbit Prediction for 64N 96W? Source Recommendations?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: do440@FreeNet.Carleton.CA
Message-ID: <5bf5jm$hro@freenet-news.carleton.ca>
Source record: 20293

Can anybody recommend a site for Mir orbit predictions that will accept Lat/Long inputs instead of Major Cities? The nearest I can get is Winnipeg, which is 1000 miles south of here. Thanks de VE8DU

190. Re: sat-track program for Mac wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5bfa9r$ak@newsread.onramp.net>
Source record: 20294

Mac sat program: The best I have seen and used
is orbiTrack

Get a copy of OrbitTrack non FPU version.
and memory is cheap .

191. TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: dpmoore@west.net
Message-ID: <5bf40i$jij@daffy.sb.west.net>
Source record: 20295

I recently bought the TAPR TrakBox and have had nothing but trouble.
I can't get the dam thing to accept satellite data downloaded from my
computer.
Has anyone else had this problem and what is the fix.

any help would be appreciated.

192. Re: Wisp32 problems with new year !!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: "Stacey E. Mills, M.D." <sem2r@virginia.edu>
Message-ID: <32DBA79E.45C2@virginia.edu>
Source record: 20296

Stephen McNeill wrote:
>
> On Fri, 10 Jan 1997 20:36:03 GMT, rossano@database.it (rossano) wrote:
>
> >Hello..my WISP32 doesn't track anymore from the 1st Jen 1997....!!!
> >Someone else have this problem ??
> >73 de Ros I4wrm e-mail rossano@database.it
> >
>
> Get a set of 1997 epoch satellite elements and the problem will go
> away for a while. The problem is know and I understand it will be
> looked at sometime in the near-ish future.
>
> 73
> Stephen ZL4HG

Actually, it doesn't seem to go away with 1997 keps, at least if you're using a KCT/T card...but the problem is well known and will be addressed very quickly as soon as Chris Jackson returns from New Zealand in the next few days.

193. Help with krep elements & Logsat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: tsarah@gwis.com
Message-ID: <5bh1th$muo@news.gwis.com>
Source record: 20297

Hi all, my first posting here and I hope you can help. I am using LogSat and have kept my Krep elements up to date. I have been trying to hear and/or contact MIR, but without any luck. I am wondering if I have things set up properly. I have used Akron Ohio as the closest city and a -5 in the time parameter, with day light savings off.

I have been listening on 145.55 and also on the 400mzh repeater frequency and haven't heard a thing when it is supposed to be overhead.

Ted
KC8ENM

194. require info on MIR video feed @16W

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: G.Milligan@Sheffield.ac.uk
Message-ID: <G.Milligan-ya023080001401971744080001@bignews.shef.ac.uk>
Source record: 20298

I understand from a satellite frequency listing obtainable from
husted@login.dknet.dk using ftp://login.dknet.dk/pub/husted/satellit.zip

that on the european Ku band satellite "SRDN" at 16 degrees west you can
pick up video feeds of MIR, can any one confirm this? Does anyone know of
the video standard they are using.

I have have enclosed an extract from the file.

16 West SRDN (Inclined Orbit)
A	VIDEO	PO	PROGRAM	VIDSTD	VT	COD	LANGUAG	AUDIO	TP#
T	10.821	RC	Feeds (space station MIR)				Russian	7.00	

Any further information on this feed would be most welcome.

I would also like to thank husted@login.dknet.dk for a very detailed listing.
--
Greg Milligan

The University of Sheffield, Department of Clinical Neurology, Floor 'N',
Royal Hallamshire Hospital, Glossop Road, Sheffield S10 2JF, UK.
Tel: 0114 2713248 Fax: 0114 2760095 EMail:G.Milligan@Sheffield.ac.uk
World Wide Web: http://www.shef.ac.uk/uni/academic/A-C/cn/index.html
Amateur Radio (AX25 Packet Network): G1CPU@GB7WRG.#19.GBR.EU

195. ARLK004 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk004.1997@arrl.org>
Source record: 20299
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK004
ARLK004 Keplerian data

ZCZC SK04
QST de W1AW
Keplerian Bulletin 4 ARLK004
From ARRL Headquarters
Newington, CT January 14, 1997
To all radio amateurs

SB KEP ARL ARLK004
ARLK004 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-81
1 24711U 97001A 97014.38314622 -.00002212 10855-4 42189-5 0 83
2 24711 51.6491 139.3603 0093981 350.5897 344.4593 15.81832736 315
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97011.56647883 .00000037 00000-0 23934-4 0 3078
2 18129 82.9239 354.5036 0010675 303.5473 56.4659 13.72373404478756
UO-11
1 14781U 84021B 97014.01440716 .00000096 00000-0 24024-4 0 9430
2 14781 97.8167 1.5712 0012169 131.0872 229.1387 14.69516075688613
RS-12/13
1 21089U 91007A 97012.53595792 .00000034 00000-0 20212-4 0 9483
2 21089 82.9215 34.0901 0030327 13.4021 346.7936 13.74076303297787
UO-14
1 20437U 90005B 97011.29048555 -.00000012 00000-0 12054-4 0 2393
2 20437 98.5328 96.2816 0010784 313.9915 46.0376 14.29945145363794
RS-15
1 23439U 94085A 97011.52878324 -.00000039 00000-0 10000-3 0 1904
2 23439 64.8169 46.1670 0154421 161.8762 198.7751 11.27527088 84279
AO-16
1 20439U 90005D 97010.26102946 -.00000052 00000-0 -32932-5 0 375
2 20439 98.5485 97.8725 0010980 318.3514 41.6831 14.29994877363667
```

```
DO-17
1 20440U 90005E 97010.26270389 .00000015 00000-0 22695-4 0 386
2 20440 98.5512 98.6306 0011393 317.3547 42.6749 14.30137655363695
WO-18
1 20441U 90005F 97010.32699154 -.00000032 00000-0 43559-5 0 416
2 20441 98.5516 98.6134 0012025 317.6069 42.4184 14.30105964363705
LO-19
1 20442U 90005G 97011.28626183 -.00000018 00000-0 10000-4 0 389
2 20442 98.5512 100.1451 0012031 314.0059 46.0153 14.30218035363867
FO-20
1 20480U 90013C 97014.51705113 -.00000041 00000-0 -19392-4 0 9356
2 20480 99.0221 5.1470 0541027 5.5885 355.0925 12.83236074324998
AO-21
1 21087U 91006A 97013.88428782 .00000094 00000-0 82657-4 0 7781
2 21087 82.9403 165.7739 0035752 341.0890 18.8936 13.74577110298955
UO-22
1 21575U 91050B 97011.23763146 -.00000007 00000-0 12012-4 0 7441
2 21575 98.3276 77.1584 0008347 8.4135 351.7190 14.37052180287949
KO-23
1 22077U 92052B 97011.77791214 -.00000037 00000-0 10000-3 0 6332
2 22077 66.0775 112.7193 0014896 248.0783 111.8652 12.86300399207638
KO-25
1 22828U 93061F 97007.77047602 -.00000008 00000-0 14024-4 0 5065
2 22828 98.5601 85.7143 0010985 341.3616 18.7160 14.28164739139313
IO-26
1 22826U 93061D 97012.74330683 .00000012 00000-0 22549-4 0 5278
2 22826 98.5642 90.5172 0010081 343.7915 16.2942 14.27823895171903
AO-27
1 22825U 93061C 97012.13223533 .00000006 00000-0 19963-4 0 5296
2 22825 98.5631 89.7070 0008714 348.7463 11.3522 14.27714616171809
FO-29
1 24278U 96046B 97011.69485032 -.00000012 00000-0 26395-4 0 504
2 24278 98.5629 74.1102 0350619 231.6674 125.2476 13.52628416 19962
MO-30
1 24305U 96052B 97012.28016460 .00000203 00000-0 20364-3 0 615
2 24305 82.9262 109.7865 0031093 285.7944 73.9706 13.73089638 17666
Mir
1 16609U 86017A 97014.38466700 .00002958 00000-0 41776-4 0 9600
2 16609 51.6523 139.2506 0008584 270.9091 120.3482 15.60257217623013

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
January 18, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

196. Re: Sat.packet system

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E40tB0.FCp@pe1chl>
Source record: 20300

In <32D8EC64.1636@internext.com.br> nsallay@internext.COM.BR (Nicolaus Sallay) writes:

>-I`m thinging about buying a AEA PK-96 for Pacsat,your opinions and
>recommendations please

Don't buy it. AEA is out of business, and the PK-96 is a K9NG type
modem, not a true G3RUH.

Rob
--
+-----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+-----------------------------------+--------------------------------------+

197. Save on phone bills

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: Fred Durham <fdurham@htcomp.net>
Message-ID: <01bc0237$8611c6a0$79bc11cf@FredDurham>
Source record: 20301

If I could show you how to have virtually unlimited
long-distance calling time
without ever having to write a check for it and
show you how to make some serious money,
wouldn't that interest you?

Contact:

Fred & Shirley Durham

fdurham@htcomp.net

198. New Russian Sat to be launched!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32dcd963.703225@news.monad.net>
Source record: 20302

Hi, Folks. I downloaded this from UO-22 today. Another RS bird to go
up soon! stay tuned. 73 to all de KA1ORB.

--------------------[UO-22:5E02E]--------------------
From: UA3CR
To: ALL
Subject: RS-16
Keywords:

Here is the estimate datas of the new Russian Satellite

RS-16

PERIOD = 95 min
INCLINATION = 97.2 deg.

UPLINK = 145.915 - 145.948 MHz
DOWNLINK = 29.415 - 29.448 MHz
BEACONS = 29.408 , 29.451 MHz
PWR 29 MHZ DOWN = 1.2 W /4 W

BEACON 1 = 435.504 MHz
BEACON 2 = 435.548 MHz
PWR 435 MHZ BEACONS - 1.6 W

LAUNCH - ??.01.97 / ??.02.97
----

de ua3cr, rk3kpk, AMSAT-R, 10.01.97

199. DXER.COM Update

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32dc4959.42973516@news.primenet.com>
Source record: 20303

DXER.COM updates. With additions to Contest Clubs,
DX Clubs, Ham Radio Clubs, Satellite and DX Newsletters.

"http://www.dxer.com"

Check it out, if you have any sites you would like to
see added email us at "support@dxer.com"

Thanks for all the support.

200. Re: sat-track program for Mac wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: "Richard B. Langley" <lang@unb.ca>
Message-ID: <5bg35f$l75@sol.sun.csd.unb.ca>
Source record: 20304

In article <199701121742.SAA18972@www.dma.be> Boiy Marc, ON1DCV@dma.BE writes:
> I'm looking for a sat-track program for a macintosh se computer.(1mb)
> Can somebody send it to me via E-mail?I don't have an access on the internet.
>
> thanks.73' de on1dcv
> ps: the satellites i want to track are the HaM sat's!!
> see you!

MacSat is also freely available. E-mail me for details.
-- Richard Langley

==
Richard B. Langley Internet: LANG@UNB.CA or SE@UNB.CA
Geodetic Research Laboratory BITnet: LANG@UNB or SE@UNB
Dept. of Geodesy and Geomatics Engineering Phone: (506) 453-5142
University of New Brunswick FAX: (506) 453-4943
Fredericton, N.B., Canada E3B 5A3 Telex: 014-46202
==

201. NORAD Two-Line Orbital Element Set: Space Shuttle (97013.73861482)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-14 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5bh2nn$lr7@blackbird.afit.af.mil>
Source record: 20305

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97013.73861482 .00002731 00000-0 39073-4 0 9587
2 16609 51.6522 142.5003 0007813 269.4673 90.5454 15.60247486622916
STS 81
1 24711U 97001A 97014.38314622 -.00002212 10855-4 42189-5 0 83
2 24711 51.6491 139.3603 0093981 350.5897 344.4593 15.81832736 315
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

202. Kenwood TM-741E

Newsgroup: rec.radio.amateur.space
Date: 1997-01-15 00:00:00 UTC
From: William Vynck <William.Vynck@ping.be>
Message-ID: <32DCC9D2.696F@ping.be>
Source record: 20306
Cross-posted to: be.forsale,rec.radio.amateur.space,fido.belg.ham,fido.belg.ned.handel

Te koop :

Kenwood TM-741E
FM Multiband zendontvanger VHF/UHF =

=B7 144/146 mHz
=B7 430/440 mHz
=B7 mogelijkheid derde band in te bouwen

volgende opties zijn aanwezig :

=B7 DTMF unit
=B7 netsnoer met ontstoringsfilter

verder nog :

=B7 mobiele montage beugel
=B7 mikrofoon met funktietoetsen
=B7 handleidingen =

=B7 originele verpakking

Toestel is in PERFECTE staat !!

Vraagprijs : 24.000-Bfr (o.v.t.k.)

Informatie via email =

-- =

Visit my Homepage http://www.ping.be/RACO =

E-mail RACO@ping.be and/or William.Vynck@ping.be =

Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

203. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-15 00:00:00 UTC
From: Tommy Karlberg <ecstka@ldecs.ericsson.se>
Message-ID: <32DCE015.547@ldecs.ericsson.se>
Source record: 20307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi!

Has anyone seen "teddy bears" callsign? I havn't!
He seems to think that yelling and screaming is ok, even
talking bad about some people he piont out. But he hasn't
got the guts to put his callsign in the mails.

Tommy / SM7PAF

204. Re: Sat.packet system

Newsgroup: rec.radio.amateur.space
Date: 1997-01-15 00:00:00 UTC
From: ka1tox@bmugbos.org
Message-ID: <ka1tox-ya02408000R1501970700310001@news.tiac.net>
Source record: 20308

pe1chl@amsat.org wrote:

>Don't buy it. AEA is out of business, and the PK-96 is a K9NG type
>modem, not a true G3RUH.
>

This is not quite true. AEA is looking for a buyer.

-t

205. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-15 00:00:00 UTC
From: Edwin Roos <edroos@deltanet.com>
Message-ID: <32DDA321.7A40@deltanet.com>
Source record: 20309
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Gary V. Deutschmann, Sr. wrote:
>
> Not that your suggestions are not valid, I think positive intervention
> from all hams on this issue should be mandantory.
>
> However, FWIW: In my numerous years as a ham, I have seen our bands
> increased not decreased. With the exception of early ham radio prior
> to WWII.
>
> How do you think taking away any of our bandwidth would be enforced?
>
> The FCC cannot handle nor do they care to, the one simple 11 meter
> band that has become a thorn in the radio spectrum.
>
> Deallocating 2 meters from Ham use would open it wide up to CBer's and
> disgruntled hams all over the world and it will probably become as
> useless as 11 meters has become.
> For less than 30 bucks, any earth based station could easily jam the
> weak signal produced by those Commercial low orbit satellites.
>
> I see any intervention by the government in deallocating the current
> spectrum assignments as opening pandora's box and obliterating the
> entire radio spectrum as we know it. And literally losing what little
> control of it they now have.
>
> The entire radio spectrum will become one big 11 meter band, that he
> with the most power dominates, even if it means ruining it for
> everybody else in the process.
>
> The government can't own what it can't control. How can they sell
> something they don't own in the first place.
>
> Think about it!
>
> TTUL
> Gary
Gary, I'm afraid they'll do it the same way they spend money they don't
have. It is going to require people who don't sit on their hands.
Ed

206. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-15 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya023680001501971319210001@news.zippo.com>
Source record: 20310
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
<ecstka@ldecs.ericsson.se> wrote:

>Has anyone seen "teddy bears" callsign?

Perhaps that =is= his callsign.
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

207. Re: Help with krep elements & Logsat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32e17540.20841450@news.monad.net>
Source record: 20172

One more thing, Ted. Mir has changed 2-meter frequencies. The downlink (you listen) is now 145.800, and the uplink (you transmit) is now 145.200. Good Luck de KA1ORB.

208. Re: TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: Rafael Garcia <rafael@sat.cide.upm.es>
Message-ID: <32DE3094.3F5CE39A@sat.cide.upm.es>
Source record: 20173

Dan Moore wrote:
>
> I recently bought the TAPR TrakBox and have had nothing but trouble.
> I can't get the dam thing to accept satellite data downloaded from my
> computer.

Could you be more explicit? This is not enough info to try to fix your problem.

Anyway, the problem could be in the terminal program that you are using for. The ascii upload should be paced to 100ms per line. I'm running Telix on MS-DOS, and minicom for Linux, and none of them have problem to upload kepler and satellite info to the TrakBox.

Cheers,

Rafael,
Madrid, SPAIN

209. Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32DDE823.31F3@mwt.net>
Source record: 20311

Anybody know of a decent tracking program that can run on a Macintosh
SE30?
--Scott N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

210. Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32DDE87E.7C1E@mwt.net>
Source record: 20312

Anybody know of a decent tracking program that can run on a Macintosh
SE30?
--Scott N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

211. NORAD Two-Line Orbital Element Set: Space Shuttle (97015.14770181)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5bk5no$qa8@blackbird.afit.af.mil>
Source record: 20313

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97015.14770181 .00003228 00000-0 45003-4 0 9637
2 16609 51.6515 135.4106 0007765 278.3282 81.6829 15.60260052623130
STS 81
1 24711U 97001A 97015.29166667 -.00000318 00000-0 24903-5 0 118
2 24711 51.6503 134.6941 0007927 275.6892 173.5214 15.60288169 468
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

212. Re: Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: pwinter@best.com
Message-ID: <5bmcon$4o7@shellx.best.com>
Source record: 20314

In article <32DDE823.31F3@mwt.net>, scott <acepilot@mwt.net> wrote:
>Anybody know of a decent tracking program that can run on a Macintosh
>SE30?

I've been using SatTrak for years. It should run fine on an SE. You
can get it from:

http://www.primenet.com/~pflueg/
or
ftp.primenet.com/users/p/pflueg

For those who don't have Web or FTP access, send a note to Mike Pflueger
at pflueg@primenet.com and he'll be happy to tell you how to get the
program by mail.

Also, John Seney's list of Macintosh ham software includes several
other tracking programs:

http://www.mv.com/ipusers/wd1v/page5.html

Patty

========================== patty@wintertime.com ==========================
"You know we just took out seven guys? One more and you qualify
for American citizenship." --Det. Ray Vecchio on "Due South"
============= N6BIS ====================== Sunnyvale, Calif. =============

213. SAREX & MIR update request.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: relliott@cyberhighway.net
Message-ID: <5blpss$7ma$1@host-3.cyberhighway.net>
Source record: 20315

I have been out of the loop for a while. Could somebody let me know the current MIR and SAREX
frequencies. Possibly an uptodate URL for current information. I have heard that MIR has several new
updates as far as Amateur Radio goes.

Thanks,
Rich Elliott KC7CDK
relliott@cyberhighway.net
http://www.cyberhighway.net/~relliott/

214. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: jrc@skypoint.com
Message-ID: <5bmjtm$93m@mirage.skypoint.com>
Source record: 20316
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> wrote:
>
>I THOUGHT that these were newsgroups for radio science discussions, based
>upon factual information. But mostly all I see here are people's
>unsolicited opinions based upon conjecture.

Welcome to Usenet !!!!!!!

>That's what happens when code skills are emphasized, hailed and
>rewarded instead of engineering skills. That's also why hams of today would
>rather buy equipment from a store than built it.
>
>Once upon a time iw was WE who invented everything elecronic! Now most of
>us have been reduced to clueless consumers, lead by the nose like dumb
>sheep... a sad legacy indeed to leave to future hams.

I think that things are harder now. It was easy to glue together
vacuum tubes in the days you speak of. Solid state is harder, at
least harder to do right. My opinion.

>
>When someone asks for calculations, instead they get speculation. But I
>must warn that if you were to try to build things out of speculation,
>you'll soon have a pile of failed projects stacked taller than you are.
>
>Amateur radio is a SCIENCE, not a realm of personal opinions! We are
>SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I thought amateur radio was a hobby. You are supposed to have fun
doing something that you like. For some it is talking, for some like
you it is doing stuff like measuring the energey of the quantum band
gaps of hot carrier diodes over temperature :-)

>I shouldn't even HAVE to tell you this! Half the hams I hear these days
>barely know how to even solder! WHAT the heck is happening to us? Who
>lowered the technical knowledge standards? Who said that they could? When
>did it become no longer required to demonstrate the ability to build and
>troubleshoot radio equipment? It's truely an embarrassment to amateur
>radio that this has happened! I honestly know of novices who understand
>electronics better than extras and extras who act like CB'ers!

That is kind of hard to believe. The extra written exam is a cake walk,
but the advanced class is about the same as a commercial radiotelephone.
Those extras must have been one of those people that memorized every

question in the pool.

--
Jeffrey Comstock

DISCLAMIER: If my employer does not agree with this message, then they are wrong.

215. Shuttle and Various space related audio

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: gdollins@pbmo.net
Message-ID: <5bm9tg$a5r$1@newsin-1.starnet.net>
Source record: 20317

What is required to hear the audio groundlink from the Shuttle and other spacecraft (e.g. Mir) when in orbit?

I have a BC200XLT Scanner. Do I need an antenna? Any info appreciated.

Thx in advance!

Email to me at:

gdollins@pbmo.net

216. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: RickH <Nexus15@flash.net>
Message-ID: <32DEF43C.54F@flash.net>
Source record: 20318
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
>
> On Fri, 10 Jan 1997, tyler wrote:
>
> > Teddybear:
> > I sure hope you don't expect any more help on your helical antenna after you
> > pulled this asshole stunt.
> >
> > Beggars can't be choosy.
>
> WHAT makes me a damn begger? I have info to give on other topics pal!
> Fair exchange is not robbery as the old saying goes. So get off your high
> horse because you do not have a corner on knowledge and even though I dont
> know it all, I certainly am not knowledgabley bankrupt!
>
> And AGAIN if I ask for a screwdriver and you give me a hammer then your
> idea of "help" is not help at all!
>
> What is so hard to understand about that? IT HAPPENS TO BE TRUE!

Teddy

But what if what you really need is a hammer?

Rick

217. Re: Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: Dietrich Morgenstern <76050.1341@CompuServe.com>
Message-ID: <32DDCE58.6E61@CompuServe.com>
Source record: 20319

scott wrote:
>
> Anybody know of a decent tracking program that can run on a Macintosh
> SE30?
> --Scott N0EDV--
Scott:
Use Orbitrack. It is one of the best Sat tracking programs available. It comes in two versions. (One with and one without floating point processor).

Dietrich DJ1VA

218. EMOTO EV700D5X schematic, anyone?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: Rafael Garcia <rafael@sat.cide.upm.es>
Message-ID: <32DE2F28.5B81966C@sat.cide.upm.es>
Source record: 20320
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space

Hi all,

I'm looking for EV700D5X controller box schematic. I have the unit damaged, and the manual included with the rotator hasn't included.

So please, if anyone of you got this rotator with its schematic, I'd like to get a copy.

Many thanks in advance,

Rafael,
Madrid, SPAIN

219. Re: Help with krep elements & Logsat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-16 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32df72be.20199013@news.monad.net>
Source record: 20321

On Tue, 14 Jan 1997 22:34:27 GMT, tsarah@gwis.com (Ted Sarah) wrote:

>Hi all, my first posting here and I hope you can help. I am using
>LogSat and have kept my Krep elements up to date. I have been trying
>to hear and/or contact MIR, but without any luck. I am wondering if I
>have things set up properly. I have used Akron Ohio as the closest
>city and a -5 in the time parameter, with day light savings off.
>
>I have been listening on 145.55 and also on the 400mzh repeater
>frequency and haven't heard a thing when it is supposed to be
>overhead.
>
>Ted
>KC8ENM
>

Hi Ted, Bruce here. I believe you should be using -6 in the time parameter, as we use -5 here in New England. You are in the Central Time Zone right? Change this, and hopefully, you will be all set. Let me know how you make out, here, or via email at bbeford@cyberportal.net 73 de KA1ORB.

220. NORAD Two-Line Orbital Element Set: Space Shuttle (97016.23651797)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5bms9c$16m@blackbird.afit.af.mil>
Source record: 20174

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97016.23651797 -.00001969 00000-0 -17291-4 0 9695
2 16609 51.6519 129.9381 0007726 283.4379 76.5748 15.60290189623304
STS 81
1 24711U 97001A 97016.25000000 -.00000324 00000-0 24189-5 0 138
2 24711 51.6505 129.8737 0008053 282.7447 153.0381 15.60273028 607
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

221. Re: Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: "Richard B. Langley" <lang@unb.ca>
Message-ID: <5bo1kv$4kg@sol.sun.csd.unb.ca>
Source record: 20175

In article <32DDE87E.7C1E@mwt.net> scott, acepilot@mwt.net writes:
> Anybody know of a decent tracking program that can run on a Macintosh
> SE30?
> --Scott N0EDV--

MacSat 3.1 is also now FREELY available. E-mail me for a copy.
-- Richard Langley
Professor

==========
Richard B. Langley Internet: LANG@UNB.CA or SE@UNB.CA
Geodetic Research Laboratory BITnet: LANG@UNB or SE@UNB
Dept. of Geodesy and Geomatics Engineering Phone: (506) 453-5142
University of New Brunswick FAX: (506) 453-4943
Fredericton, N.B., Canada E3B 5A3 Telex: 014-46202
==========

222. SASI Sattracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5bosml$g03@tilde.csc.ti.com>
Source record: 20176

Are the SASI, the KCT, and the high dollar TAPR kit
the only ones out there now? ...Seems like there were
a couple of others. TheSASI is overpriced for a cable
plus software and uses the computer ports. The KCT is
not stand alone box.

Is there a stand alone rotor control and tune box being
built now? The AMSAT page is no help and searches don't
turn up anything but software.

Ken K5MBV

223. NORAD Two-Line Orbital Element Set: Space Shuttle (97017.13319379)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5bp0p8$4l0@blackbird.afit.af.mil>
Source record: 20177

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97017.13319379 .00028954 00000-0 35132-3 0 9720
2 16609 51.6518 125.4282 0008266 288.5721 71.5000 15.60332705623443
STS 81
1 24711U 97001A 97017.25000000 -.00000323 00000-0 24407-5 0 164
2 24711 51.6501 124.8415 0008409 290.2191 6.4050 15.60318155 768
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

224. MIR jump ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: Rainer.Redweik@t-online.de
Message-ID: <5bn5i1$11a@news00.btx.dtag.de>
Source record: 20178

Hello together,

I have question to the specialists:

1. while following the MIR-positions I found a big jump
from the 7th day in '97 to the 12th day. Around 5000 km.

Was it a maneuver for meeting the shuttle ?

2. Does someone know, why the Kepler-data of AO-10 are so old ?

In the last updates they were alway from 96299.11...

Thank you very much !

So long !

Rainer

--
Bewahre mich davor zu wissen, was ich nicht wissen muï¿½.
Bewahre mich davor, auch nur zu wissen, daï¿½ es Wissenswertes gibt,
von dem ich nichts weiï¿½.
Bewahre mich davor zu wissen, daï¿½ ich beschlossen habe, nichts von
den Dingen zu wissen, die nicht zu wissen ich beschlossen habe.
Douglas Adams

225. weather sat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-17 00:00:00 UTC
From: kevin sturt <pigsquill@msn.com>
Message-ID: <01bc04ba$bd732780$4d5195c1@pigsquill>
Source record: 20179

Can anybody help me ??
I would like to be able to view the weather satalites via my scanner on
my pc. I belive such decoding software is available but
i don't know where to obtian it
Any advice or suggestions would be greatly apprieciated or even better
if there is a shareware version around perhaps you may be able to send me a
copy???
thanks again
PIGSQUILL@MSN.COM

226. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: bin@asarginv.ORG.AR
Message-ID: <199701180611.AA00217@asarginv.org.ar>
Source record: 20180

```
Newsgroups: edu.ucsd.ham-space
Path: atina.UUCP!UCSD.EDU!owner-ham-space
From: ham-space@UCSD.EDU (Ham-Space Mailing List and Newsgroup)
Subject: Ham-Space Digest V97 #17
Sender: bin@asarginv.org.ar (bin)
Organization: Asociacion Argentina de Inventores
Message-ID: <199701171230.EAA15595@mail.ucsd.edu>
Date: Fri, 17 Jan 1997 12:30:39 GMT

Ham-Space Digest Fri, 17 Jan 97 Volume 97 : Issue 17

Today's Topics:
ARLK002 Keplerian data
DXER.COM Update
Facts vs Opinions
HAM SITE
Mac SE30 tracking program? (2 msgs)
Mir & AO-21
MIR was talking
NORAD Two-Line Orbital Element Set: Space Shuttle (97012.64976432)
SAREX & MIR update request.
Sat.packet system
Shuttle and Various space related audio
TAPR TrakBox

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 7 Jan 1997 18:24:04 -0500
From: w1aw@arrl.org
Subject: ARLK002 Keplerian data

SB KEP @ ARL $ARLK002
ARLK002 Keplerian data

ZCZC SK02
QST de W1AW
Keplerian Bulletin 2 ARLK002
```

Date: 14 Jan 1997 20:07:05 -0700
From: kb7ub@dxer.com (R. Dale Piedfort)
Subject: DXER.COM Update

DXER.COM updates. With additions to Contest Clubs,
DX Clubs, Ham Radio Clubs, Satellite and DX Newsletters.

"http://www.dxer.com"

Check it out, if you have any sites you would like to
see added email us at "support@dxer.com"

Thanks for all the support.

Date: 16 Jan 1997 19:16:38 -0600
From: jrc@skypoint.com (Jeff Comstock)
Subject: Facts vs Opinions

In article <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> wrote:
>
>I THOUGHT that these were newsgroups for radio science discussions, based
>upon factual information. But mostly all I see here are people's
>unsolicited opinions based upon conjecture.

Welcome to Usenet !!!!!!!

>That's what happens when code skills are emphasized, hailed and
>rewarded instead of engineering skills. That's also why hams of today would
>rather buy equipment from a store than built it.
>
>Once upon a time iw was WE who invented everything elecronic! Now most of
>us have been reduced to clueless consumers, lead by the nose like dumb
>sheep... a sad legacy indeed to leave to future hams.

I think that things are harder now. It was easy to glue together
vacuum tubes in the days you speak of. Solid state is harder, at
least harder to do right. My opinion.

>
>When someone asks for calculations, instead they get speculation. But I
>must warn that if you were to try to build things out of speculation,
>you'll soon have a pile of failed projects stacked taller than you are.
>
>Amateur radio is a SCIENCE, not a realm of personal opinions! We are
>SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I thought amateur radio was a hobby. You are supposed to have fun
doing something that you like. For some it is talking, for some like
you it is doing stuff like measuring the energey of the quantum band
gaps of hot carrier diodes over temperature :-)

>I shouldn't even HAVE to tell you this! Half the hams I hear these days
>barely know how to even solder! WHAT the heck is happening to us? Who
>lowered the technical knowledge standards? Who said that they could? When
>did it become no longer required to demonstrate the ability to build and
>troubleshoot radio equipment? It's truely an embarrassment to amateur
>radio that this has happened! I honestly know of novices who understand
>electronics better than extras and extras who act like CB'ers!

That is kind of hard to believe. The extra written exam is a cake walk,
but the advanced class is about the same as a commercial radiotelephone.
Those extras must have been one of those people that memorized every
question in the pool.

--
Jeffrey Comstock

DISCLAMIER: If my employer does not agree with this message, then they
are wrong.

Date: Sat, 04 Jan 1997 01:35:46 -0800
From: John Fleenor <johnf@mailhost.cyberramp.net>
Subject: HAM SITE

http://www.cyberramp.net/~johnf

Date: Thu, 16 Jan 1997 00:36:14 -0800
From: scott <acepilot@mwt.net>
Subject: Mac SE30 tracking program?

Anybody know of a decent tracking program that can run on a Macintosh
SE30?
--Scott N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

Date: 16 Jan 1997 15:14:31 -0800
From: pwinter@best.com (Patty Winter)
Subject: Mac SE30 tracking program?

In article <32DDE823.31F3@mwt.net>, scott <acepilot@mwt.net> wrote:
>Anybody know of a decent tracking program that can run on a Macintosh
>SE30?

I've been using SatTrak for years. It should run fine on an SE. You
can get it from:

http://www.primenet.com/~pflueg/
or
ftp.primenet.com/users/p/pflueg

For those who don't have Web or FTP access, send a note to Mike Pflueger
at pflueg@primenet.com and he'll be happy to tell you how to get the
program by mail.

Also, John Seney's list of Macintosh ham software includes several
other tracking programs:

http://www.mv.com/ipusers/wd1v/page5.html

Patty

========================== patty@wintertime.com ========================
"You know we just took out seven guys? One more and you qualify
for American citizenship." --Det. Ray Vecchio on "Due South"
============= N6BIS ====================== Sunnyvale, Calif. =============

Date: Sun, 12 Jan 97 18:42:23 GMT
From: trandall@mhv.net
Subject: Mir & AO-21

In article <19970112063600.BAA13898@ladder01.news.aol.com>, mayrosec@aol.com (Mayrosec)
wrote:
>I have had a scanner set to the MIR repeater downlink freqs for about a
>week and have heard nothing. The freq I've been listening to is 437.950,
>is this correct?

John Blaha confirmed the repeater has been down. Didn't hear why and he
said he wasn't sure what's up. You have the freq. correct.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

Date: 13 Jan 1997 23:22:50 GMT
From: Erik Finskas <lakki@clinet.fi>
Subject: MIR was talking

This morning about 06 UTC MIR passed by and I copied the service frequency
143.625MHz with an average signal. The conversation was simplex, the
transmitter was keyed an unkeyed, like to save battery (??) Previously as
I have heard this service frequency, they latch the ptt as the
transmission is full duplex. At the same time, MIR was operating packet on
145.800MHz.

So there is life onboard MIR...

The Shuttle mission commentators told that the shuttle crew are equipped
with portable VHF radios to communicate air to air directly with the crew
on MIR space station at the time of docking the shuttle to the MIR. Anyone
have a clue of the frequencies? It could be a exotic signal to copy.

Erik
--
Erik Finskas OH2LAK & M1AAJ
Email Lakki@clinet.fi

Date: 13 Jan 1997 23:03:32 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set: Space Shuttle (97012.64976432)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97012.64976432 .00002995 00000-0 42239-4 0 9577
2 16609 51.6500 147.9775 0007729 267.1437 92.8527 15.60240415622748
STS 81
1 24711U 97001A 97013.27083333 -.00000265 11361-4 55873-5 0 41
2 24711 51.6512 145.2987 0037461 27.6359 15.6085 16.00642075 136
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 16 Jan 1997 17:52:28 GMT
From: relliott@cyberhighway.net
Subject: SAREX & MIR update request.

I have been out of the loop for a while. Could somebody let me know the current MIR and
SAREX
frequencies. Possibly an uptodate URL for current information. I have heard that MIR has
several new
updates as far as Amateur Radio goes.

Thanks,
Rich Elliott KC7CDK
relliott@cyberhighway.net
http://www.cyberhighway.net/~relliott/

Date: Wed, 15 Jan 1997 07:00:31 -0400
From: ka1tox@bmugbos.org (Tom McGee)
Subject: Sat.packet system

pe1chl@amsat.org wrote:

>Don't buy it. AEA is out of business, and the PK-96 is a K9NG type
>modem, not a true G3RUH.
>

This is not quite true. AEA is looking for a buyer.

-t

Date: 16 Jan 1997 22:25:52 GMT
From: gdollins@pbmo.net (Magnum)
Subject: Shuttle and Various space related audio

What is required to hear the audio groundlink from the Shuttle and other
spacecraft (e.g. Mir) when in orbit?

I have a BC200XLT Scanner. Do I need an antenna? Any info appreciated.

Thx in advance!

Email to me at:

gdollins@pbmo.net

Date: 14 Jan 1997 05:02:10 GMT
From: dpmoore@west.net (Dan Moore)
Subject: TAPR TrakBox

I recently bought the TAPR TrakBox and have had nothing but trouble.
I can't get the dam thing to accept satellite data downloaded from my
computer.
Has anyone else had this problem and what is the fix.

any help would be appreciated.

Date: (null)
From: (null)

SB KEP ARL ARLK002
ARLK002 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97007.11912897 .00000009 00000-0 -63877-5 0 3064
2 18129 82.9241 357.7918 0011040 316.8270 43.1999 13.72372994478148
UO-11
1 14781U 84021B 97007.06913666 .00000030 00000-0 12865-4 0 09535
2 14781 97.8162 354.9203 0011458 152.8410 207.3397 14.69513741687599
RS-12/13
1 21089U 91007A 97007.14750591 .00000009 00000-0 -65585-5 0 09671
2 21089 82.9219 38.0876 0030470 27.9383 332.3399 13.74075973297041
UO-14
1 20437U 90005B 97007.23206924 .00000004 00000-0 18270-4 0 2383
2 20437 98.5327 92.3040 0010944 326.2681 33.7799 14.29945002363215
RS-15
1 23439U 94085A 97007.18278706 -.00000039 00000-0 10000-3 0 1897
2 23439 64.8167 53.1951 0154486 162.6777 197.9488 11.27527418 83783
AO-16
1 20439U 90005D 97007.18233776 .00000049 00000-0 35966-4 0 00405
2 20439 98.5483 94.8489 0011078 327.8430 32.2071 14.29995808363229
DO-17
1 20440U 90005E 97007.18432153 -.00000017 00000-0 10054-4 0 00415
2 20440 98.5509 95.6059 0011746 326.2520 33.7921 14.30137027363253
WO-18
1 20441U 90005F 97007.17857510 .00000030 00000-0 28421-4 0 00447
2 20441 98.5516 95.5206 0012211 327.1608 32.8813 14.30106343363257
LO-19
1 20442U 90005G 97007.15866258 -.00000023 00000-0 77626-5 0 00406
2 20442 98.5544 96.0882 0012539 327.4868 32.5542 14.30217949363272
FO-20
1 20480U 90013C 97007.03266536 -.00000089 00000-0 -12840-3 0 09404
2 20480 99.0225 359.0892 0541305 22.5152 339.8762 12.83235406324038
AO-21
1 21087U 91006A 97007.47872991 .00000094 00000-0 82657-4 0 7762
2 21087 82.9404 170.5142 0035896 358.7288 1.3770 13.74576806298070
UO-22
1 21575U 91050B 97007.19925715 .00000020 00000-0 20921-4 0 7434
2 21575 98.3281 73.2520 0008452 19.1220 341.0283 14.37051971287361
KO-23
1 22077U 92052B 97007.42390446 -.00000037 00000-0 10000-3 0 6320

```
2 22077 66.0773 121.8350 0014838 250.6372 109.3042 12.86300303207079
KO-25
1 22828U 93061F 97007.13993698 .00000029 00000-0 29075-4 0 05266
2 22828 98.5601 85.0964 0010988 343.1795 16.9017 14.28165045139220
IO-26
1 22826U 93061D 97007.13718487 -.00000028 00000-0 62599-5 0 05433
2 22826 98.5647 85.0222 0010366 359.1235 0.9930 14.27823171171101
AO-27
1 22825U 93061C 97007.15641836 .00000030 00000-0 29880-4 0 05456
2 22825 98.5642 84.8343 0009506 358.1739 1.9402 14.27714675171099
FO-29
1 24278U 96046B 97007.18262385 -.00000019 00000-0 19707-4 0 491
2 24278 98.5630 70.2024 0350572 243.4011 113.0807 13.52628360 19352
MO-30
1 24305U 96052B 97007.32503218 .00000203 00000-0 20364-3 0 593
2 24305 82.9282 113.4491 0031658 298.4554 61.3380 13.73089439 16982
Mir
1 16609U 86017A 97007.14260667 .00002896 00000-0 38559-4 0 9437
2 16609 51.6510 175.6867 0013432 211.6664 148.3500 15.61940194621887

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
January 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

------------------------------

End of Ham-Space Digest V97 #17
******************************
```

227. CD-Recordable Media for Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: angie@tccs.net
Message-ID: <5bq6oc$6mh@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 20181

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

228. Re: CD-Recordable Media for Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: calamari@singnet.com.sg
Message-ID: <32e0ae52.2476881@news>
Source record: 20182

Please go to

www.cdrominc.com

$6.99 seems to be market price anyway.

==========
>On 18 Jan 1997 09:56:28 GMT, angie@tccs.net wrote:
>We have the following CD-R media for sale.
>
>Brand: Pioneer
>Type: Printable Media (Surface is blank for printing or labels)
>Type: Gold on Green>Size: 74 min (650 mb)
>Price: 6.99
>Minimum Order: 10
>

>Brand: Pioneer>Type: Gold on Green>Size: 74 min (650 mb)
>Price: 6.55
>Minimum Order: 10
>
>Brand: Maxell>Type: Gold on Gold>Size: 74 min (650 mb)
>Price: 6.55
>Minimum Order: 10
>
>Brand: TDK>Type: Gold on Green>Size: 74 min (650 mb)
>Price: 6.55
>Minimum Order: 10
>
>Brand: Hewlett Packard>Type Gold on Gold>Size: 74 min (650 mb)
>Price: 7.15
>Minimum Order: 10>Lifetime Warranty
>
>The Copy Cat Shop has all your CD duplication, replication, recorders,
>software, and media needs.
>
>If you have any questions or comments feel free to call.
>
>Cordially,
>
> The Copy Cat Shop
> 213-650-1680
> 213-650-9110 Fax

229. Rebellions in Space!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32e0f768.84990176@news.erols.com>
Source record: 20183

I was watching The Learning Channel last night. They ran a program astronaut/ cosmonaut health. Norm Thagard was interviewed. At one point they mentioned an American Shuttle astronaut who - while on a space walk- was overwhelmed with the wonder of it all and essentially refused to come back inside. Had to be dragged back in by the tether! Did this really happen?

They also reported on a rebellion by a MIR crew. Disgusted with their ground controllers, they turned off their radios and wouldn't communicate for several weeks! Does anyone have info on this incident?

Thanks 73 N2CQR

230. Re: Rebellions in Space!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: Practice&#65533; <Eckart@usa.net>
Message-ID: <01bc0541$6954a7a0$8c6a2299@eckart>
Source record: 20184

I don't know but I know there was a mutiny in space. The Space Shuttle crew was working very hard every waking moment for a long time during the mission and mutinied for a while so they could relax, play and admire the galaxy. I herd that from a Shuttle astronaut during a TV interview.

KD6FEE

Bill Meara <wmeara@erols.com> wrote in article
<32e0f768.84990176@news.erols.com>...
> I was watching The Learning Channel last night. They ran a program
> astronaut/ cosmonaut health. Norm Thagard was interviewed. At one
> point they mentioned an American Shuttle astronaut who - while on a
> space walk- was overwhelmed with the wonder of it all and essentially
> refused to come back inside. Had to be dragged back in by the tether!
> Did this really happen?
>
> They also reported on a rebellion by a MIR crew. Disgusted with their
> ground controllers, they turned off their radios and wouldn't
> communicate for several weeks! Does anyone have info on this
> incident?
>
> Thanks 73 N2CQR
>

231. Phase 3

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: Brian Baskett <B.Baskett@worldnet.att.net>
Message-ID: <01bc0550$89768620$968d93cf@default>
Source record: 20185

I am looking for inexpensive 432 equipment and antenna which will enable me
to get on the new phase 3 satelite.
Anyone have an old icom or kenwood or xverter???
tnx
73 Brian WA7PVE

232. Desperately need KC5PZQ's QSL ROUTE.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bc0565$17bb06e0$fd1479a8@wave.mindspring.com>
Source record: 20186

Could someone please post the QSL manager for John Blaha aboard the MIR SS?

thanks
N4IPieter

233. A question on MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: tsarah@gwis.com
Message-ID: <5br4en$6p5@news.gwis.com>
Source record: 20187

I want to thank everyone for helping with my LogSat proble, it's now working properly.

I was also told that MIR had shifted from 145.550 to 145.80/145.20. Now I want to be sure that I do this correctly, since packet and satellite communications are new to me. Please correct me if the following is incorrect (it's from the Feb '97 issue of CQ VHF):

MIR packet simplex on 145.80
MIR voice: MIR transmitts on 145.20
I transmit on 145.80

STS still operates on 145.55

These frequencies for MIR are a real problem here. There is a strong packet station already on 145.80. And, there is a VERY strong wide area repeater on 145.19 that really bleeds over on 145.20. Not nice.

Thanks in advance,

Ted
KC8ENM

234. ARLK005 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk005.1997@arrl.org>
Source record: 20188
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK005
ARLK005 Keplerian data

ZCZC SK05
QST de W1AW
Keplerian Bulletin 5 ARLK005
From ARRL Headquarters
Newington, CT January 18, 1997
To all radio amateurs

SB KEP ARL ARLK005
ARLK005 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-81
1 24711U 97001A 97017.25000000 -.00000323 00000-0 24407-5 0 164
2 24711 51.6501 124.8415 0008409 290.2191 6.4050 15.60318155 768
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97015.86801463 .00000033 00000-0 20136-4 0 3089
2 18129 82.9243 351.3235 0010529 290.9333 69.0696 13.72373604479348
UO-11
1 14781U 84021B 97015.03576954 .00000076 00000-0 20587-4 0 09491
2 14781 97.8168 2.5495 0012276 127.9478 232.2818 14.69516161688764
RS-12/13
1 21089U 91007A 97016.54088735 .00000018 00000-0 26748-5 0 9496
2 21089 82.9205 31.1162 0029830 2.6069 357.5237 13.74076271298332
UO-14
1 20437U 90005B 97015.76873673 .00000024 00000-0 26054-4 0 2405
2 20437 98.5316 100.6657 0010590 299.8718 60.1412 14.29946051364439
RS-15
1 23439U 94085A 97016.14086085 -.00000039 00000-0 10000-3 0 1913
2 23439 64.8161 38.7082 0153787 160.9741 199.7009 11.27526907 84799
AO-16
1 20439U 90005D 97015.15894411 .00000001 00000-0 17244-4 0 00395
2 20439 98.5437 102.6775 0010627 301.9804 58.0347 14.29995753364368
```

```
DO-17
1 20440U 90005E 97015.16013035 .00000010 00000-0 20686-4 0 00410
2 20440 98.5492 103.4375 0011125 302.3113 57.6992 14.30138458364395
WO-18
1 20441U 90005F 97015.15456255 -.00000011 00000-0 12674-4 0 00437
2 20441 98.5508 103.3538 0011698 302.6293 57.3763 14.30106357364397
LO-19
1 20442U 90005G 97015.76365597 -.00000005 00000-0 15019-4 0 397
2 20442 98.5515 104.5425 0011794 299.7524 60.2484 14.30218722364500
FO-20
1 20480U 90013C 97014.98482453 -.00000020 00000-0 27881-4 0 09398
2 20480 99.0221 5.5259 0541088 4.5235 356.0487 12.83236286325059
AO-21
1 21087U 91006A 97016.94148680 .00000094 00000-0 82657-4 0 7798
2 21087 82.9402 163.5114 0035791 332.8654 27.0629 13.74577216299371
UO-22
1 21575U 91050B 97015.69376560 .00000046 00000-0 29584-4 0 7450
2 21575 98.3263 81.4672 0008123 355.8616 4.2504 14.37053223288585
KO-23
1 22077U 92052B 97016.20967041 -.00000037 00000-0 10000-3 0 6349
2 22077 66.0777 103.4414 0014743 247.2624 112.6837 12.86300551208207
KO-25
1 22828U 93061F 97011.13334754 -.00000044 00000-0 -11790-6 0 05236
2 22828 98.5597 89.0084 0010859 331.7320 28.3272 14.28164591139792
IO-26
1 22826U 93061D 97017.22820339 .00000010 00000-0 21521-4 0 5286
2 22826 98.5635 94.9115 0009484 331.1796 28.8856 14.27824336172548
AO-27
1 22825U 93061C 97016.26706556 -.00000021 00000-0 89867-5 0 5306
2 22825 98.5624 93.7570 0008336 336.6409 23.4393 14.27714981172397
FO-29
1 24278U 96046B 97016.20710671 -.00000040 00000-0 -28925-5 0 511
2 24278 98.5617 78.0154 0350665 219.8624 137.6278 13.52628087 20573
Mir
1 16609U 86017A 97017.77362690 .00062692 00000-0 74765-3 0 9737
2 16609 51.6501 122.2108 0007990 294.3070 65.7090 15.60426807623544

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
January 21, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

235. Stsplus and win95

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: bret Johnson <bret@baj.com>
Message-ID: <32E10A08.4290@baj.com>
Source record: 20189

I have version 9650. It is installed on a 200mhz pentium pro.
I can update the tle's jsut fine.
Do pass preditcs just fine.

However, If I goto a ORTHO or WORLD view map after about two mins it
locks up. I have to power off to regain controll.

Is there a fix or a win/win95 version.

I have tried winorbit but, I do not like the maps it has..

Thanks..

236. CD-R Media

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: "The Copy Cat Shop"
Message-ID: <5brj0f$g6o@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 20190

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

237. FS Timestep HRPT receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: jeff kelly <jkelly@bellatlantic.net>
Message-ID: <32E167E6.7C84@bellatlantic.net>
Source record: 20191

For Sale: Timestep HRPT receiver, card, 10 bit software.
Excellent condition.
$1000.00
Feedhorns, combiners and Greg Ehler pre-amps also available.

Contact jeff kelly (KT2K) jkelly@bellatlantic.net

238. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-18 00:00:00 UTC
From: bin@asarginv.ORG.AR
Message-ID: <199701181619.AA01733@asarginv.org.ar>
Source record: 20192

```
Newsgroups: edu.ucsd.ham-space
Path: atina.UUCP!UCSD.EDU!owner-ham-space
From: ham-space@UCSD.EDU (Ham-Space Mailing List and Newsgroup)
Subject: Ham-Space Digest V97 #18
Sender: bin@asarginv.org.ar (bin)
Organization: Asociacion Argentina de Inventores
Message-ID: <199701181230.EAA14915@mail.ucsd.edu>
Date: Sat, 18 Jan 1997 12:30:30 GMT

Ham-Space Digest Sat, 18 Jan 97 Volume 97 : Issue 18

Today's Topics:
(none)
CD-Recordable Media for Sale
EMOTO EV700D5X schematic, anyone?
Facts vs Opinions
Mac SE30 tracking program?
new mir freq for 1997
NORAD Two-Line Orbital Element Set: Space Shuttle (97016.23651797)
NORAD Two-Line Orbital Element Set: Space Shuttle (97017.13319379)
SASI Sattracker
TAPR TrakBox
Wanted! 2M RHCP Helical for EME designs!
Wisp32 problems with new year !!

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 18 Jan 97 06:11:03 GMT
From: bin@asarginv.ORG.AR (bin)
Subject: (none)

Newsgroups: edu.ucsd.ham-space
Path: atina.UUCP!UCSD.EDU!owner-ham-space
From: ham-space@UCSD.EDU (Ham-Space Mailing List and Newsgroup)
Subject: Ham-Space Digest V97 #17
Sender: bin@asarginv.org.ar (bin)
```

Organization: Asociacion Argentina de Inventores
Message-ID: <199701171230.EAA15595@mail.ucsd.edu>
Date: Fri, 17 Jan 1997 12:30:39 GMT

Ham-Space Digest Fri, 17 Jan 97 Volume 97 : Issue 17

Today's Topics:
ARLK002 Keplerian data
DXER.COM Update
Facts vs Opinions
HAM SITE
Mac SE30 tracking program? (2 msgs)
Mir & AO-21
MIR was talking
NORAD Two-Line Orbital Element Set: Space Shuttle (97012.64976432)
SAREX & MIR update request.
Sat.packet system
Shuttle and Various space related audio
TAPR TrakBox

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 Jan 1997 18:24:04 -0500
From: w1aw@arrl.org
Subject: ARLK002 Keplerian data

SB KEP @ ARL $ARLK002
ARLK002 Keplerian data

ZCZC SK02
QST de W1AW
Keplerian Bulletin 2 ARLK002

Date: 14 Jan 1997 20:07:05 -0700
From: kb7ub@dxer.com (R. Dale Piedfort)
Subject: DXER.COM Update

DXER.COM updates. With additions to Contest Clubs,
DX Clubs, Ham Radio Clubs, Satellite and DX Newsletters.

"http://www.dxer.com"

Check it out, if you have any sites you would like to
see added email us at "support@dxer.com"

Thanks for all the support.

Date: 16 Jan 1997 19:16:38 -0600
From: jrc@skypoint.com (Jeff Comstock)
Subject: Facts vs Opinions

In article <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> wrote:
>
>I THOUGHT that these were newsgroups for radio science discussions, based
>upon factual information. But mostly all I see here are people's
>unsolicited opinions based upon conjecture.

Welcome to Usenet !!!!!!!

>That's what happens when code skills are emphasized, hailed and
>rewarded instead of engineering skills. That's also why hams of today would
>rather buy equipment from a store than built it.
>
>Once upon a time iw was WE who invented everything elecronic! Now most of
>us have been reduced to clueless consumers, lead by the nose like dumb
>sheep... a sad legacy indeed to leave to future hams.

I think that things are harder now. It was easy to glue together
vacuum tubes in the days you speak of. Solid state is harder, at
least harder to do right. My opinion.

>
>When someone asks for calculations, instead they get speculation. But I
>must warn that if you were to try to build things out of speculation,
>you'll soon have a pile of failed projects stacked taller than you are.
>
>Amateur radio is a SCIENCE, not a realm of personal opinions! We are
>SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I thought amateur radio was a hobby. You are supposed to have fun
doing something that you like. For some it is talking, for some like
you it is doing stuff like measuring the energey of the quantum band
gaps of hot carrier diodes over temperature :-)

>I shouldn't even HAVE to tell you this! Half the hams I hear these days
>barely know how to even solder! WHAT the heck is happening to us? Who
>lowered the technical knowledge standards? Who said that they could? When
>did it become no longer required to demonstrate the ability to build and
>troubleshoot radio equipment? It's truely an embarrassment to amateur
>radio that this has happened! I honestly know of novices who understand
>electronics better than extras and extras who act like CB'ers!

That is kind of hard to believe. The extra written exam is a cake walk,
but the advanced class is about the same as a commercial radiotelephone.

Those extras must have been one of those people that memorized every question in the pool.

--
Jeffrey Comstock

DISCLAMIER: If my employer does not agree with this message, then they are wrong.

Date: Sat, 04 Jan 1997 01:35:46 -0800
From: John Fleenor <johnf@mailhost.cyberramp.net>
Subject: HAM SITE

http://www.cyberramp.net/~johnf

Date: Thu, 16 Jan 1997 00:36:14 -0800
From: scott <acepilot@mwt.net>
Subject: Mac SE30 tracking program?

Anybody know of a decent tracking program that can run on a Macintosh SE30?
--Scott N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

Date: 16 Jan 1997 15:14:31 -0800
From: pwinter@best.com (Patty Winter)
Subject: Mac SE30 tracking program?

In article <32DDE823.31F3@mwt.net>, scott <acepilot@mwt.net> wrote:
>Anybody know of a decent tracking program that can run on a Macintosh
>SE30?

I've been using SatTrak for years. It should run fine on an SE. You can get it from:

http://www.primenet.com/~pflueg/
or
ftp.primenet.com/users/p/pflueg

For those who don't have Web or FTP access, send a note to Mike Pflueger at pflueg@primenet.com and he'll be happy to tell you how to get the program by mail.

Also, John Seney's list of Macintosh ham software includes several
other tracking programs:

http://www.mv.com/ipusers/wd1v/page5.html

Patty

========================== patty@wintertime.com ==========================
"You know we just took out seven guys? One more and you qualify
for American citizenship." --Det. Ray Vecchio on "Due South"
============= N6BIS ====================== Sunnyvale, Calif. =============

Date: Sun, 12 Jan 97 18:42:23 GMT
From: trandall@mhv.net
Subject: Mir & AO-21

In article <19970112063600.BAA13898@ladder01.news.aol.com>, mayrosec@aol.com (Mayrosec)
wrote:
>I have had a scanner set to the MIR repeater downlink freqs for about a
>week and have heard nothing. The freq I've been listening to is 437.950,
>is this correct?

John Blaha confirmed the repeater has been down. Didn't hear why and he
said he wasn't sure what's up. You have the freq. correct.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

Date: 13 Jan 1997 23:22:50 GMT
From: Erik Finskas <lakki@clinet.fi>
Subject: MIR was talking

This morning about 06 UTC MIR passed by and I copied the service frequency
143.625MHz with an average signal. The conversation was simplex, the
transmitter was keyed an unkeyed, like to save battery (??) Previously as
I have heard this service frequency, they latch the ptt as the
transmission is full duplex. At the same time, MIR was operating packet on
145.800MHz.

So there is life onboard MIR...

The Shuttle mission commentators told that the shuttle crew are equipped
with portable VHF radios to communicate air to air directly with the crew
on MIR space station at the time of docking the shuttle to the MIR. Anyone
have a clue of the frequencies? It could be a exotic signal to copy.

Erik
--
Erik Finskas OH2LAK & M1AAJ
Email Lakki@clinet.fi

Date: 13 Jan 1997 23:03:32 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set: Space Shuttle (97012.64976432)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97012.64976432 .00002995 00000-0 42239-4 0 9577
2 16609 51.6500 147.9775 0007729 267.1437 92.8527 15.60240415622748
STS 81
1 24711U 97001A 97013.27083333 -.00000265 11361-4 55873-5 0 41
2 24711 51.6512 145.2987 0037461 27.6359 15.6085 16.00642075 136
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 16 Jan 1997 17:52:28 GMT
From: relliott@cyberhighway.net
Subject: SAREX & MIR update request.

I have been out of the loop for a while. Could somebody let me know the current MIR and
SAREX
frequencies. Possibly an uptodate URL for current information. I have heard that MIR has
several new
updates as far as Amateur Radio goes.

Thanks,
Rich Elliott KC7CDK
relliott@cyberhighway.net
http://www.cyberhighway.net/~relliott/

Date: Wed, 15 Jan 1997 07:00:31 -0400
From: ka1tox@bmugbos.org (Tom McGee)
Subject: Sat.packet system

pe1chl@amsat.org wrote:

>Don't buy it. AEA is out of business, and the PK-96 is a K9NG type
>modem, not a true G3RUH.
>

This is not quite true. AEA is looking for a buyer.

-t

Date: 16 Jan 1997 22:25:52 GMT
From: gdollins@pbmo.net (Magnum)
Subject: Shuttle and Various space related audio

What is required to hear the audio groundlink from the Shuttle and other
spacecraft (e.g. Mir) when in orbit?

I have a BC200XLT Scanner. Do I need an antenna? Any info appreciated.

Thx in advance!

Email to me at:

gdollins@pbmo.net

Date: 14 Jan 1997 05:02:10 GMT
From: dpmoore@west.net (Dan Moore)
Subject: TAPR TrakBox

I recently bought the TAPR TrakBox and have had nothing but trouble.
I can't get the dam thing to accept satellite data downloaded from my
computer.
Has anyone else had this problem and what is the fix.

any help would be appreciated.

Date: (null)
From: (null)

SB KEP ARL ARLK002
ARLK002 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ

```
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97007.11912897 .00000009 00000-0 -63877-5 0 3064
2 18129 82.9241 357.7918 0011040 316.8270 43.1999 13.72372994478148
UO-11
1 14781U 84021B 97007.06913666 .00000030 00000-0 12865-4 0 09535
2 14781 97.8162 354.9203 0011458 152.8410 207.3397 14.69513741687599
RS-12/13
1 21089U 91007A 97007.14750591 .00000009 00000-0 -65585-5 0 09671
2 21089 82.9219 38.0876 0030470 27.9383 332.3399 13.74075973297041
UO-14
1 20437U 90005B 97007.23206924 .00000004 00000-0 18270-4 0 2383
2 20437 98.5327 92.3040 0010944 326.2681 33.7799 14.29945002363215
RS-15
1 23439U 94085A 97007.18278706 -.00000039 00000-0 10000-3 0 1897
2 23439 64.8167 53.1951 0154486 162.6777 197.9488 11.27527418 83783
AO-16
1 20439U 90005D 97007.18233776 .00000049 00000-0 35966-4 0 00405
2 20439 98.5483 94.8489 0011078 327.8430 32.2071 14.29995808363229
DO-17
1 20440U 90005E 97007.18432153 -.00000017 00000-0 10054-4 0 00415
2 20440 98.5509 95.6059 0011746 326.2520 33.7921 14.30137027363253
WO-18
1 20441U 90005F 97007.17857510 .00000030 00000-0 28421-4 0 00447
2 20441 98.5516 95.5206 0012211 327.1608 32.8813 14.30106343363257
LO-19
1 20442U 90005G 97007.15866258 -.00000023 00000-0 77626-5 0 00406
2 20442 98.5544 96.0882 0012539 327.4868 32.5542 14.30217949363272
FO-20
1 20480U 90013C 97007.03266536 -.00000089 00000-0 -12840-3 0 09404
2 20480 99.0225 359.0892 0541305 22.5152 339.8762 12.83235406324038
AO-21
1 21087U 91006A 97007.47872991 .00000094 00000-0 82657-4 0 7762
2 21087 82.9404 170.5142 0035896 358.7288 1.3770 13.74576806298070
UO-22
1 21575U 91050B 97007.19925715 .00000020 00000-0 20921-4 0 7434
2 21575 98.3281 73.2520 0008452 19.1220 341.0283 14.37051971287361
KO-23
1 22077U 92052B 97007.42390446 -.00000037 00000-0 10000-3 0 6320
2 22077 66.0773 121.8350 0014838 250.6372 109.3042 12.86300303207079
KO-25
1 22828U 93061F 97007.13993698 .00000029 00000-0 29075-4 0 05266
2 22828 98.5601 85.0964 0010988 343.1795 16.9017 14.28165045139220
IO-26
1 22826U 93061D 97007.13718487 -.00000028 00000-0 62599-5 0 05433
```

2 22826 98.5647 85.0222 0010366 359.1235 0.9930 14.27823171171101
AO-27
1 22825U 93061C 97007.15641836 .00000030 00000-0 29880-4 0 05456
2 22825 98.5642 84.8343 0009506 358.1739 1.9402 14.27714675171099
FO-29
1 24278U 96046B 97007.18262385 -.00000019 00000-0 19707-4 0 491
2 24278 98.5630 70.2024 0350572 243.4011 113.0807 13.52628360 19352
MO-30
1 24305U 96052B 97007.32503218 .00000203 00000-0 20364-3 0 593
2 24305 82.9282 113.4491 0031658 298.4554 61.3380 13.73089439 16982
Mir
1 16609U 86017A 97007.14260667 .00002896 00000-0 38559-4 0 9437
2 16609 51.6510 175.6867 0013432 211.6664 148.3500 15.61940194621887

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
January 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

End of Ham-Space Digest V97 #17
****

Date: 18 Jan 1997 09:56:28 GMT
From: angie@tccs.net
Subject: CD-Recordable Media for Sale

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

Date: Thu, 16 Jan 1997 14:37:44 +0100
From: Rafael Garcia <rafael@hp433.cide.upm.es>
Subject: EMOTO EV700D5X schematic, anyone?

Hi all,

I'm looking for EV700D5X controller box schematic. I have the unit
damaged, and the manual included with the rotator hasn't included.

So please, if anyone of you got this rotator with its schematic, I'd
like to get a copy.

Many thanks in advance,

Rafael,
Madrid, SPAIN

Date: Wed, 15 Jan 1997 13:19:21 -0800
From: dick@merlin.libelle.com (Dick Flanagan)
Subject: Facts vs Opinions

In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
<ecstka@ldecs.ericsson.se> wrote:

>Has anyone seen "teddy bears" callsign?

Perhaps that =is= his callsign.
--
Dick Flanagan W6OLD CFII Minden, Nevada

Visit http://wadg.greatbasin.net/siera/

Date: 17 Jan 1997 14:17:03 GMT
From: "Richard B. Langley" <lang@unb.ca>
Subject: Mac SE30 tracking program?

In article <32DDE87E.7C1E@mwt.net> scott, acepilot@mwt.net writes:
> Anybody know of a decent tracking program that can run on a Macintosh
> SE30?
> --Scott N0EDV--

MacSat 3.1 is also now FREELY available. E-mail me for a copy.
-- Richard Langley
Professor

==========
Richard B. Langley Internet: LANG@UNB.CA or SE@UNB.CA
Geodetic Research Laboratory BITnet: LANG@UNB or SE@UNB
Dept. of Geodesy and Geomatics Engineering Phone: (506) 453-5142
University of New Brunswick FAX: (506) 453-4943
Fredericton, N.B., Canada E3B 5A3 Telex: 014-46202
==========

Date: Sun, 12 Jan 97 18:43:21 GMT
From: trandall@mhv.net
Subject: new mir freq for 1997

In article <19970112060700.BAA13048@ladder01.news.aol.com>, mayrosec@aol.com (Mayrosec)
wrote:
>Are these freqs for voice or packet.
>
>I am a newby to the MIR experience
>
>Clay Mayrose, WA6LBU

The freqs for 2 meters are for both voice AND packet.
145.800 down, 145.200 up.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

Date: 17 Jan 1997 03:39:24 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set: Space Shuttle (97016.23651797)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97016.23651797 -.00001969 00000-0 -17291-4 0 9695
2 16609 51.6519 129.9381 0007726 283.4379 76.5748 15.60290189623304
STS 81
1 24711U 97001A 97016.25000000 -.00000324 00000-0 24189-5 0 138
2 24711 51.6505 129.8737 0008053 282.7447 153.0381 15.60273028 607
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 17 Jan 1997 23:08:24 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Set: Space Shuttle (97017.13319379)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97017.13319379 .00028954 00000-0 35132-3 0 9720
2 16609 51.6518 125.4282 0008266 288.5721 71.5000 15.60332705623443
STS 81
1 24711U 97001A 97017.25000000 -.00000323 00000-0 24407-5 0 164
2 24711 51.6501 124.8415 0008409 290.2191 6.4050 15.60318155 768
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 17 Jan 1997 21:58:45 GMT
From: mbv@ti.com (Ken Durham)
Subject: SASI Sattracker

Are the SASI, the KCT, and the high dollar TAPR kit
the only ones out there now? ...Seems like there were
a couple of others. TheSASI is overpriced for a cable
plus software and uses the computer ports. The KCT is
not stand alone box.

Is there a stand alone rotor control and tune box being
built now? The AMSAT page is no help and searches don't
turn up anything but software.

Ken K5MBV

Date: Thu, 16 Jan 1997 14:43:48 +0100
From: Rafael Garcia <rafael@hp433.cide.upm.es>
Subject: TAPR TrakBox

Dan Moore wrote:
>
> I recently bought the TAPR TrakBox and have had nothing but trouble.
> I can't get the dam thing to accept satellite data downloaded from my
> computer.

Could you be more explicit? This is not enough info to try to fix your
problem.

Anyway, the problem could be in the terminal program that you are using
for. The ascii upload should be paced to 100ms per line. I'm running
Telix on MS-DOS, and minicom for Linux, and none of them have problem to
upload kepler and satellite info to the TrakBox.

Cheers,

Rafael,
Madrid, SPAIN

Date: Thu, 16 Jan 1997 21:38:36 -0600
From: RickH <Nexus15@flash.net>
Subject: Wanted! 2M RHCP Helical for EME designs!

Teddy Bear wrote:
>
> On Fri, 10 Jan 1997, tyler wrote:
>
> > Teddybear:
> > I sure hope you don't expect any more help on your helical antenna after you
> > pulled this asshole stunt.

> >
> > Beggars can't be choosy.
>
> WHAT makes me a damn begger? I have info to give on other topics pal!
> Fair exchange is not robbery as the old saying goes. So get off your high
> horse because you do not have a corner on knowledge and even though I dont
> know it all, I certainly am not knowledgabley bankrupt!
>
> And AGAIN if I ask for a screwdriver and you give me a hammer then your
> idea of "help" is not help at all!
>
> What is so hard to understand about that? IT HAPPENS TO BE TRUE!

Teddy

But what if what you really need is a hammer?

Rick

Date: Tue, 14 Jan 1997 15:34:54 GMT
From: "Stacey E. Mills, M.D." <sem2r@virginia.edu>
Subject: Wisp32 problems with new year !!

Stephen McNeill wrote:
>
> On Fri, 10 Jan 1997 20:36:03 GMT, rossano@database.it (rossano) wrote:
>
> >Hello..my WISP32 doesn't track anymore from the 1st Jen 1997....!!!
> >Someone else have this problem ??
> >73 de Ros I4wrm e-mail rossano@database.it
> >
>
> Get a set of 1997 epoch satellite elements and the problem will go
> away for a while. The problem is know and I understand it will be
> looked at sometime in the near-ish future.
>
> 73
> Stephen ZL4HG

Actually, it doesn't seem to go away with 1997 keps, at least if you're
using a KCT/T card...but the problem is well known and will be addressed
very quickly as soon as Chris Jackson returns from New Zealand in the
next few days.

End of Ham-Space Digest V97 #18
****

239. Re: Mac SE30 tracking program?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-1801972134120001@tsa-p0.pconline.com>
Source record: 20193

In article <32DDE823.31F3@mwt.net>, scott <acepilot@mwt.net> wrote:

> Anybody know of a decent tracking program that can run on a Macintosh
> SE30?
> --Scott N0EDV--

OrbiTrack 2.1.5 works quite nicely... available in version needing an FPU,
or without FPU. Check the usual sites. It ran OK, but slow, on my old SE,
but on getting my SE/30 with FPU, boy did it make short work of a month's
worth of printouts. Real time track on a map, grayline map,
sunrise/sunset, satellite to satellite views... all the works.

John Seboldt K0JD

240. Re: Stsplus and win95

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: Les Alverson <docfester@aol.com>
Message-ID: <01bc05c1$f7598f40$bdfb0b26@junior>
Source record: 20194

I have had the same problems, but I found out that by disableing the Events Alarm cured my problems, that could be what is happening.
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or numbered" - The Prisoner

bret Johnson <bret@baj.com> wrote in article <32E10A08.4290@baj.com>...
> I have version 9650. It is installed on a 200mhz pentium pro.
> I can update the tle's jsut fine.
> Do pass preditcs just fine.
>
> However, If I goto a ORTHO or WORLD view map after about two mins it
> locks up. I have to power off to regain controll.
>
> Is there a fix or a win/win95 version.
>
> I have tried winorbit but, I do not like the maps it has..
>
> Thanks..
>
>

241. Re: A question on MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: Bob Snyder <rsnyder@pcisys.net>
Message-ID: <01bc05ce$8d320a40$6e664ccf@rocky>
Source record: 20195

> MIR packet simplex on 145.80
> MIR voice: MIR transmitts on 145.20
> I transmit on 145.80

I don't know what the packet is anymore but the voice is:

145.200 uplink
145.800 downlink

and yes these are reversed from what they were. I also heard that the packet was now split the same.

242. Re: weather sat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: beato@ibm.net
Message-ID: <32e14bef.2191432@news-s01.ca.us.ibm.net>
Source record: 20196

"kevin sturt" <pigsquill@msn.com> wrote:

> Can anybody help me ??
> I would like to be able to view the weather satalites via my scanner on
>my pc. I belive such decoding software is available but
>i don't know where to obtian it
> Any advice or suggestions would be greatly apprieciated or even better
>if there is a shareware version around perhaps you may be able to send me a
>copy???
> thanks again
> PIGSQUILL@MSN.COM
Kevin, have a look in this URL, maybe it fits your need

Hello.
I've just updated my FTV program, which does FAX & SSTV using a
SoundCard,
to decode Baudot using the same (FM) demodulation engine.

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can
be
analysed again at a different keying rate or polarity! Garbage can be
resampled on the fly, which means that minutes of received signals
decoded
at the wrong baud rate or keying polarity are recovered, on the fly,
while
still receiving.

(2) Keying rate and polarity are analysed automatically - standard
baud
rates are automatically set following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

(5) I wrote it, and I love it - I myself can't believe it works so
well!

Download your copy of FTV from my web site, at:
http://www.geocities.com/SiliconValley/2504

System requirements, and the standard features of FTV are described
in the
following page:
http://www.geocities.com/SiliconValley/2504/ftv.htm

By the way, AM signals from low orbiting weather satellites are also decoded - no extra interfaces needed. Demodulation mode is user selectable
in software.

Hope you all have a load of fun receiving 'words and pictures' - I hope to
get some feedback !

Happy New Year 1997
All the best from Brian, 9H1JS, on the Island of Malta.

243. Hams on mir/shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: perkiert@nildram.co.uk
Message-ID: <32e1f90d.0@scooby.nildram.co.uk>
Source record: 20197

Hi I wonder if any knows if The new member of the mir crew is a radio amateur I havn't seen any thing about that I know John who is coming down sts81 was.

244. Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32e24282.49345169@news.erols.com>
Source record: 20198

At first I thought this was a gag, but when the caller to NPR's "Car-Talk " said he was moving at 17,500 mph and was 200 miles north of Hawaii I took notice. One of the Astronauts had called in to talk to the Car-Talk guys! Apparently they let him use their shop back when he as in college. Pretty cool! (I heard it 18 Jan). I imagine the will post it soon on their Web Sit using Real Audio.

This sounds kind of unbelievable, but I found it somewhat easy to accept because I've talked to astronauts and cosmonauts in orbit (on 2 mweter FM phone)

73 de N2CQR

245. Re: weather sat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: Zubin Randeria <100611.3615@compuserve.com>
Message-ID: <32E29AA5.6FBD@compuserve.com>
Source record: 20199

kevin sturt wrote:
>
> Can anybody help me ??
> I would like to be able to view the weather satalites via my scanner on
> my pc. I belive such decoding software is available but
> i don't know where to obtian it
> Any advice or suggestions would be greatly apprieciated or even better
> if there is a shareware version around perhaps you may be able to send me a
> copy???
> thanks again
> PIGSQUILL@MSN.COM

Kevin,

A couple of points to note:

- your scanner will probanly have insufficient bandwidth to receive the full content of APT transmissions on 137Mhz. My AR8000's bandwidth is too narrow on narrow band FM, and way to wide on wide band FM. Either modify your scanner or buy/build a dedicated receiver.

- you can decode pictures using a dedicated hardware interface (best approach) but there is software around which uses a soundblaster card to decode pics. I have tried it and was not impressed with the results, although some people have had more success.

- if you are interested in receiving and decoding weather satellite pictures, why not join the Remote Imaging Group here in England. Membership costs GBP12 for overseas members (I think) but it is spectacular value - the journal is well written and full of interesting topics. I built a receiver and PC interface based on RIG designs for under GBP 100, and can receive great pics from NOAA 12 and 14.

Let me know if you need more information. I suggest you mail me directly if you do, on 10611.3615@compuserve.com

Regards,

Zubin

246. Re: Hams on mir/shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: KaLiMaN <kaliman@multipro.com>
Message-ID: <01bc0630$d274d440$3cb178cf@multipro.com.kaliman>
Source record: 20200

Paul Erkiert <perkiert@nildram.co.uk> wrote in article
<32e1f90d.0@scooby.nildram.co.uk>...
> Hi I wonder if any knows if The new member of the mir crew is a radio
> amateur I havn't seen any thing about that I know John who is coming
> down sts81 was.
>
>
Yes Jerry Linenger is a "HAM" his call is KG5HPR, I had a contact with him
on STS-64 (Discovery), on 10 Sept 94, also with Sue Helms (KB5SWR) on the
same flight 4 days later.

KaLiMaN

247. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: bin@asarginv.ORG.AR
Message-ID: <199701190631.AA01094@asarginv.org.ar>
Source record: 20201

Newsgroups: edu.ucsd.ham-space
Path: atina.UUCP!ucsd.edu!owner-ham-space
From: ham-space@UCSD.EDU (Ham-Space Mailing List and Newsgroup)
Subject: Ham-Space Digest V97 #19
Sender: bin@asarginv.org.ar (bin)
Organization: Asociacion Argentina de Inventores
Message-ID: <199701181636.IAA03538@mail.ucsd.edu>
Date: Sat, 18 Jan 1997 16:36:22 GMT

Ham-Space Digest Sat, 18 Jan 97 Volume 97 : Issue 19

Today's Topics:
Rebellions in Space!!!

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 18 Jan 1997 16:21:13 GMT
From: wmeara@erols.com (Bill Meara)
Subject: Rebellions in Space!!!

I was watching The Learning Channel last night. They ran a program
astronaut/ cosmonaut health. Norm Thagard was interviewed. At one
point they mentioned an American Shuttle astronaut who - while on a
space walk- was overwhelmed with the wonder of it all and essentially
refused to come back inside. Had to be dragged back in by the tether!
Did this really happen?

They also reported on a rebellion by a MIR crew. Disgusted with their
ground controllers, they turned off their radios and wouldn't
communicate for several weeks! Does anyone have info on this
incident?

Thanks 73 N2CQR

End of Ham-Space Digest V97 #19
****

248. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32E2E753.20A2@mwt.net>
Source record: 20202

Bill Meara wrote:
>
> At first I thought this was a gag, but when the caller to NPR's
> "Car-Talk " said he was moving at 17,500 mph and was 200 miles north
> of Hawaii I took notice. One of the Astronauts had called in to
> talk to the Car-Talk guys! Apparently they let him use their shop
> back when he as in college. Pretty cool! (I heard it 18 Jan). I
> imagine the will post it soon on their Web Sit using Real Audio.
>
> This sounds kind of unbelievable, but I found it somewhat easy to
> accept because I've talked to astronauts and cosmonauts in orbit (on 2
> mweter FM phone)
>
> 73 de N2CQR

But if the "astronaut" or astronut was using a cellular phone, he'll have
a pink slip waiting for him upon his return to Earth. You can't even use
a cellular phone in an airplane let alone 200 miles up! Probably just a
radio show gag...
73, scott

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

249. Re: READ: 2M & 440 Band Threats - TELEDESIC SATELLITES

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <32e247fb.3096779@news.fastlink.com.au>
Source record: 20203
Cross-posted to: rec.radio.amateur.antenna,rec.radio.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Mark Johnson <mark.johnson@symbios.com> wrote:

:> None of our spectrum should be assumed to be safe. There are
:> companies out there with viable business plans looking at all
:> of it. Improvements in technology have made this possible, and
:> growth in demand for wireless services has made it potentially
:> very profitable.
:
:I think this is absolutely correct. If we can't demonstrate that
:amateur radio is a service, not just a hobby, the new policies
:regarding spectrum usage will likely flush us right down the
:bowl.

Yet amateur radio is just a hobby and a lot of the amateur frequencys
are wasted and should be reassigned. All amateur bands could be
reduced by 50% with no loss to amateur radio.

==========
When replying please remove the spaces from my email
address. They are included to fool automatic replys.

Unsolicited commercial emails are not wanted.
Unsolicited replys to my article are welcome.

250. Ham Radio in Scouting ScoutRadio WWW

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: myriad1@ix.netcom
Message-ID: <myriad1-ya02348000190197154936000 1@nntp.ix.netcom.com>
Source record: 20204
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc

ScoutRadio WWW is a "good turn project" of Troop 319, Huntington Beach, California USA. Our goal is to promote amateur radio in Scouting. Over 500,000 Past & present Scouts & Scouters. Scouts & Scouters in amateur radio helping their communities in times of natural disasters, emergencies and humanitarian aid.

ScoutRadio projects since we went online 6 months ago: Scouts helping US Huricane Center; ScoutRadio Summer Camp HF Net; Scouts Protecting the Ham Bands; Stateside ScoutRadio HF Net; Egyptian HF Communications for Humanitarian Medical Relief; JOTA "Matchmaking" Service; Featured in ARRL newsletter; Red Cross Communications for Scouts & Scouters.

If you wish to subscribe ScoutRadio email list please send us an email with the SUBJECT to read exactly "SCOUTRADIO SUBSCRIBE".

Mel KO6TF
ASM Troop 319 & Webmaster Advisor
ScoutRadio@Scout.net
http://www.ocbsa.org/troop319/ham.htm

251. Re: Hams on mir/shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <853722939.20202@dejanews.com>
Source record: 20205

In article <32e1f90d.0@scooby.nildram.co.uk>,
perkiert@nildram.co.uk (Paul Erkiert) wrote:
>
> Hi I wonder if any knows if The new member of the mir crew is a radio
> amateur I havn't seen any thing about that I know John who is coming
> down sts81 was.

Jerry Lineger is a ham, KC5HBR. By the way, in Feburary Reinhold
Ewald will be going to Mir,
DL2MIR.

Tom
----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

252. trackbox

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <32E2EC07.6C63@vibroplex.com>
Source record: 20206

tapr sells a trakbox kit... check out the specs at
http://www.tapr.org

i have one assembled in a very nice professionally lettered
box that i no longer use... i would like to sell it...

let me know if u r interested...

mitch, w4oa

Felton "Mitch" Mitchell, W4OA email: w4oa@vibroplex.com
The Vibroplex Co., Inc., 11 Midtown Park, E., Mobile, AL 36606-4141 USA
Orders 800-840-8873, Info 334-478-8873, FAX 334-476-0465
Visit our www site at: http://www.vibroplex.com

253. Re: A question on MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: kd7aat@ior.com
Message-ID: <32e36518.2014600@nntp.ior.com>
Source record: 20207

tsarah@gwis.com (Ted Sarah) wrote:

>I was also told that MIR had shifted from 145.550 to 145.80/145.20.

Yes they did.

> Please correct me if the following is incorrect (it's from the Feb '97 issue of CQ VHF):
> MIR packet simplex on 145.80
> MIR voice: MIR transmitts on 145.20
> I transmit on 145.80

Correction......
Wrong!! I just connected to Mir Packet the other day for the
jillionth time and the following is the freq plan........

145.800- (standard 600 offset) for BOTH VOICE AND PACKET.

In plain terms. Listen on 145.800 and transmit on 145.200. Listen
first. If you hear packet, don't transmit voice. If you hear
voice, turn off your tnc........

Have a nice day.

Bus Driver Mobile KD7AAT "John"
http://www.ior.com/kd7aat

254. This Great Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-01-19 00:00:00 UTC
From: Rich <kf4bia@mail.dbeach.com>
Message-ID: <32e1ac28.0@204.71.8.22>
Source record: 20208

Look at this great ham site:

http://www.dbeach.com/~kf4bia/index.htm

255. Equipment needed for space

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: rok.zevnik@guest.arnes.si
Message-ID: <32e3a2f6.9590364@news.arnes.si>
Source record: 20072

Hi all
I just started in HAM and would like to know what do I need to
comunicate via amateue satelite and to to make EME contact?

Thanks in advance from

Rok, S56LCW

256. Satellite Comms Question

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: info@hypermall.com
Message-ID: <info-ya023480002001971449230001@news.eskimo.com>
Source record: 20073

I apoligize in advance if this doesn't belong here... what can I say?

I'm looking for information on duplex data satellite systems =-= cost and reliability figures. I need to install a system in a VERY rural location. The data rate need not be huge - 2Megabit/second should be sufficient to start with.

Can any readers here point me at the right newsgroup, or even the right systems? Any and all help would be greatly appreciated.

Please e-mail to lurch@eskimo.com

--
Erik Kloeppel
Vice President, CFO
Interlink Advertising Services, Inc

257. ATV Rocket video available

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: forsberg@io-online.com
Message-ID: <32e3aed9.3871865@news.io-online.com>
Source record: 20074
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

On 11/23/96 an amateur rocket launch occurred carrying an ATV payload. It went to a height of 50+ miles. An AVI file of the launch is available at my web site. It can be reached at:

http://web.io-online.com/users/forsberg/atv.htm

Once there go to the ATV Movie files section. This launch was sponsored by the Reaction Research Society. The ATV payload was designed and built by Mike Henkoski, KC6CCC.

73 Bruce WB6IZG
ATV Home Page: http://web.io-online.com/users/forsberg/atv.htm
Email: forsberg@io-online.com

258. SASI Satracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5bufe0kqh1@excalibur.flash.net>
Source record: 20209

Does anyone know of a standalone box to
run the rotors and the transceiver tuning
for satellite tracking? I am not interested
in a kit or anything that uses my computer
ports. The SASI is interesting but doesn't
meet these criteria. The KCT uses the computer
and I don't know if it ties up any ports.
The TAPR box is ideal except for the price
and the fact that its a kit.

There was another one..... can't remember
the name or source though.

Ken K5MBV mbv@flash.net

259. Re: Rebellions in Space!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc069a$19f8d780$3a8142ce@dale>
Source record: 20210

'Mutiny' may be a bit strong. It was probably something
more like a lively discussion with the flight director about the work load
which led to a 'day off' being put in the timeline for the crewmembers.
I think that is done on the flights now as a matter of routine.

Back in the Skylab days, I think one of the crews really did let their
feelings known about the work load and the lack of free time. They
were subsequently given 'off days', etc.

When the planners set up the schedules on the ground during the
planning stages of the flight, 'reality' doesn't set in until the crew
is actually performing the activities and the schedules are or are
not being met. Usually, the planners are pretty good about it, but
on a flight manifested with beaucoup experiments, the schedule
can and does go through all kinds of revisions during the flight.

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Practice <Eckart@usa.net> wrote in article
<01bc0541$6954a7a0$8c6a2299@eckart>...
> I don't know but I know there was a mutiny in space. The Space Shuttle
crew
> was working very hard every waking moment for a long time during the
> mission and mutinied for a while so they could relax, play and admire the
> galaxy. I herd that from a Shuttle astronaut during a TV interview.
>
> KD6FEE
>
> Bill Meara <wmeara@erols.com> wrote in article
> <32e0f768.84990176@news.erols.com>...
> > I was watching The Learning Channel last night. They ran a program
> > astronaut/ cosmonaut health. Norm Thagard was interviewed. At one
> > point they mentioned an American Shuttle astronaut who - while on a
> > space walk- was overwhelmed with the wonder of it all and essentially
> > refused to come back inside. Had to be dragged back in by the tether!
> > Did this really happen?
> >
> > They also reported on a rebellion by a MIR crew. Disgusted with their
> > ground controllers, they turned off their radios and wouldn't
> > communicate for several weeks! Does anyone have info on this
> > incident?

> >
> > Thanks 73 N2CQR
> >
>

260. Re: Hams on mir/shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc0698$e2775bc0$3a8142ce@dale>
Source record: 20211

Jerry Linenger, the U.S. astronaut remaining onboard Mir, is a ham.
His call is KC5HBR.
Hopefully, he will be as active as John was...

73 and good luck,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Paul Erkiert <perkiert@nildram.co.uk> wrote in article
<32e1f90d.0@scooby.nildram.co.uk>...
> Hi I wonder if any knows if The new member of the mir crew is a radio
> amateur I havn't seen any thing about that I know John who is coming
> down sts81 was.
>
>

261. Re: A question on MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.217.0007D0D3@hugo.rz.fh-ulm.de>
Source record: 20212

```
>> MIR packet simplex on 145.80
>> MIR voice: MIR transmitts on 145.20
>> I transmit on 145.80

>I don't know what the packet is anymore but the voice is:

>145.200 uplink
>145.800 downlink

packet uses the same frequencies:

145.200 up
145.800 dwn
```

262. Re: MIR jump ?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: "Matthew T. Jachimstal" <mtj@usa.net>
Message-ID: <01bc0665$0c044040$7c51db8d@jachsys.resnet.mtu.edu>
Source record: 20213

Rainer Redweik <Rainer.Redweik@t-online.de> wrote in article
<5bn5i1$11a@news00.btx.dtag.de>...

Replies pulled from various AMSAT bulletins:

> Hello together,
> I have question to the specialists:
> 1. while following the MIR-positions I found a big jump
> from the 7th day in '97 to the 12th day. Around 5000 km.
>

Those tracking the MIR should be sure their Keplerian elements
are post 97008 due to a maneuver MIR made on that date.

No reason was given for this manuever, but it probably was for the
redezvous.
> Was it a maneuver for meeting the shuttle ?

> 2. Does someone know, why the Kepler-data of AO-10 are so old ?

Stacey E. (Chuck) Mills, W4SM, reports that
Ken Ernandes is attempting to obtain updated Keps, however the satellite is

apparently in an inopportune orbit to accomplish this. It has been
suggested that amateurs may be able to do better, at least for the next few
months by various ranging experiments of their own.. There have been
various discussion on AMSAT-BB on this. However, in the meantime, AO-10's
orbit doesn't change very fast. Parameters are now off by a bit,
especially at perigee. W4SM calculated the blon/blat, -125/5, about one
year ago and is waiting to see if predictions for this year hold up.

>
> In the last updates they were alway from 96299.11...
> Thank you very much !
> So long !
> Rainer

--

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtj@usa.net or mtjachim@mtu.edu Voice: 906-487-0899
| WWW: http://netnet.net/~jachim Pager: 906-222-9880
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

263. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc0698$6b6666c0$3a8142ce@dale>
Source record: 20214

Actually, the conversation between the crewmember
(Grunsfeld? Jett? not sure) and the Tappitt Brothers
(John and Ray Maliocci (I'm guessing here on the
spelling of their last name) was conducted via the
air-to-ground with the Johnson Space Center's Mission
Control Center, their Public Affairs Office, and and NPR
on Thursday or Friday.

73
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Bill Meara <wmeara@erols.com> wrote in article
<32e24282.49345169@news.erols.com>...
> At first I thought this was a gag, but when the caller to NPR's
> "Car-Talk " said he was moving at 17,500 mph and was 200 miles north
> of Hawaii I took notice. One of the Astronauts had called in to
> talk to the Car-Talk guys! Apparently they let him use their shop
> back when he as in college. Pretty cool! (I heard it 18 Jan). I
> imagine the will post it soon on their Web Sit using Real Audio.
>
> This sounds kind of unbelievable, but I found it somewhat easy to
> accept because I've talked to astronauts and cosmonauts in orbit (on 2
> mweter FM phone)
>
>
> 73 de N2CQR
>

264. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970120005725.5152A-100000@prog1.caprica.com>
Source record: 20215
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Wed, 15 Jan 1997, Dick Flanagan wrote:
> In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
> <ecstka@ldecs.ericsson.se> wrote:
>
> >Has anyone seen "teddy bears" callsign?

My call sign is MY business OFF the air. So is yours. If you don't like that, tough tetrodes!

Since when is a ham callsign required to post in usenet?

As I have said to someone here before, I do not give my callsign off the air.

If you need a callsign, my internet "callsign" appears at the top of my messages. Deal with it.

265. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970120010559.5152B-100000@prog1.caprica.com>
Source record: 20216
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Thu, 16 Jan 1997, RickH wrote:

> > On Fri, 10 Jan 1997, tyler wrote:

> > Beggars can't be choosy.
> > >
> > WHAT makes me a begger? I also have info to give on other topics pal!
> > Fair exchange is not robbery as the old saying goes. So get off your high
> > horse because you do not have a corner on knowledge and even though I dont
> > know it all, I certainly am not knowledgabley bankrupt!
> >
> > And AGAIN if I ask for a screwdriver and you give me a hammer then your
> > idea of "help" is not help at all!
> >
> > What is so hard to understand about that? IT HAPPENS TO BE TRUE!
>
> Ted
>
> But what if what you really need is a hammer?

Then I'd have asked for one. I'm a pioneer. I dont follow trails, I cut them.

266. MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: subbustr@whidbey.net
Message-ID: <5c03m2$dtg@news.whidbey.com>
Source record: 20217

Anybody have a list?? I'm near Seattle, WA

thanks..dave

Oak Harbor,WA
98277
subbustr@whidbey.net
de VE7-LFA/W7

267. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32e3f93b.6766650@news.erols.com>
Source record: 20218

On 20 Jan 1997 06:09:49 GMT, "Dale Martin" <kg5u@hal-pc.org> wrote:

>Actually, the conversation between the crewmember
>(Grunsfeld? Jett? not sure) and the Tappitt Brothers
>(John and Ray Maliocci (I'm guessing here on the
>spelling of their last name) was conducted via the
>air-to-ground with the Johnson Space Center's Mission
>Control Center, their Public Affairs Office, and and NPR
>on Thursday or Friday.
>

Thanks Dale. I knew it sounded authentic! I'm pretty sure it was Grunsfield. It was by far the most memorable call taken by Click and Clack! Could you fill us in on how the call was placed? Is this new equipment? Do the astronauts use the smae circuits to phone home?

Thanks. 73 Bill N2CQR

268. Re: SASI Sattracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5c0dmr$j22@tilde.csc.ti.com>
Source record: 20219

In article <32e2c515.1323527@news.smartt.com>, ooraargg@fznegg.pbz says...
>
>>
>Hi Ken,
>the problem with a stand alone controller is that you would have to
>manually input the Keplarian elements and doppler offsets,
>so, in essence, the stand alone unit would still have to employ some
>sort of microprocessor thereby making a stand alone unit extremely
>expensive.
>
>As for a tracking unit, I built my own, using the Fodtrack 2.0
>software/schematic...freeware! (search for it with this engine:
>http://ftpsearch.ntnu.no/ftpsearch filename" fodtrk20.zip")
>total cost of the controller..about $30.00 Cdn.
>
>~~~~~~`
The box I'm looking for took its Keps from a computer file.

Microprocessors sell for about $5 or $10, and are even used
in $100 stereo receivers nowdays, so that shouldn't cause
a unit to be expensive.

I have the Fodtrack program.Using it to do doppler
tuning now. I don't want to build the tracking unit
and tie up a serial and a printer port also.
The program is excellent and its *free* so I may
end up buying the unit from AMSAT-CE. It only
costs $110 for the box and cables to the computer
and the rotor box. Still, there was a box...

Ken K5MBV

269. Re: weather sat software

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <32E402C7.3744@erols.com>
Source record: 20220

Zubin Randeria wrote:
>
> kevin sturt wrote:
> >
> > Can anybody help me ??
> > I would like to be able to view the weather satalites via my scanner on
> > my pc. I belive such decoding software is available but
> > i don't know where to obtian it
> > Any advice or suggestions would be greatly apprieciated or even better
> > if there is a shareware version around perhaps you may be able to send me a
> > copy???
> > thanks again
> > PIGSQUILL@MSN.COM
>
> Kevin,
>
> A couple of points to note:
>
> - your scanner will probanly have insufficient bandwidth to receive the
> full content of APT transmissions on 137Mhz. My AR8000's bandwidth is
> too narrow on narrow band FM, and way to wide on wide band FM. Either
> modify your scanner or buy/build a dedicated receiver.
>
> - you can decode pictures using a dedicated hardware interface (best
> approach) but there is software around which uses a soundblaster card to
> decode pics. I have tried it and was not impressed with the results,
> although some people have had more success.
>
> - if you are interested in receiving and decoding weather satellite
> pictures, why not join the Remote Imaging Group here in England.
> Membership costs GBP12 for overseas members (I think) but it is
> spectacular value - the journal is well written and full of interesting
> topics. I built a receiver and PC interface based on RIG designs for
> under GBP 100, and can receive great pics from NOAA 12 and 14.
>
> Let me know if you need more information. I suggest you mail me directly
> if you do, on 10611.3615@compuserve.com
>
> Regards,
>
> Zubin You might want to try Marius Rensen's site which has LOTS of info on
weather FAX and software. If memory serves, the URL below is correct.
Good luck and 73s Mike

http://ourworld.compuserve.com/homepages/HFFAX/

270. Looking for VHF/UHG Satellite Ham Radio FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-01-20 00:00:00 UTC
From: mic@hpfimic.fc.hp.com
Message-ID: <MIC.97Jan20151212@hpfimic.fc.hp.com>
Source record: 20221

Could some kind soul please point me to the FAQ about this group?
I have all the standard no-code Technician questions:

1) Can I talk via satellites using my dual band VHF/UHF 5 Watt hand
held? Can I talk to the shuttle and/or Mir?

2) Where do I find sources of tracking programs that will run on DOS
and Windows 3.1? Hopefully low-registration-fee shareware.

3) How do I learn which satellites I can talk to and listen to on VHF
and UHF FM?

4) What are the recommended antenna set ups? Starting with a roof
mounted VHF/UHG discone and working on up to dual band VHF/UHF
hand-held Yagis and thenup to dual axis rotators and control
software.

5) When I upgrade to General later this year, all the above questions
but with HF included?

I bet I am about the millionth person to ask all these questions. I
bet you are pretty tired of seeing these same beginner questions over
and over again. Where might I find the FAQ?

--
Marc Illsley Clarke, mic@frii.com, KB0YDL, KB0YDL@N0MPI.#NECO.CO.USA.NOAM
4857 North Sheridan Avenue, Loveland, Colorado 80538-1767 USA
(Representing solely myself, I am emphatically NOT a representative of
any employer, club, group, church, league, organization, or government!)

271. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc075a$99219fe0$298142ce@dale>
Source record: 20075

I can find out exactly how the call was placed tomorrow.

But, in the past, it was simply a patch from the air-to-ground loop through the Mission Control Center's Commcontrol to the Public Affairs Office's Audio Control Room. The ACR either made the actual landline phone call to or took the call from NPR. The line quality was checked, then patched to MCC where it was again checked on the ground. Then it was switched to the a/g and Grunsfeld probably did a voice check to confirm audio quality both ways. Then or a few minutes later, the 'phone call' was made with the Tappett Brothers.

This is pretty much the norm for the inflight media interviews (e.g., news media, radio/TV stations, etc.) since the Apollo Program. They are done on the open a/g circuits with landline interface at MCC & PAO.

As far as I know, the only time their comm is made private (imbedded in the digital downlink?) is during medical conferences with the flight surgeons or during private family conferences.

73,

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Bill Meara <wmeara@erols.com> wrote in article
<32e3f93b.6766650@news.erols.com>...
> On 20 Jan 1997 06:09:49 GMT, "Dale Martin" <kg5u@hal-pc.org> wrote:
>
> >Actually, the conversation between the crewmember
> >(Grunsfeld? Jett? not sure) and the Tappitt Brothers
> >(John and Ray Maliocci (I'm guessing here on the
> >spelling of their last name) was conducted via the
> >air-to-ground with the Johnson Space Center's Mission
> >Control Center, their Public Affairs Office, and and NPR
> >on Thursday or Friday.
> >
>
>
> Thanks Dale. I knew it sounded authentic! I'm pretty sure it was
> Grunsfield. It was by far the most memorable call taken by Click and

> Clack! Could you fill us in on how the call was placed? Is this new
> equipment? Do the astronauts use the smae circuits to phone home?
>
> Thanks. 73 Bill N2CQR
>

272. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: n4jvp@ix.netcom.com
Message-ID: <32e42345.7259977@nntp.ix.netcom.com>
Source record: 20076

On Mon, 20 Jan 1997 23:03:43 GMT, wmeara@erols.com (Bill Meara)
wrote:
>
>Thanks Dale. I knew it sounded authentic! I'm pretty sure it was
>Grunsfield. It was by far the most memorable call taken by Click and
>Clack! Could you fill us in on how the call was placed? Is this new
>equipment? Do the astronauts use the smae circuits to phone home?
>
>Thanks. 73 Bill N2CQR

Details concerning the call can be found at
http://www.cartalk.com/About/Space/index.html
Real Audio is also available.

NPR is cool and so are Ray and Tom. Many markets rebroadcast Car Talk
on Sunday, I believe it is live on Saturday. N2CQR's post made me make
certain that I listened to the rebroadcast yesterday.

John Grunsfeld placed the call using a cellular phone and the signal
was relayed by a high-orbiting satellite. When the call was made the
shuttle was about 200 miles north of Hawaii over the Pacific.
Grunsfeld was more specific about the details of the call and
hopefully it is in the Real Audio file.

73 de n4jvp
Fritz

cc: wmeara@erols.com
To reply to this message, please remove the
underscore from the beginning of the reply to
address. I'm trying to fight the spam-bots!

273. Re: SASI Satracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: dj1km@aol.com
Message-ID: <19970121133701.IAA10986@ladder01.news.aol.com>
Source record: 20077

Hello,
send an inquiry to Ron, w8gus@amsat.org about his Sattrack 4 system.
73
Reinhard in Hannover
DJ1KM

274. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan21.143848.3836@ke4zv.atl.ga.us>
Source record: 20078
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <5c0g75$iq8@nr1.ottawa.istar.net> lafont02@cn.ca (Don Lafontaine) writes:
>On 20 Jan 1997 03:32:12 GMT, "Erik Skovgaard"
><Erik_Skovgaard@bc.sympatico.ca> wrote:
>>Brian,
>>Lat I tried your software, it crashed under Windows 95. Did you fix it?
>
>Did you try rebooting to MS-DOS mode? Programs that demand heavy duty
>CPU time run better (At least run) only in MS-DOS mode (Not DOS IN A
>BOX). SBFFT is like this.

Yeah, at least you can get the main screen up if you reboot to DOS mode,
but when you give it the run command, it crashes and burns. It appears
to put the SVGA card in a very strange mode. The monitor goes into sweep
protect. And the only way out is a hardware reset. That's with it configured
for the default 640x480 mode, which should work on any hardware. I haven't
tried it yet in 1024x768. PC is a 100 MHz 486DX4 with 16 Mb RAM running
Windows 95 and using an ATI Mach64 video card and a Soundblaster 16 sound
card. I configured the EMS memory, and at sign on the program Oks that and
finds and checks the sound card Ok too. But give the Run command and the
screen goes dead and the machine locks solid. Not pretty.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

275. NORAD Two-Line Orbital Element Set: Space Shuttle (97021.16780985)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5c39qj$hd7@blackbird.afit.af.mil>
Source record: 20079

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97021.16780985 .00008684 00000-0 10942-3 0 9846
2 16609 51.6522 105.1287 0012941 344.3748 15.6772 15.60437456624077
STS 81
1 24711U 97001A 97021.34192130 -.00000339 00000-0 24169-5 0 279
2 24711 51.6531 104.2027 0027112 92.8197 190.5119 15.69094421 1405
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

276. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Michael Berg <mikeberg@midstate.tds.net>
Message-ID: <32E54D27.5F9F@midstate.tds.net>
Source record: 20080
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

I tried the FTV demo program and keep getting a memory error
when it loads. Any ideas?
73 Mike N0QBH

277. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: lafont02@cn.ca
Message-ID: <5c3ee4$7b@nr1.ottawa.istar.net>
Source record: 20081
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

>Yeah, at least you can get the main screen up if you reboot to DOS mode,
>but when you give it the run command, it crashes and burns. It appears
>to put the SVGA card in a very strange mode. The monitor goes into sweep
>protect. And the only way out is a hardware reset. That's with it configured
>for the default 640x480 mode, which should work on any hardware. I haven't
>tried it yet in 1024x768. PC is a 100 MHz 486DX4 with 16 Mb RAM running
>Windows 95 and using an ATI Mach64 video card and a Soundblaster 16 sound
>card. I configured the EMS memory, and at sign on the program Oks that and
>finds and checks the sound card Ok too. But give the Run command and the
>screen goes dead and the machine locks solid. Not pretty.

Interesting, I tried it last night, and it worked right off the bat.

486DX4-100
Trio S3 svga board
Soundblaster 16 w/WaveBlaster daughtercard
32 Megs RAM
Running QEMM.

I still haven't managed to decode anything yet, but I will persist!

Sorry, but that was the only clue I could offer.

Don Lafontaine VE2UFO

278. NORAD Two-Line Orbital Element Sets (TLE934)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5c3am3$hfb@blackbird.afit.af.mil>
Source record: 20082

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #934 -
Alouette 1
1 00424U 62049A 97018.70487898 .00000072 00000-0 74674-4 0 2610
2 00424 80.4640 71.0998 0022717 197.4281 162.6090 13.67886100711800
ATS 1
1 02608U 66110A 97015.21495196 -.00000154 00000-0 10000-3 0 9972
2 02608 14.5608 350.5405 0006833 101.3073 258.7888 1.00288901 26990
ATS 3
1 03029U 67111A 97015.46393770 -.00000125 00000-0 10000-3 0 6058
2 03029 14.9132 357.5022 0010997 270.2761 268.9458 1.00273023106895
Starlette
1 07646U 75010A 97020.45129977 -.00000182 00000-0 -32744-4 0 288
2 07646 49.8286 11.3470 0206211 227.9251 130.3941 13.82191467109012
LAGEOS
1 08820U 76039A 97020.26604019 -.00000003 00000-0 00000+0 0 2580
2 08820 109.8451 100.3953 0043616 81.4072 279.1627 6.38664540227693
ETS-2
1 09852U 77014A 97018.26314031 -.00000043 00000-0 10000-3 0 957
2 09852 13.4838 30.4753 0005772 151.8067 208.2517 1.00022232 19797
GOES 2
1 10061U 77048A 97018.61772602 .00000042 00000-0 10000-3 0 7897
2 10061 12.6522 34.6658 0010555 136.7225 353.0161 1.00287401 16607
IUE
1 10637U 78012A 97019.45930829 -.00000001 00000-0 10000-3 0 3474
2 10637 35.8115 80.1034 1343268 63.5023 356.3607 1.00065347 22105
GOES 3
1 10953U 78062A 97020.20970108 -.00000118 00000-0 10000-3 0 7685
2 10953 11.6579 37.5870 0000799 257.0289 155.4790 1.00263816 21233

```
SeaSat 1
1 10967U 78064A 97018.23014388 .00000001 00000-0 44945-4 0 5461
2 10967 107.9938 259.7189 0001807 279.4253 80.6683 14.38146504972365
Nimbus 7
1 11080U 78098A 97019.12242620 -.00000083 00000-0 -37406-4 0 6430
2 11080 98.9196 236.5298 0009448 101.3183 258.9040 13.83686201921032
GOES 5
1 12472U 81049A 97021.18021999 .00000070 00000-0 10000-3 0 9795
2 12472 8.5416 47.9857 0004187 82.3094 277.7808 1.00303696 15281
Cosmos 1383
1 13301U 82066A 97018.41962999 .00000008 00000-0 -74849-5 0 5592
2 13301 82.9303 335.9800 0028448 9.6818 350.4876 13.68079850726804
LandSat 4
1 13367U 82072A 97017.19887996 .00000051 00000-0 21136-4 0 387
2 13367 98.0457 67.2758 0006174 186.6947 173.4171 14.57195875771707
DMSP B5D2-1
1 13736U 82118A 97020.63067345 -.00000013 00000-0 12884-4 0 1604
2 13736 98.6224 211.5069 0009078 110.3385 249.8769 14.25816776732051
IRAS
1 13777U 83004A 97020.59490744 .00000314 00000-0 24614-3 0 5556
2 13777 98.9653 207.5005 0011535 213.2777 146.7655 13.99272677383775
Cosmos 1447
1 13916U 83021A 97020.53579965 -.00000007 00000-0 -22492-4 0 6518
2 13916 82.9424 30.2793 0036447 266.8729 92.8348 13.74349992693596
TDRS 1
1 13969U 83026B 97020.22609398 -.00000305 00000-0 00000+0 0 6977
2 13969 9.2934 41.5800 0002353 250.3007 220.1993 1.00267267 23568
GOES 6
1 14050U 83041A 97018.23742391 -.00000065 00000-0 10000-3 0 6063
2 14050 7.3807 51.6206 0002028 41.2616 358.9350 1.00218106108358
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97018.23192609 .00000011 00000-0 12812-4 0 5842
2 14780 98.3066 81.7277 0002902 5.0246 355.0959 14.57063708685271
UO-11
1 14781U 84021B 97018.50840014 .00000079 00000-0 21126-4 0 9445
2 14781 97.8170 5.8745 0012408 117.0836 243.1637 14.69517237689278
Cosmos 1574
1 15055U 84062A 97021.26298642 .00000053 00000-0 40578-4 0 8517
2 15055 82.9575 85.1220 0028905 93.1834 267.2627 13.73644098630921
Cosmos 1602
1 15331U 84105A 97018.56839843 .00000249 00000-0 26370-4 0 5333
2 15331 82.5344 271.2265 0019558 320.9556 39.0245 14.84831606664936
ERBS
1 15354U 84108B 97018.57880088 -.00000166 00000-0 64320-5 0 2502
2 15354 56.9952 237.4413 0003847 164.9280 195.1865 14.95012279669053
NOAA 9
1 15427U 84123A 97020.82762263 .00000005 00000-0 25948-4 0 78
```

```
2 15427 98.9235 91.5873 0015960 58.1423 302.1298 14.13831490624386
Mir
1 16609U 86017A 97021.16780985 .00008684 00000-0 10942-3 0 9846
2 16609 51.6522 105.1287 0012941 344.3748 15.6772 15.60437456624077
SPOT 1
1 16613U 86019A 97018.83285508 -.00000045 00000-0 00000+0 0 254
2 16613 98.8145 92.2034 0000979 53.6784 306.4489 14.19996083250913
Cosmos 1766
1 16881U 86055A 97020.87955539 .00000251 00000-0 27298-4 0 4486
2 16881 82.5173 326.7035 0019492 344.0905 15.9691 14.83803938566126
EGP
1 16908U 86061A 97018.41273021 -.00000083 00000-0 10000-3 0 1471
2 16908 50.0074 55.3044 0011506 201.0520 158.9843 12.44415581143209
NOAA 10
1 16969U 86073A 97020.72675706 -.00000007 00000-0 15263-4 0 9374
2 16969 98.5337 17.6805 0014240 78.0822 282.1951 14.25016789537582
MOS-1
1 17527U 87018A 97021.20754496 -.00000043 00000-0 00000+0 0 5085
2 17527 98.9117 84.1488 0020399 80.5733 279.7734 14.00432640505509
GOES 7
1 17561U 87022A 97020.25795145 -.00000174 00000-0 10000-3 0 2445
2 17561 3.4935 67.9340 0005279 327.3104 83.2227 1.00272905 19480
Kvant-1
1 17845U 87030A 97020.91156003 .00021233 00000-0 25791-3 0 8779
2 17845 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922558149
DMSP B5D2-3
1 18123U 87053A 97020.67315965 -.00000001 00000-0 21680-4 0 7753
2 18123 98.7647 213.3599 0014464 357.6325 2.4777 14.15464217495268
RS-10/11
1 18129U 87054A 97019.87792197 .00000016 00000-0 14142-5 0 3090
2 18129 82.9254 348.3594 0010259 277.5951 82.4041 13.72373499479896
Meteor 2-16
1 18312U 87068A 97019.54152784 .00000012 00000-0 -24232-5 0 5387
2 18312 82.5540 180.4707 0012570 340.2628 19.8044 13.84090279476105
Meteor 2-17
1 18820U 88005A 97020.52965610 .00000002 00000-0 -11474-4 0 1561
2 18820 82.5414 234.1964 0018107 37.9443 322.2992 13.84768082453605
DMSP B5D2-4
1 18822U 88006A 97020.14404405 .00000010 00000-0 22421-4 0 4422
2 18822 98.3792 207.8392 0006958 88.3865 271.8108 14.23213598465435
Glonass 34
1 19163U 88043A 97020.32480834 -.00000026 00000-0 10000-3 0 1493
2 19163 65.3668 78.5196 0007117 138.3323 221.8131 2.13103195 66860
Glonass 36
1 19165U 88043C 97013.34304418 -.00000024 00000-0 10000-3 0 5573
2 19165 65.3192 78.7089 0004847 341.8040 18.2427 2.13102062 67332
METEOSAT 3
1 19215U 88051A 97019.13692810 -.00000067 00000-0 10000-3 0 3000
2 19215 3.6940 66.5686 0006020 131.6125 228.3499 0.96946940 19279
OKEAN 1
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1 19274U 88056A 97019.57426063 .00000193 00000-0 20925-4 0 1480
2 19274 82.5126 69.0484 0020752 127.5472 232.7650 14.82565615461430
Meteor 3-2
1 19336U 88064A 97020.51760955 .00000051 00000-0 10000-3 0 5440
2 19336 82.5384 12.6349 0018409 52.1705 308.1078 13.16980796408088
Glonass 39
1 19503U 88085C 97015.72005597 -.00000061 00000-0 10000-3 0 4395
2 19503 65.4995 317.5519 0002970 136.9952 223.0387 2.13101786 64871
NOAA 11
1 19531U 88089A 97020.81737928 .00000010 00000-0 30250-4 0 8270
2 19531 99.1696 50.4206 0012014 354.7935 5.3106 14.13118496429189
TDRS 3
1 19548U 88091B 97015.75173666 -.00000204 00000-0 10000-3 0 2653
2 19548 2.9170 70.7431 0006677 187.3994 212.9930 1.00274026 17665
Glonass 40
1 19749U 89001A 97018.10370736 -.00000045 00000-0 10000-3 0 6520
2 19749 65.3002 78.1088 0007105 257.3524 102.6288 2.13101482 62435
Glonass 41
1 19750U 89001B 97019.56626312 -.00000033 00000-0 10000-3 0 5590
2 19750 65.3064 78.1303 0008780 231.9261 128.0574 2.13101772 62488
GPS BII-01
1 19802U 89013A 97018.53304682 -.00000070 00000-0 00000+0 0 3460
2 19802 55.4276 102.0617 0020045 179.5852 180.4471 2.00560657 58038
Akebono
1 19822U 89016A 97020.43647252 .00005997 00000-0 31265-3 0 8480
2 19822 75.1140 357.3532 3727193 301.7874 27.2292 7.95718228183939
Meteor 2-18
1 19851U 89018A 97020.75022166 .00000067 00000-0 46822-4 0 5363
2 19851 82.5239 107.6175 0015734 85.7096 274.5862 13.84424896398932
MOP-1
1 19876U 89020B 97018.69985477 -.00000055 00000-0 00000+0 0 2421
2 19876 2.4260 70.9623 0017167 280.5755 79.0210 0.97108751 8711
TDRS 4
1 19883U 89021B 97008.50016387 -.00000263 00000-0 00000+0 0 3000
2 19883 0.2910 87.4539 0004925 189.6775 330.0226 1.00269168201161
GPS BII-02
1 20061U 89044A 97019.86907382 -.00000024 00000-0 10000-3 0 3404
2 20061 54.0559 277.4469 0165326 223.1625 135.6158 2.00562781 55800
Nadezhda 1
1 20103U 89050A 97020.82182411 .00000083 00000-0 71827-4 0 466
2 20103 82.9638 308.1672 0037213 165.1795 195.0448 13.73873295378569
GPS BII-03
1 20185U 89064A 97018.56922190 -.00000070 00000-0 10000-3 0 3820
2 20185 55.2246 102.4740 0016220 340.3824 19.5801 2.00551776 54359
GMS 4
1 20217U 89070A 97 9.56805051 .00000000 00000-0 10000-3 0 5205
2 20217 2.2124 73.4893 0003386 320.7376 39.2420 1.00266075 27496
INTERCOSMOS 24
1 20261U 89080A 97017.40333142 .00000195 00000-0 60843-4 0 5592
2 20261 82.5929 133.9113 1240366 274.5665 71.5124 12.47377627332617
```

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GPS BII-04
1 20302U 89085A 97017.74132577 .00000077 00000-0 10000-3 0 3629
2 20302 53.1937 217.2482 0026672 187.7523 172.2740 2.00571843 53134
Meteor 3-3
1 20305U 89086A 97019.88804482 .00000044 00000-0 10000-3 0 7371
2 20305 82.5576 334.7792 0010107 138.4161 221.7793 13.04436843346452
COBE
1 20322U 89089A 97020.60416044 .00000297 00000-0 21723-3 0 2760
2 20322 98.9311 38.0997 0009115 147.7607 212.5567 14.03464627367423
Kvant-2
1 20335U 89093A 97020.91156003 .00021233 00000-0 25791-3 0 7991
2 20335 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922407151
GPS BII-05
1 20361U 89097A 97019.25680121 -.00000051 00000-0 10000-3 0 1663
2 20361 56.1239 44.7426 0090929 140.9413 219.7688 2.00565639 42641
COSMOS 2054 (Altair-1)
1 20391U 89101A 97020.08718336 -.00000144 00000-0 00000+0 0 4970
2 20391 4.2506 62.0891 0002655 186.6669 246.1698 1.00273570 26177
SPOT 2
1 20436U 90005A 97019.87726615 -.00000044 00000-0 00000+0 0 1773
2 20436 98.7428 96.5369 0001853 80.5864 279.5522 14.20020227362598
UO-14
1 20437U 90005B 97020.24698798 -.00000022 00000-0 84404-5 0 2411
2 20437 98.5316 105.0543 0010197 287.1529 72.8535 14.29946205365073
AO-16
1 20439U 90005D 97019.21721645 -.00000019 00000-0 96027-5 0 391
2 20439 98.5456 106.6638 0010500 290.8895 69.1171 14.29996039364947
DO-17
1 20440U 90005E 97018.79821770 -.00000030 00000-0 51076-5 0 405
2 20440 98.5497 107.0132 0011019 292.3263 67.6696 14.30138507364912
WO-18
1 20441U 90005F 97019.21251911 .00000075 00000-0 45826-4 0 434
2 20441 98.5505 107.3403 0011305 289.7458 70.2501 14.30107597364977
LO-19
1 20442U 90005G 97020.80072529 .00000043 00000-0 33311-4 0 406
2 20442 98.5506 109.4922 0011206 283.7837 76.2065 14.30219813365228
GPS BII-06
1 20452U 90008A 97018.65664575 .00000004 00000-0 10000-3 0 2620
2 20452 54.0479 157.9913 0070452 91.7247 269.2535 2.00552992 51133
MOS-1B
1 20478U 90013A 97020.75772760 -.00000174 00000-0 -98594-4 0 177
2 20478 99.1081 93.3413 0005928 20.4799 339.6597 13.93969029274869
DEBUT
1 20479U 90013B 97020.46530391 -.00000034 00000-0 -28032-6 0 399
2 20479 99.0264 10.2100 0540657 351.4621 7.7664 12.83349468325779
FO-20
1 20480U 90013C 97019.03886242 -.00000090 00000-0 -12784-3 0 9363
2 20480 99.0228 8.8092 0541188 355.3474 4.2681 12.83235622325578
MOS-1B R/B
1 20491U 90013D 97018.21620716 .00000246 00000-0 52312-3 0 3115
```

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2 20491 99.0547 80.1174 0470443 150.8931 211.9258 13.03007292329865
LACE
1 20496U 90015A 97020.23189848 .00001069 00000-0 37665-4 0 7239
2 20496 43.1015 43.8423 0010815 16.2065 343.9124 15.36302436387205
Nadezhda 2
1 20508U 90017A 97020.64659149 .00000070 00000-0 57657-4 0 457
2 20508 82.9534 82.7737 0045640 119.3305 241.2422 13.73517689345743
OKEAN 2
1 20510U 90018A 97019.11713230 .00000132 00000-0 14819-4 0 5562
2 20510 82.5223 25.1862 0018660 337.6756 22.3642 14.78659542371588
GPS BII-07
1 20533U 90025A 96353.12701437 -.00000065 00000-0 00000+0 0 2950
2 20533 54.4343 279.6053 0040336 77.6117 282.8589 2.00570188 49270
PegSat
1 20546U 90028A 97018.31719197 .00005873 00000-0 10005-3 0 206
2 20546 94.1256 115.2443 0053035 251.7608 107.7872 15.49865642378292
HST
1 20580U 90037B 97018.91358690 .00000402 00000-0 24448-4 0 9127
2 20580 28.4706 271.7627 0006232 269.3277 90.6594 14.91159699170819
MACSAT 2
1 20608U 90043B 97018.92958455 .00000151 00000-0 23033-4 0 2416
2 20608 89.9253 171.5271 0107935 22.6447 337.9478 14.64971079357877
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2 20638 52.9885 55.2610 0013494 63.4778 296.7563 15.07533368364599
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2 20670 82.5457 174.9884 0016485 8.7488 351.3962 13.84128946331853
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2 20724 55.0742 99.9332 0131785 188.2391 171.5731 2.00564048 45803
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2 20959 55.2593 102.1240 0114824 237.2448 121.6616 2.00555084 44994
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Nadezhda 3
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2 21218 64.8276 316.0711 0008646 305.0775 54.8508 2.13102566 45071
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Meteor 3-5
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Glonass 59
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1 22698U 93041A 97018.72858212 .00000091 00000-0 34544-4 0 5488
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Meteor 2-21
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UFO F2
1 22787U 93056A 97020.79602663 -.00000071 00000-0 00000+0 0 7048
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Nadezhda 4
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Spektr
1 23579U 95024A 97020.91156003 .00021233 00000-0 25791-3 0 5522
2 23579 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922 95461
GOES 9
1 23581U 95025A 97020.30883601 .00000073 00000-0 10000-3 0 3096
2 23581 0.0425 92.5651 0003790 210.1456 153.5125 1.00284769 6104
Helios 1A
1 23605U 95033A 97020.85393148 .00002142 00000-0 41922-3 0 4091
2 23605 98.1422 319.6419 0001103 76.5228 283.6126 14.63841728 82408
UPM SAT 1
1 23606U 95033B 97017.24077775 .00000137 00000-0 32839-4 0 2454
2 23606 98.1226 317.8296 0006548 226.6531 133.4133 14.67339606 82105
CERISE
1 23607U 95033C 97019.87651528 .00000048 00000-0 17157-4 0 1489
2 23607 98.1239 320.2277 0005303 213.1107 146.9765 14.66993749 82502
TDRS 7
1 23613U 95035B 97018.49047223 .00000087 00000-0 00000+0 0 2888
2 23613 1.1256 81.8571 0001636 211.7834 189.5885 1.00273907 5541
Glonass 74
1 23620U 95037A 97018.83561154 .00000092 00000-0 00000+0 0 2358
2 23620 64.8180 196.7646 0018778 163.2693 196.8056 2.13102751 11607
Glonass 75
1 23621U 95037B 97018.54427267 .00000095 00000-0 00000+0 0 2446
2 23621 64.8325 196.7761 0018049 173.3850 186.6512 2.13102020 11596
Glonass 76
1 23622U 95037C 97020.01003231 .00000079 00000-0 00000+0 0 2502
2 23622 64.8220 196.7265 0036948 163.0354 197.0992 2.13102394 11629
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Prognoz-M2
1 23632U 95039A 97019.79525280 .00000366 00000-0 00000+0 0 1071
2 23632 70.8870 248.2640 7669071 327.4970 37.3930 0.26396100 1421
SICH-1
1 23657U 95046A 97021.11357835 .00000041 00000-0 27316-5 0 1406
2 23657 82.5323 359.9640 0029713 62.5108 297.9110 14.73523506 74925
RADARSAT
1 23710U 95059A 97021.15876159 .00000142 00000-0 72025-4 0 2295
2 23710 98.5796 30.7377 0001184 50.8137 309.3148 14.29996624 63395
Glonass 79
1 23734U 95068A 97018.72035106 .00000093 00000-0 00000+0 0 2248
2 23734 64.8193 196.6872 0017149 327.8253 32.0831 2.13101805 8560
Glonass 78
1 23735U 95068B 97018.44065339 .00000096 00000-0 00000+0 0 2163
2 23735 64.8178 196.6795 0006196 199.2043 160.7855 2.13124814 8555
Glonass 77
1 23736U 95068C 97020.36255544 .00000075 00000-0 00000+0 0 1972
2 23736 64.8135 196.6306 0007133 185.7398 174.2655 2.13101859 8598
XTE
1 23757U 95074A 97017.17078089 .00000537 00000-0 15890-4 0 1155
2 23757 22.9798 35.0707 0013475 103.3352 256.8632 14.97759061 57588
Polar
1 23802U 96013A 97 8.89750293 -.00000037 00000-0 10000-3 0 986
2 23802 86.2733 23.9230 6533669 276.1928 18.3790 1.36266605 4375
1996010E
1 23824U 96010E 97020.37310243 .00311288 00000-0 34232-1 0 1604
2 23824 47.4069 190.8400 6996677 84.6676 344.9327 2.66640261 7585
GPS BIIA-25
1 23833U 96019A 97020.27866624 -.00000101 00000-0 00000+0 0 1335
2 23833 54.6463 339.1666 0029366 140.2693 219.8066 2.00565633 6035
Priroda
1 23848U 96023A 97020.91156003 .00021233 00000-0 25791-3 0 2405
2 23848 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922 42552
MSX
1 23851U 96024A 97019.88417706 -.00000047 00000-0 00000+0 0 1765
2 23851 99.4033 9.9176 0005852 283.2280 76.8227 13.97444658 37762
SAX
1 23857U 96027A 97006.03444621 .00001422 00000-0 64711-4 0 482
2 23857 3.9552 74.7294 0013557 51.7931 308.2972 14.91701731 37488
MSTI 3
1 23868U 96031A 97018.52666240 -.00000952 00000-0 -17355-4 0 1054
2 23868 97.1164 211.2586 0010701 104.5307 255.7133 15.46659929 38093
TOMS-EP
1 23940U 96037A 97019.22504272 .00001859 00000-0 84759-4 0 781
2 23940 97.4337 288.0074 0012314 314.3174 45.7018 15.21850623 30489
GPS BIIA-26
1 23953U 96041A 97019.19765933 -.00000069 00000-0 00000+0 0 1088
2 23953 55.1273 99.6391 0013639 23.0695 337.0176 2.00558518 3803
ADEOS
1 24277U 96046A 97019.25165401 -.00000044 00000-0 00000+0 0 1335
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2 24277 98.6124 99.0840 0000748 152.8176 207.3056 14.27637363 22114
FO-29
1 24278U 96046B 97020.71938572 -.00000033 00000-0 31768-5 0 525
2 24278 98.5618 81.9231 0350739 208.1598 150.0180 13.52628154 21180
Soyuz TM-24
1 24280U 96047A 97020.91156003 .00021233 00000-0 25791-3 0 1445
2 24280 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922 24452
FAST
1 24285U 96049A 97019.23569784 .00001234 00000-0 12714-3 0 550
2 24285 82.9926 108.2967 2205954 255.8914 78.8762 10.81718848 16318
Microsat
1 24291U 96050A 97021.10601699 .00040756 63157-5 27693-3 0 1170
2 24291 62.7954 262.0414 0596916 128.3675 237.2627 14.70081750 21218
MO-30
1 24305U 96052B 97021.24313545 .00000203 00000-0 20364-3 0 659
2 24305 82.9209 103.1597 0029234 259.5102 100.2705 13.73089419 18892
GPS BIIA-27
1 24320U 96056A 97019.06002070 -.00000035 00000-0 00000+0 0 560
2 24320 54.6725 279.7114 0051757 114.3602 246.2670 2.00569474 2461
SAC-B/HETE
1 24645U 96061A 97017.46204930 .00000461 00000-0 30174-4 0 389
2 24645 37.9757 42.9262 0047209 170.1308 190.0392 15.14832390 11190
Progress M-33
1 24663U 96066A 97020.91156003 .00021233 00000-0 25791-3 0 574
2 24663 51.6525 106.4219 0012842 345.0182 14.5772 15.60443922 9696
Cosmos 2336
1 24677U 96071A 97019.55253135 .00000015 00000-0 00000+0 0 114
2 24677 82.9394 195.9439 0023368 175.1269 185.0117 13.71047486 4149
1996071B
1 24678U 96071B 97020.53704003 .00000015 00000-0 00000+0 0 244
2 24678 82.9276 195.1375 0024850 148.5312 211.7293 13.72692940 4289
BION 11
1 24701U 96073A 97007.63261992 .00018249 79897-5 30000-4 0 223
2 24701 62.7988 196.4152 0115614 109.2892 252.6962 15.93127811 2241
1996073B
1 24702U 96073B 97021.10620574 .00765675 83858-5 43736-3 0 792
2 24702 62.7841 142.6524 0058179 101.0138 259.7610 16.14461139 4418
1996073C
1 24706U 96073C 97020.41893365 .00173532 80656-5 21768-3 0 215
2 24706 62.8037 146.5077 0102020 109.7532 251.4680 15.97615429 4288
1996073D
1 24707U 96073D 97020.77380685 .00165689 00000-0 13279-2 0 199
2 24707 62.8072 147.7446 0104586 33.3661 327.4097 15.63263012 2098
1996073E
1 24708U 96073E 97020.56679962 .00192388 18813-4 11568-2 0 185
2 24708 62.8039 147.8319 0082291 49.4939 311.3356 15.72744231 2071
1996073F
1 24709U 96073F 97020.76774021 .01748659 84777-5 77729-3 0 409
2 24709 62.7709 144.3041 0042503 104.4176 256.7779 16.19402881 2172
1996073G
```

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1 24710U 96073G 97020.25972265 -.00002734 86447-5 00000+0 0 53
2 24710 62.7610 144.9436 0033441 93.2208 269.7844 16.26990469 2080
STS 81
1 24711U 97001A 97021.34192130 -.00000339 00000-0 24169-5 0 279
2 24711 51.6531 104.2027 0027112 92.8197 190.5119 15.69094421 1405
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

279. Software for doing system noise calcs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5c3b78$m3d@news.ysu.edu>
Source record: 20083

I'm looking for a simple shareware program that will make it possible
to evaluate the path losses and system noise for a system comprising
an airborne transmitter and earth-based antenna, preamp, feedline,
and receiver.

The important part is the system noise temperature, but the path loss
and output carier-to-noise would be nice to have, too. This program
should accomodate total antenna effective noise temperature; and the
noise temp. of the preamp and receiver, of course

Niceties such as separate inputs for cosmic noise, earth thermal
noise as seen by the antenna, and other refinements are good
but not necessary.

This is to answer a question about the performance of an amateur radio
application (high altitude balloon beacon). A *quick* search of Oakland
did not yield anything that looked appropriate.

Anyone have any obscure ham or *industry* software that will handle this?

Hank Riley, N1LTV
h1riley@umassd.edu

http://www.geocities.com/capecanaveral/3161

280. Space Shuttle Plasma-Scatter DX Opportunity

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Mark Gingrich <grinch@rahul.net>
Message-ID: <5c3g1f$8rk@samba.rahul.net>
Source record: 20084
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.space

On Wednesday morning, 22 January, around 7:47 a.m. EST (12:47 UTC), the Space Shuttle Atlantis (STS-81) is expected to touch down at the Kennedy Space Center. (If weather conditions don't allow, landing may be delayed for 90 minutes, still with KSC as the destination.) Assuming all goes as planned, about 25 minutes prior to landing, as it approaches the coast of British Columbia, the orbiter will experience sufficient atmospheric friction to create an ionized wake, a condition persisting for nearly fifteen minutes as the craft streaks like a meteor over the southern parts of Alberta and Saskatchewan, above central North Dakota and Minnesota, eventually passing almost directly over the heads of Chicagoans. This trajectory is nearly identical to the re-entry of STS-79, on 26 September last year.

DXers working VHF frequencies -- TV, FM, 2-meter, and 6-meter ham bands -- who reside within a thousand miles of all but the easternmost re-entry track will have a rare opportunity: the Shuttle-generated plasma trail may enhance reception of over-the-horizon signals, much like meteor scatter. Meteors, known to be just pea-gravel-sized flotsam colliding at high speed with Earth's atmosphere, create narrow ionized columns for a few seconds; in contrast, the near-airliner-sized Shuttle should cut a much larger plasma swath over an interval of minutes. Such temporary plasmas scatter very-high-frequency radio signals over the horizon, whereas normal reception is limited to line-of-site distances from the transmitter. Shuttle plasma effects may persist for as long as a few minutes.

DXers should tune to a known distant station in the general direction of the Shuttle's re-entry track -- that is, if you are south of the track, try for a northern station, on a locally unoccupied, interference-free frequency.

- Re-entry Time Line -

If the re-entry goes as planned, the time line is as follows:

Event Time UTC EST CST MST PST

Arrives British Columbia 12:23 7:23 6:23 5:23 4:23

Overflies Calgary, Alberta 12:26 7:26 6:26 5:26 4:26

Overflies Fargo, ND 12:29 7:29 6:29 5:29 4:29

Overflies Chicago, IL 12:32 7:32 6:32 5:32 4:32

Overflies Cincinnati, OH 12:33 7:33 6:33 5:33 4:33

KSC Touch down 12:47 7:47 6:47 5:47 4:47

More detailed predictions (containing "look angles" at best visibility
for various locales) are available at the end of the document found at:

http://shuttle.nasa.gov/sts-81/orbit/orbiter/sighting/sighting.html

Also, check out the groundtrack maps for both the primary and secondary
landing attempts at:

http://shuttle.nasa.gov/sts-81/landing/grtrack

Note that only observers west of Illinois will have a decent chance
at a visual sighting of the Shuttle, due to lessened interference from
sunlight/twilight. The sonic boom, however, may be noted by anyone
in the vicinity of the re-entry track; be aware that it occurs a few
minutes *after* the Shuttle's closest approach to your location.

- Last-Minute Sources of Information -

Weather conditions at Kennedy may cause last-minute postponement of
the landing. The following Web site provides weather status:

http://www.ksc.nasa.gov/weather/weather.html

Last-minute information about the Shuttle's re-entry/landing status
is available at:

http://shuttle.nasa.gov/

Also, last-minute schedule changes are usually reported on the hourly
national news (e.g., CBS Radio affiliate stations, CNN, etc.) and on
NASA TV.

I would be especially interested in receiving successful (or even un-
successful) reports of DX catches made possible by Shuttle plasma scatter.

Good luck!

--
~~~~~~
Mark Gingrich grinch@rahul.net San Leandro, California
~~~~~~

281. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Phil Collier <103446.1373@CompuServe.COM>
Message-ID: <5c3ghufai1@mhade.production.compuserve.com>
Source record: 20085

>was conducted via the air-to-ground with

>the Johnson Space Center's Mission Control

>Center, their Public Affairs Office, and and NPR

>on Thursday or Friday.

That was a pretty amusing stunt they pulled. The rather

heavily processed shuttle audio was easily recognizable,

and of course there were lots of hints about Rockwell,

two minute engine burns, etc. It would have been fun to

have Nasa TV on when that was being set up...I guess the

astronaut still owes the Tappit Brothers $5.00 for the use

of their tools :-)

First time I've ever heard of a call from orbit to earth

for the purpose of having some fun on a talk show. Was it

NPR's idea, or was the Atlantis crew looking for a good

stunt to pull on a radio show?

PHil,

KG2DH

--
Regards,
Phil Collier

PGP: because big brother is watching...

282. ARLK006 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk006.1997@arrl.org>
Source record: 20086
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK006
ARLK006 Keplerian data

ZCZC SK06
QST de W1AW
Keplerian Bulletin 6 ARLK006
From ARRL Headquarters
Newington, CT January 21, 1997
To all radio amateurs

SB KEP ARL ARLK006
ARLK006 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-81
1 24711U 97001A 97021.34192130 -.00000339 00000-0 24169-5 0 279
2 24711 51.6531 104.2027 0027112 92.8197 190.5119 15.69094421 1405
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97020.97153330 .00000016 00000-0 14142-5 0 03150
2 18129 82.9258 347.5517 0010242 274.5520 85.4464 13.72373504480045
UO-11
1 14781U 84021B 97021.02775740 .00000077 00000-0 20893-4 0 09582
2 14781 97.8170 8.2864 0012452 108.9084 251.3462 14.69517931689649
RS-12/13
1 21089U 91007A 97021.05553477 .00000034 00000-0 20632-4 0 09536
2 21089 82.9205 27.7672 0029590 350.1308 9.9258 13.74076476298955
UO-14
1 20437U 90005B 97021.15663363 -.00000065 00000-0 -84529-5 0 02463
2 20437 98.5314 105.9448 0010234 284.1321 75.8727 14.29945820365206
RS-15
1 23439U 94085A 97021.10771462 -.00000039 00000-0 10000-3 0 01948
2 23439 64.8154 30.6751 0153521 160.0363 200.6651 11.27526660085356
AO-16
1 20439U 90005D 97020.82653165 -.00000039 00000-0 17498-5 0 00501
2 20439 98.5451 108.2422 0010390 285.3116 74.6911 14.29995914365173
```

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DO-17
1 20440U 90005E 97021.10700705 -.00000054 00000-0 -42151-5 0 00511
2 20440 98.5495 109.2813 0010827 284.8236 75.1750 14.30138191365243
WO-18
1 20441U 90005F 97021.17153478 -.00000027 00000-0 64736-5 0 00532
2 20441 98.5505 109.2641 0011170 282.8426 77.1511 14.30106865365257
LO-19
1 20442U 90005G 97021.15052235 .00000043 00000-0 33517-4 0 00416
2 20442 98.5506 109.8359 0011204 282.6865 77.3066 14.30219880365275
FO-20
1 20480U 90013C 97020.98791921 -.00000023 00000-0 22675-4 0 09465
2 20480 99.0227 10.3873 0541045 350.9426 8.2221 12.83236109325825
AO-21
1 21087U 91006A 97020.87217234 .00000093 00000-0 82657-4 0 07820
2 21087 82.9403 160.6039 0035306 321.9787 37.8877 13.74577152299917
UO-22
1 21575U 91050B 97019.66250922 -.00000042 00000-0 40279-7 0 07683
2 21575 98.3250 85.3024 0007805 345.7858 14.3076 14.37053182289151
KO-23
1 22077U 92052B 97020.71917809 -.00000037 00000-0 10000-3 0 06381
2 22077 66.0775 94.0000 0014782 246.0308 113.9165 12.86300649208789
KO-25
1 22828U 93061F 97021.15189841 .00000097 00000-0 56527-4 0 05189
2 22828 98.5548 98.8284 0009861 303.4187 56.6050 14.28166535141225
IO-26
1 22826U 93061D 97021.15248810 .00000052 00000-0 38363-4 0 05492
2 22826 98.5628 98.7559 0009525 320.7442 39.3047 14.27825009173102
AO-27
1 22825U 93061C 97021.10271596 -.00000036 00000-0 29240-5 0 05323
2 22825 98.5615 98.4926 0008332 320.9533 39.1065 14.27714881173080
FO-29
1 24278U 96046B 97021.16321713 -.00000030 00000-0 61418-5 0 00553
2 24278 98.5618 82.3076 0350798 207.0126 151.2370 13.52628187021249
MO-30
1 24305U 96052B 97021.24313545 .00000203 00000-0 20364-3 0 659
2 24305 82.9209 103.1597 0029234 259.5102 100.2705 13.73089419 18892
Mir
1 16609U 86017A 97021.48802597 .00007891 00000-0 10000-3 0 9850
2 16609 51.6525 103.5160 0012827 344.9349 15.1575 15.60441996624124

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
January 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

283. Re: MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <32E57D8D.36F9@ix.netcom.com>
Source record: 20087

Dave Schertzer wrote:
>
> Anybody have a list?? I'm near Seattle, WA
>
> thanks..dave
>
Hi Dave from the kg5ai pages:

Mir
Uplink/Dnlink 145.550 AX.25 & FM voice
New Information
70 cm voice: Uplink 435.725 FM 70 cm packet: Uplink 435.775 FM
Dnlink 437.925 FM Dnlink 437.975 FM
2m voice: Uplink 145.200 FM (cannot interfere with repeater activity)
Dnlink 145.800 FM
Notes: Very large-can be seen by naked eye at dawn or dusk.
Packet robot callsign is R0MIR-1.

You can find more Amateur Satellite info on the DX Reference Guide
below.
73
Rod

--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V

284. DXER Updates

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32e59826.21089591@news.primenet.com>
Source record: 20088

New additions to the following indexes

Contest Clubs, DX Clubs, Ham Radio Clubs,
Ham Radio Info, Manufacturers, Propagation
and Satellites.

Visit our new Sponsor "COMET ANTENNA"

We will soon be adding a Product Evaluation
Page. If you would like to comment on a product
use the interactive BBS at the top of our page.

Check us out "http://www.dxer.com"

285. Re: Looking for VHF/UHG Satellite Ham Radio FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <32E57F00.5492@ix.netcom.com>
Source record: 20089

Marc Illsley Clarke wrote:
>
> Could some kind soul please point me to the FAQ about this group?
> I have all the standard no-code Technician questions:
>
> 1) Can I talk via satellites using my dual band VHF/UHF 5 Watt hand
> held? Can I talk to the shuttle and/or Mir?
>
> 2) Where do I find sources of tracking programs that will run on DOS
> and Windows 3.1? Hopefully low-registration-fee shareware.
>
> 3) How do I learn which satellites I can talk to and listen to on VHF
> and UHF FM?
>
> 4) What are the recommended antenna set ups? Starting with a roof
> mounted VHF/UHG discone and working on up to dual band VHF/UHF
> hand-held Yagis and thenup to dual axis rotators and control
> software.
>
> 5) When I upgrade to General later this year, all the above questions
> but with HF included?
>
> I bet I am about the millionth person to ask all these questions. I
> bet you are pretty tired of seeing these same beginner questions over
> and over again. Where might I find the FAQ?
>
> --

Howdy Marc, I haven't found a satellite FAQ but wonder if you have
visited the following?

Satellite Frequencies -- via KG5AI Pages

Work the Satellites -- AMSAT Pages

Ashley's Space World -- Amateur Radio In Space.

The Satellite DX Foundation -- DX in the sky

Amateur Radio Satellites -- KitSats Via KB1SG

SAREX -- Shuttle Amateur Radio Experiment

MIR -- Russian Space Station
--
Go to the DX Reference Guide below and then to the Index and
"Satelittes".

Hope this helps.

73
Rod
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V

286. WTB 2m/70cm All Mode Dual Band

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Mike <cobbco@terranet.net>
Message-ID: <32E4E5C5.37C2@terranet.net>
Source record: 20090

I'm looking for an exceellent 2m/70cm all mode xciever for SSB and satellite ops.

Please leave me an e-mail msg. with your phone number, and I'll call you.

Thanks very much,

Mike, KB0QMF

287. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: sm7paf@mbox300.swipnet.se
Message-ID: <5c1nmc$imb@mn5.swip.net>
Source record: 20091
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970120005725.5152A-100000@prog1.caprica.com>,
teddyb@caprica.com says...
>
>
>On Wed, 15 Jan 1997, Dick Flanagan wrote:
>> In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
>> <ecstka@ldecs.ericsson.se> wrote:
>>
>> >Has anyone seen "teddy bears" callsign?
>
>My call sign is MY business OFF the air. So is yours. If you don't like
>that, tough tetrodes!
>
>Since when is a ham callsign required to post in usenet?
>
>As I have said to someone here before, I do not give my callsign off the air.
>
>If you need a callsign, my internet "callsign" appears at the top of my
>messages. Deal with it.
>

Oh, well.......

I think it gives a friendly and nice atmosphere to this group, since most
of the writers include their call. But judging from your mail you dont seem
to be interrested in keeping that atmosphere.......... It's as they say:
You get what you ask for!

SM7PAF / Tommy

288. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Dave Moran <dmoran@h2net.net>
Message-ID: <01bc07f0$c42c14e0$dd13e3cc@default>
Source record: 20092
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

Don Lafontaine <lafont02@cn.ca> wrote in article
<5c3ee4$7b@nr1.ottawa.istar.net>...
> On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
Coffman)
> wrote:
>
> >Yeah, at least you can get the main screen up if you reboot
to DOS mode,
> >but when you give it the run command, it crashes and burns.
....
>
> Interesting, I tried it last night, and it worked right off
the bat.
>
>
> 486DX4-100
> Trio S3 svga board
> Soundblaster 16 w/WaveBlaster daughtercard
> 32 Megs RAM
> Running QEMM.
>
> I still haven't managed to decode anything yet, but I will
persist!
>
> Sorry, but that was the only clue I could offer.
>
> Don Lafontaine VE2UFO

Works for me 486 - 33mhz, 8meg, soundblaster, etc
(Gotta use EMM386 or as Don has Qemm.)
Decoding takes some tweaking but I got it working in the ham
bands on rtty and weather FAX.

Every decoder I have (hardware) really takes tweaking and
experience, I am still evaluating this
software (shareware), but it looks promising.

Dave - W0PYP

289. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-21 00:00:00 UTC
From: Bill Beam <wbeam@polarnet.com>
Message-ID: <32E5B31D.AA1@polarnet.com>
Source record: 20093
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

Dave Moran wrote:
>
> Don Lafontaine <lafont02@cn.ca> wrote in article
> <5c3ee4$7b@nr1.ottawa.istar.net>...
> > On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
> Coffman)
> > wrote:
> >
> > >Yeah, at least you can get the main screen up if you reboot
> to DOS mode,
> > >but when you give it the run command, it crashes and burns.
> ....
> >
> > Interesting, I tried it last night, and it worked right off
> the bat.
> >
> >
> > 486DX4-100
> > Trio S3 svga board
> > Soundblaster 16 w/WaveBlaster daughtercard
> > 32 Megs RAM
> > Running QEMM.
> >
> > I still haven't managed to decode anything yet, but I will
> persist!
> >
> > Sorry, but that was the only clue I could offer.
> >
> > Don Lafontaine VE2UFO
>
> Works for me 486 - 33mhz, 8meg, soundblaster, etc
> (Gotta use EMM386 or as Don has Qemm.)
> Decoding takes some tweaking but I got it working in the ham
> bands on rtty and weather FAX.
>
> Every decoder I have (hardware) really takes tweaking and
> experience, I am still evaluating this
> software (shareware), but it looks promising.
>
> Dave - W0PYP

I also run ATI Mach64 card. (also QEMM)
My vidio card required the VESA driver.

This card has some strange behaviour with
programs that make VESA calls without the
driver.

Look for 64VBE200.ZIP from ATI. Contained
in this .ZIP is the driver M64BE.COM which
is a DOS TSR.

BTW the program runs in an OS/2 DOS full screen
session (with the tsr installed.)
--
Bill Beam/NL7F
wbeam@polarnet.com

290. 2.4 GHZ Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc0806$40927fa0$5e427fce@default>
Source record: 20094

Howdy from Helena, Montana - I am looking for a vendor or source for a 2.4GHZ receiver for the Phase 3D Satellite going up this summer. I have the antennas but don't have a clue to vendors for 2.4GHZ. I have 1.2 in my TS790 for uplink and would like to have 2.4 downlink. Thanks from Bill

291. Re: 2.4 GHZ Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Dietrich Morgenstern <76050.1341@CompuServe.com>
Message-ID: <32E5B185.4E53@CompuServe.com>
Source record: 20095

William F. Erhardt wrote:
>
> Howdy from Helena, Montana - I am looking for a vendor or source for a
> 2.4GHZ receiver for the Phase 3D Satellite going up this summer.

Try the 2.4 GHz converter from SSB Electronics. It is a converter down to 144 MHz that can be mounted directly on the antenna. You can feed it with some low cost coax and the power can go through the coax cable. Weatherproof housing, looks like a mast preamp and has very low noise figure.
I used one for 2.4 GHz on AO-13 with good results.

73 Dietrich DJ1VA

292. Re: MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: mr@homebase.airtime.co.uk
Message-ID: <32e5f0e4.366060@news.airtime.co.uk>
Source record: 20096

subbustr@whidbey.net (Dave Schertzer) wrote:

>Anybody have a list?? I'm near Seattle, WA

Hello Dave:

Here in the UK the MIR frequencies for both voice
and packet are:-

Uplink 145.800Mhz
Downlink 145.200Mhz

(Also now used by Shuttle)

Being new to this group I hope I have understood
your query correctly.

73 Mike G7PQL
==========
Email:- mr@homebase.airtime.co.uk
Web:- http://www.airtime.co.uk/users/homebase/
==========

293. Re: MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Tim Smith <n1btq@tiac.net>
Message-ID: <32E62283.3590@tiac.net>
Source record: 20097

Mike wrote:
>
> subbustr@whidbey.net (Dave Schertzer) wrote:
>
> >Anybody have a list?? I'm near Seattle, WA
>
> Hello Dave:
>
> Here in the UK the MIR frequencies for both voice
> and packet are:-
>
> Uplink 145.800Mhz
> Downlink 145.200Mhz
>
> (Also now used by Shuttle)

Hi,

Does that mean that 145.55 is no longer used?

73,

Tim N1BTQ

294. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Don Lafontaine <lafont02@cn.ca>
Message-ID: <5c5bna$faq@nr1.ottawa.istar.net>
Source record: 20098
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Tue, 21 Jan 1997, charles copeland wrote:

> >I still haven't managed to decode anything yet, but I will persist!
>
> Try 14385 and tell whats up there? Always RTTY there.
>

By the time I get home, 20 meters is dead unfortunately. :(

Don Lafontaine (VE2UFO) 935 de la gauchetiere Fl. 5
Senior System Programmer Montreal Quebec
Telecom Engineering, access Canada
Canadian National Railways
packet -=> ve2ufo@ve2ike.#mtl.pq.can.noam Internet: lafont02@cn.ca

295. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.970122105200.17596C-100000@light.lightlink.com>
Source record: 20099
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On 22 Jan 1997, Don Lafontaine wrote:

> > Try 14385 and tell whats up there? Always RTTY there.
>
> By the time I get home, 20 meters is dead unfortunately. :(

it is not dead, it only moved to sunnier places. Simply come home early :)

296. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Don Lafontaine <lafont02@cn.ca>
Message-ID: <5c5f1q$h7i@nr1.ottawa.istar.net>
Source record: 20100
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Wed, 22 Jan 1997, Siegfried Rambaum wrote:

> On 22 Jan 1997, Don Lafontaine wrote:
>
> > > Try 14385 and tell whats up there? Always RTTY there.
> >
> > By the time I get home, 20 meters is dead unfortunately. :(
>
> it is not dead, it only moved to sunnier places. Simply come home early :)

Now there's a great plan!!

Don Lafontaine (VE2UFO) 935 de la gauchetiere Fl. 5
Senior System Programmer Montreal Quebec
Telecom Engineering, access Canada
Canadian National Railways
packet -=> ve2ufo@ve2ike.#mtl.pq.can.noam Internet: lafont02@cn.ca

297. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc0892$385d0940$3d8142ce@dale>
Source record: 20101

If you listen to the 'phone call,' you will hear John Grunsfeld
describe the path of the 'call:' Atlantis to TDRS satellite.
After that the signal following this path: TDRS satellite to
the ground (NASA Ground Terminal, Las Cruces, NM,) then
to Mission Control Center in Houston, then via landline to
NPR's Car Talk.

He is likely using the normal air-to-ground circuits as are used
for the normal communications with the MCC and with the
news media for interviews, etc. No special cellular phone or
anything exotic like that.

73,
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

A.G. von Luternow <n4jvp@ix.netcom.com> wrote in article
<32e42345.7259977@nntp.ix.netcom.com>...
> On Mon, 20 Jan 1997 23:03:43 GMT, wmeara@erols.com (Bill Meara)
> wrote:
> >
> >Thanks Dale. I knew it sounded authentic! I'm pretty sure it was
> >Grunsfield. It was by far the most memorable call taken by Click and
> >Clack! Could you fill us in on how the call was placed? Is this new
> >equipment? Do the astronauts use the smae circuits to phone home?
> >
> >Thanks. 73 Bill N2CQR
>
> Details concerning the call can be found at
> http://www.cartalk.com/About/Space/index.html
> Real Audio is also available.
>
> NPR is cool and so are Ray and Tom. Many markets rebroadcast Car Talk
> on Sunday, I believe it is live on Saturday. N2CQR's post made me make
> certain that I listened to the rebroadcast yesterday.
>
> John Grunsfeld placed the call using a cellular phone and the signal
> was relayed by a high-orbiting satellite. When the call was made the
> shuttle was about 200 miles north of Hawaii over the Pacific.
> Grunsfeld was more specific about the details of the call and
> hopefully it is in the Real Audio file.
>
> 73 de n4jvp
> Fritz

>
> cc: wmeara@erols.com
> To reply to this message, please remove the
> underscore from the beginning of the reply to
> address. I'm trying to fight the spam-bots!
>

298. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan22.143722.8700@ke4zv.atl.ga.us>
Source record: 20102
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <32E54D27.5F9F@midstate.tds.net> Michael Berg <mikeberg@midstate.tds.net>
writes:
>I tried the FTV demo program and keep getting a memory error
>when it loads. Any ideas?
>73 Mike N0QBH

Well, I might be able to help you with that. Make sure you have your
EMS memory manager installed in config.sys, and make sure it isn't set
for NO EMS (that's the default way it'll be with Windows). Just delete
the NO EMS from the line and reboot.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

299. Re: Hams on mir/shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5c63unkba2@news.mhv.net>
Source record: 20103

In article <32e1f90d.0@scooby.nildram.co.uk>, perkiert@nildram.co.uk (Paul Erkiert) wrote:
>Hi I wonder if any knows if The new member of the mir crew is a radio
>amateur I havn't seen any thing about that I know John who is coming
>down sts81 was.

The new U.S. astronaut Jerry Linenger is a ham, KC5HBR. Valerie is on the
air quite often. Reinhold Ewald will be going up very soon, DL2MIR is his
callsign.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

300. Re: MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5c63qrkba1@news.mhv.net>
Source record: 20104

In article <32E62283.3590@tiac.net>, n1btq@tiac.net wrote:
>Mike wrote:
>>
>> subbustr@whidbey.net (Dave Schertzer) wrote:
>>
>> >Anybody have a list?? I'm near Seattle, WA
>>
>> Hello Dave:
>>
>> Here in the UK the MIR frequencies for both voice
>> and packet are:-
>>
>> Uplink 145.800Mhz
>> Downlink 145.200Mhz
>>
>> (Also now used by Shuttle)
>
>Hi,
>
>Does that mean that 145.55 is no longer used?
>
>73,
>
>Tim N1BTQ

I have heard nothing about the shuttle freqs being changed. Anyone know if that is a fact?

Tom

301. FS: AEA PK-900 with 9600 modem

Newsgroup: rec.radio.amateur.space
Date: 1997-01-22 00:00:00 UTC
From: rubenc@iglou.com
Message-ID: <E4Fp6G.3r2@iglou.com>
Source record: 20105
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.digital.misc

I have for sale an AEA PK-900 Multimode TNC with the factory 9600 baud modem installed.Excellennt condition, includes all manuals, cables, etc. This unit runs all HF modes, VHF Packet at 1200 or 9600 baud, and works all 9600 baud packet satellites (that's what I used it for) such as UO-22 KO-23 and KO-25.Works well with WISP.

Cost over $500.00, sell for $350.00 + shipping.

Charlie KB8BWE
kb8bwe@amsat.org
rubenc@iglou.com

302. Re: 2.4 GHZ Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5c755o$ivj@newsread.onramp.net>
Source record: 20106

Downeast microsystems has a web site
I found it once :-) http://www.downeastmicrowave.com/
I think ?? yep that's it , I just checked

303. New Concept! Cyberscheds Your Next DX and Satellite Contact!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-2201972224560001@s25-pm03-ontro-t.telis.org>
Source record: 20107

This is a new use of the WWW that can benefit ham radio operators throughout the world.

You can now schedule contacts with hams all over the world simply and easily by using the WWW and e-mail.I have set aside a section of my web site http://www.sarrio.com for hams to post their request for over-the-air schedules. Included in each posting is a place to list the posters specific ham radio contact needs (countries, zones,IOTA, grid squares ect...). The postings will also include an e-mail link that will allow hams that read the posts, to easily request an over-the-air schedule.

Cyberscheds are a simple way to have the internet work to the benefit of hams all over the world.

All posting will stay on-line for 6 months, or until the posting is asked to be deleted. Below is an example of one cyberpost visit the cyberpost page and view them all. Below is an example of one of the postings:

Station: BV/N0IAT

Name: Joe Fitter
QTH: Taipei, TAIWAN Republic of China
Bands: 40/20/17/15/10
Mode: CW (occasional SSB, but not much)
Comments: Looking for South America, Central America, and Carribean QSO's.
I QRV from a
neighbors shack (local law), so operating times are limited to station availability. QSL via my CBA --
I DO NOT accept IRC's or Greenbacks, just please send me your QSL card and a route for returning
the favor.
Post Date: Sept. 6, 1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

304. Sat weather maps the cheap way: questions o plenty...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: helling@uwindsor.ca
Message-ID: <E4G89B.B0x@news.uwindsor.ca>
Source record: 20108
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

A few questions on the fine points of weather satellite image
reception...
(on a shoestring budget.......)

I have read the article in Nuts and Volts, picked up the LM741
fuzzbox interface for my Pc (it does reemble a crude guitar
fuzzbox effect...what an odd way to get square waves!!!!)

My ancient heathkit GR-64 has a BFO, am bust dusting it off,
Won't hook the mess up until I get an isolation xformer for
the patch...

AND.... Tadah.... just scored an ancient Radio-shack PRO-33
20 channel scanner for that all-important 137 MHZ reception...
As the scanner tunes in 5KHZ steps, it might even
tolerate the reported doppler shift...

SO......
1) Assuming I find an antenna, will the little 741 interface
and the shareware program for weather fax I got with it do the
job for 137 MHZ reception ?

2) the Nuts &volts article has a diagram of a double crossed
dipole antenna. Bottom cross must be grounded as "reflector",
right? Top one is PVC and wire along the sides, just like the
ancient RLL handbook design... OK. but what length??? The
formula in my 1970 Arrl book doesn't look too useful over 50MHZ
or am I banging the calculator wrong???

Any suggested lengths???? Got baling wire o plenty...
(then off to the cable co dumpster for coax.... and away we
go...)

3) I am really interested in the High Orbit 1691 MHZ sat
images... But that $US600 downconverter.... ulp...
On the other hand, I garbage picked an old sat reciver a while
back (swapped it off.... they aren't worth much if they don't
de-cypher) Now.... hmmmmm..... Conversions anyone???

3B) Those really cheap mini-sat disk systems being sold to
hook one in to paying subscription fees forever.... wonder how
modifyable these are....

Ok...at this point my ignorance is REALLY SHOWING, but heck...
one week ago I was ripe for a Ramsey 137 MHZ kit (fortunately

I am perpetually broke), and then I pick up the scanner at a 2nd hand store for CAN$30.... As a bonus, I get to hear the walky-talkies at macdonalds 4 blks away (YAWWNNNNNNN!)

This sat stuff looks great.... (I used to mess with electronics and DX a bit, went to University, got useless degree, decided to have FUN, went to ART school, got a REAL USELESS DEGREE, and now do gallery sized set-ups involving wonky technology... Still can't draw worth a %$&....
So what If I recycle a few sci-fi plot lines here and there...

TRY this....
Sat receiver => computer => stored images scripted to slide show mode, adding latest image to end => cheesy VGA-2-video coverter => rented scan rate doubler => rented video projector high up projecting on the floor of a darkened room...

OOOOHhhhh..... View from a height....

The pro sat pictures from high orbit would be best, but the low orbit ones are a good start...

Any tips, sites, advice, apreciated big time...
Thanks & regards.... B/H
helling@server.uwindsor.ca

305. Re: MIR freqs, thanks

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: subbustr@whidbey.net
Message-ID: <5c7rig$rr7@news.whidbey.com>
Source record: 20109

Thanks to all who responded....dave

Oak Harbor,WA
98277
subbustr@whidbey.net
de VE7-LFA/W7

306. FS HF module for FT 726r New Price

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: paulc@snet.net
Message-ID: <32e7c437.12597433@news.snet.net>
Source record: 20110
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

Hello Folks

I have a HF module forsale for the FT 726r radio I am asking $225
The module makes 10 watts out on all the bands it covers. Here are
the bands

21.0 - 21.5 Mhz
24.5- 25.0 Mhz
26.0- 30.0 Mhz

If interested email me at PaulC@snet.net

Thank you

307. FS HF module for FT 726r New Price

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: paulc@snet.net
Message-ID: <32e7c8fc.13818745@news.snet.net>
Source record: 20111
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

Hello Folks

I have a HF module forsale for the FT 726r radio I am asking $225
The module makes 10 watts out on all the bands it covers. Here are
the bands

21.0 - 21.5 Mhz
24.5- 25.0 Mhz
26.0- 30.0 Mhz

If interested email me at PaulC@snet.net

Thank you

308. Re: MIR freqs?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: mr@homebase.airtime.co.uk
Message-ID: <32e7b4d8.18851500@news.airtime.co.uk>
Source record: 20112

trandall@mhv.net wrote:

>In article <32E62283.3590@tiac.net>, n1btq@tiac.net wrote:
>>Mike wrote:
>>> >Anybody have a list?? I'm near Seattle, WA
>>>
>>> Here in the UK the MIR frequencies for both voice
>>> and packet are:-
>>> Uplink 145.800Mhz
>>> Downlink 145.200Mhz
>>
>>Does that mean that 145.55 is no longer used?
>>Tim N1BTQ
>
> I have heard nothing about the shuttle freqs being changed. Anyone know if
>that is a fact?
>Tom

Hello again:

To clarify, the source of the frequencies quoted
was 'Radcom', the journal of The Radio Society of
Great Britain - the UK equivalent of ARRL.

The old 145.550Mhz up/down link was quit by MIR
when Shuttle/MIR docking became more frequent. The
new frequencies I quote will be used by MIR and
future Shuttle SAREX missions according to the
amended 2m bandplan issued recently in the UK.

===
Please be advised that the 2m band plan in the UK
and the US does differ somewhat and on previous
Shuttle SAREX missions the European frequencies
were different from those in the USA.
===

73 Mike G7PQL
==========
Email:- mr@homebase.airtime.co.uk
Web:- http://www.airtime.co.uk/users/homebase/
==========

309. TrakBox questions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-23 00:00:00 UTC
From: Philip Peake <philip@vogon.rain.com>
Message-ID: <32E7BD1F.64DB@vogon.rain.com>
Source record: 20113

I have just finished building a TrakBox, and after a few glitches it
now appears to work fine.

However, I have some operational questions, the answers to which
I don't seem to be able to find in either the supplied (TAPR)
documentation, or in the notes with the 3.30i ROM.

I am using it in conjunction with an FT-736, using the CAT interface
for doppler correction.

Questions:

1. The doppler correction step is 100hz, which is (to my mind)
a bit big for SSB working. The ROM notes mention a 50Hz step,
and the "Show Config" menu item lists the step frequency as 100Hz,
which suggests that it can be changed - how ?

2. Although it is possible to step the Rx frequency up/down with the
+ and - keys, there doesn't seem to be any similar functionality
for the Tx frequency. Yes, I know you can specify 4 Tx frequencies,
and I know that I can enter "host" mode and change the Tx frequency
from thre - but it seems rather cumbersome.
So what is the normal operating procedure (on Fo-20 and Fo-29 for
example) ? How do I adjust my Tx frequency onto that of someone
calling CQ ?
Are there (maybe) just a limited number (4 ?) of recognised
"channels" on these sats ?

Philip

310. SASI Satracker

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: nsallay@internext.COM.BR
Message-ID: <32E8188B.2875@internext.com.br>
Source record: 20114

Hello Ken,
So far I do not know any equip.wich works with out data infos,orbital information.Up to the present,that means, all antenna tracking devices I know,are connected to a source wich gives to the converter (a/d),the info. to wich place the antenna has to point and the source normally ia a sat tracking softer as Instantrack,Nova or similar.
The one you mentioned,takes the info from some place where it is stored and unfortunately you will loose one of your serial/parallel ports to do the job.
I'm using Nova for Dos and the SASI-Y for Yaesu 5600G A/E dual contr. and the set up work really well.In other words,one port for the doppler the other one for the antenna tracking sys.
Best regard and 73,
Nicolau - PP8DA
nsallay@internext.com.br
pp8da@amsat.org
+

311. MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: Les Alverson <docfester@aol.com>
Message-ID: <01bc09b2$acad52c0$befb0b26@junior>
Source record: 20115

Unfortunately, where I live (Upstate SC) there is a VERY LOUD APRS station
that causes interference. I've been unable to "punch" through the QRM.
docfester@mindspring.com
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or
numbered" - The Prisoner

312. Re: TrakBox questions

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: apbiddle@worldnet.att.net
Message-ID: <32e81a10.2774804@netnews.worldnet.att.net>
Source record: 20116

Philip,

I have never used the T_B mic click tuning, but under configuration then is a place for setting the mic click, and in that is the step size. This _may_ be what you want.

As for the four channels. The TB is primarily aimed at working the digital birds, which have 4 or less uplinks. The analog birds of course have no such channels. To operate the analog birds, most people use a program which drives the T_B in the host mode. That way, the T_B is basically just a dumb interface.

The only widely distributed program I can think of is Mike Owen's NOVA program. Several other people have their own private versions, which may or may not ever get widely released.

Alan
WA4SCA

313. HARC Winter Carnival Special Events Station

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: jdhaas@mtu.edu
Message-ID: <5cak1b$mjm@login.ee>
Source record: 20117

Hello there. I am Jim Haas, KG9IF, QSL/Contest/Awards Manager for the Husky Amateur Radio Club, W8YY, which is the amateur radio club of Michigan Technological University in Houghton, MI. Every year over a festival known up here as Winter Carnival, where everyone takes a couple of days off to enjoy the snow (we get a lot of that up here), we run a special event station. This year's station runs from 1100Z on 30 January 1997 (6:00 AM Eastern) to 1100Z on 1 February 1997.

"So Jim," you ask, "what do I get for working this station?" Well, if you work our station, just send us a self-addressed, stamped envelope suitable for holding a certificate and we will send you just that--a really nice certificate that says you worked W8YY over Winter Carnival.

Below is the frequency list, which is a general guideline and not a promise of where we will be. I can guarantee one thing--if you look around, we will be there. We may not be on, for example, 14.325 exactly, but we'll be on 20 somewhere. We may also do some HF digital modes (we still need a few connectors for that) and some satellite work as well. If there is enough interest among the station ops/control ops, we will work some CW as well.

If you have any questions, comments, or criticisms, just drop me a line at jdhaas@mtu.edu. We look forward to hearing you on the air.

73 de Jim Haas KG9IF

Band Mode Frequency
17 M USB 18.130.0 MHz

20 M USB 14.325.0 MHz
CW (maybe, if
there is 14.130.0 MHz
interest)

30 M CW (if there 10.125.0 MHz
is interest)

40 M LSB 7.262.5 MHz

75/ LSB 3.972.0 MHz
80 M

160 M LSB 1.932.0 MHz

314. Re: MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5cbcd6$4n9$1@news.mhv.net>
Source record: 20118

In article <01bc09b2$acad52c0$befb0b26@junior>, "Les Alverson" <docfester@aol.com> wrote:
>Unfortunately, where I live (Upstate SC) there is a VERY LOUD APRS station
>that causes interference. I've been unable to "punch" through the QRM.
>docfester@mindspring.com

Don't give up, keep trying. After 2 years and hundreds of tries I finally
got through and talked to John. Talk about exciting!

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

315. Re: Sat weather maps the cheap way: questions o plenty...

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5caucf$f47@tilde.csc.ti.com>
Source record: 20119
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

>Any suggested lengths???? Got baling wire o plenty...
>(then off to the cable co dumpster for coax.... and away we
>go...)
>
~~~~~~

The APT signal is about 38KHZ wide, so the scanner
won't yield a useable signal until it's modified.
Usually a resistor across a couple of the IF ckts
will lower the Q enough to get by. You might have
to change a filter. Either way, the signal to noise
ratio is degraded by increasing the bandwidth, so
a pre-amp at the antenna will be helpful.

73 Ken K5MBV
~~~~~~

316. ARLS002 Ham-astronauts swap spots aboard Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls002.1997@arrl.org>
Source record: 20120
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS002
ARLS002 Ham-astronauts swap spots aboard Mir

ZCZC AS02
QST de W1AW
Space Bulletin 002 ARLS002
From ARRL Headquarters
Newington, CT January 24, 1997
To all radio amateurs

SB SPACE ARL ARLS002
ARLS002 Ham-astronauts swap spots aboard Mir

Ham-Astronaut Jerry Linenger, KC5HBR, has become the fourth American to occupy a position on the Russian Space Station Mir. Following the docking of Atlantis to the Russian space station on January 14, Linenger officially traded places with fellow ham-Astronaut John Blaha, KC5TZQ, who has since returned to Earth. ''We're truly in the space station business,'' said Blaha, who completed 118 days as a Mir crew member.

Linenger spent his 42nd birthday aboard Mir on January 16. ''I could not think of a nicer place to have my birthday,'' he told Dave Larsen, N6CO, during a packet QSO January 17. Linenger will remain aboard the space station until May.

It's not known how active on ham radio Linenger expects to be during his stay aboard Mir.
NNNN
/EX

317. Re: Astronaut phones "Car Talk" !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: bd703@scn.org
Message-ID: <E4Hrox.2y0@scn.org>
Source record: 20121

The "call" was listed on the NASA TV schedule for Thursday morning.

Kerwin

--
****
* They know who you are...
bd703@scn.org * They know where you live...
* And there's no doubt about it!

318. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32E97CFC.15A1@mailhost.cyberramp.net>
Source record: 20122

http://www.cyberramp.net/~johnf

319. Need Sat.Rotor Contr. Schematic

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: Allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5cb43hean1@lscruz.scf.lmms.lmco.com>
Source record: 20123

I have problems with my analog position indicators. I want to make a computer controllable motor drive and position display. Are there any schematics anywhere for such an interface. It would use the voltage from a pot. as the referance. My antenna array is az/el. Thanks, Allen WB6RWU

Allen@cruzio.com

allen@lmsc.lockheed.com

320. Re: Need Sat.Rotor Contr. Schematic

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: Greg Dolkas <gregd@jps.net>
Message-ID: <32E981A1.13B4@jps.net>
Source record: 20124

Guest wrote:
>
> I have problems with my analog position indicators. I want to make a
> computer controllable motor drive and position display. Are there any
> schematics anywhere for such an interface. It would use the voltage from
> a pot. as the referance. My antenna array is az/el. Thanks, Allen WB6RWU

Look on the Amsat web site somewhere for FODTRACK. There's a circuit for a controller that runs off a parallel port, and software which will control both the rotors (AZ and EL) *and* control your radio's doppler shift in real time. The radio is controlled from a serial port. It's a DOS program which works under DESQview or straight DOS. I haven't tried it under Windows yet. I have the serial interface, and that part works. The rotor control is waiting for time to wire it all up.

Good luck,

Greg KO6TH

321. RE: GPS System info needed

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9701241403291296@atdbbs.com>
Source record: 20125

>>My father wants a GPS...
>>He's getting old and we're actually getting concerned that one of
>>these days he'll get lost.

Excuse me if I'm off-base...

You're concerned that he may get lost...but he's "electronic gadget-aware" enough to interpret a GPS?

Of course, a GPS is useless if its data cannot be transmitted to a "locating party." Make sure he's also equipped with reliable, easy-to-use radio gear. With pre-designated emergency channels. The FRS is totally unsuitable...GMRS is UHF and "clean" - and it may be a viable alternative. Of course, check out his favourite hiking areas...there may be Amateur repeaters available (like in Yosemite!).

Your plight is interesting...please keep up informed as to what you decide to do - and how you present it to your Father.

Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com
---

322. N5KFX PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-01-24 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32E98013.7CCB@mailhost.cyberramp.net>
Source record: 20126

http://www.why.net/home/3051

323. Re: GPS System info needed

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: n5zgt@swcp.com
Message-ID: <5cbk74$mu0@sloth.swcp.com>
Source record: 20127

Try the sci.geo.satellite-nav newsgroup. This is the place to go for
GPS info!
73,
Brian, N5ZGT

gradyr@mindspring.com (Grady Russell) wrote:

>I think this is the right newsgroup for this...correct me if I'm wrong.

>My father wants a GPS system for Father's day (he's dropping hints
>early!). I don't know anything about them and he really doesn't either.

>He is planning on using it for hunting purposes. He's getting old and
>we're actually getting concerned that one of these days he'll get lost. If
>someone could provide some info about these it would be nice. I've been
>looking at the Magellan GPS-4000 for $249. Is this a fair price? What
>about other brands? What features do we need to look for?

>TIA,
>Grady

Boy Scouts of America Amateur Radio - N5ZGT
Eagle Scout (12-6-96) ARRL QRP: NorCal# 1700 QRP-L# 580
JASM - Troop 41 Author of Worldradio's "Youth Forum" Column
Albuquerque, N.M. Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NOAM
O.A. Lodge 66 <-W-W-W-<< Internet: n5zgt@swcp.com
---

324. Re: FS: AEA PK-900 with 9600 modem

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: rubenc@iglou.com
Message-ID: <E4JHI6.Hr9@iglou.com>
Source record: 20128
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.digital.misc

The PK900 has been sold, thanks for all the inquiries.

Charlie

325. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan25.052758.22849@ke4zv.atl.ga.us>
Source record: 20129
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <32E5B31D.AA1@polarnet.com> wbeam@polarnet.com writes:
>> > On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
>> Coffman)
>> > wrote:
>> > >Yeah, at least you can get the main screen up if you reboot
>> to DOS mode,
>> > >but when you give it the run command, it crashes and burns.
>
>I also run ATI Mach64 card. (also QEMM)
>My vidio card required the VESA driver.
>This card has some strange behaviour with
>programs that make VESA calls without the
>driver.
>
>Look for 64VBE200.ZIP from ATI. Contained
>in this .ZIP is the driver M64BE.COM which
>is a DOS TSR.

BINGO! Thanks Bill.

Gary

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

326. FO-29 Working?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc0a8b$1b3dd420$8dd866cf@default>
Source record: 20130

Can anyone tell me if FO-29 is still active? I have listened for the beacon , but haven't heard it yet.

I have also scanned the downlink for any activity without luck.

73 de VE7MDL ....Erik.

P.S. FO-20 seems to get through very well here.

327. FOR SALE

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: Stop picking on the poor boy <Tim_Raffety@Oxy.com>
Message-ID: <32EA43F6.5664@Oxy.com>
Source record: 20131

Heavy Duty 10' dish with bulls-eye feed horn. Two C bands are on the feed horn now. RX is a C and Ku General Inst. Will trade for multiband HF beam or various ham items. Will also sell. Make offer.

328. X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: sbabb@lpub.com
Message-ID: <5cdnpj$apf@news-central.tiac.net>
Source record: 20132
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna,rec.radio.amateur.misc

Has anyone tried expanded quad (x-q) antennas in EME arrays?

An x-q antenna uses ~2 wavelength loops as opposed to the ~1
wavelength loops in a regular quad. Actually, the x-q 'loop'
is broken by an insulator at the halfway point from the feed.

The 3rd edition of Orr & Cowan's _All About Cubical Quad Antennas_
(ISBN 0-933616-03-1) claims that a 2 element (DE & REF) x-q with
0.125 spacing gives 9.5 dBd of gain. A regular 2-el quad is about
7 dBd and a 2-el Yagi is about 5.5 dBd.

Given those numbers, I would think that it would be possible to
build a 4 antenna array of modest length (at least compared to the
usual EME beams) antennas with over 20 dBd of gain.

Comments? Experiences? Computer models?

329. Home Page

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: Jeff Wood <jwood@mail.one.net>
Message-ID: <32EA5AD0.5011@mail.one.net>
Source record: 20133

Check out my home page @ http://w3.one.net/~jwood

Jeff Wood
N8PPB
Cincinnati,Ohio
USA

330. ARLK007 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk007.1997@arrl.org>
Source record: 20134
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK007
ARLK007 Keplerian data

ZCZC SK07
QST de W1AW
Keplerian Bulletin 7 ARLK007
From ARRL Headquarters
Newington, CT January 25, 1997
To all radio amateurs

SB KEP ARL ARLK007
ARLK007 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97023.96073714 .00000016 00000-0 14142-5 0 3104
2 18129 82.9255 345.3418 0010147 265.3030 94.6965 13.72373568480459
UO-11
1 14781U 84021B 97023.00238753 +.00000101 +00000-0 +24908-4 0 09466
2 14781 097.8172 010.1778 0012431 102.9857 257.2736 14.69518571689938
RS-12/13
1 21089U 91007A 97024.55074644 .00000030 00000-0 15948-4 0 9516
2 21089 82.9202 25.1735 0029403 340.6157 19.3877 13.74076529299438
UO-14
1 20437U 90005B 97024.79521235 -.00000044 00000-0 -98313-7 0 2428
2 20437 98.5310 109.5094 0010398 272.9412 87.0581 14.29946224365725
RS-15
1 23439U 94085A 97023.14767281 -.00000039 +00000-0 +10000-3 0 02163
2 23439 064.8153 027.3760 0153483 159.6451 201.0679 11.27526604085585
AO-16
1 20439U 90005D 97023.76528083 -.00000016 00000-0 10452-4 0 403
2 20439 98.5448 111.1267 0010391 276.3123 83.6874 14.29996249365594
DO-17
1 20440U 90005E 97023.20590470 -.00000026 00000-0 69028-5 0 419
2 20440 98.5495 111.3432 0010732 278.1082 81.8894 14.30138461365540
```

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WO-18
1 20441U 90005F 97023.76023223 -.00000015 00000-0 11048-4 0 447
2 20441 98.5498 111.8048 0011291 275.9018 84.0877 14.30107204365623
LO-19
1 20442U 90005G 97023.17934179 +.00000029 +00000-0 +27922-4 0 00547
2 20442 098.5503 111.8293 0011222 276.4831 083.5076 14.30220033365560
FO-20
1 20480U 90013C 97023.56067486 -.00000031 00000-0 69925-5 0 9373
2 20480 99.0235 12.4725 0541156 345.1075 13.4590 12.83236150326152
AO-21
1 21087U 91006A 97023.78379277 .00000093 00000-0 82657-4 0 7818
2 21087 82.9404 158.4500 0035069 313.8352 45.9906 13.74577139300315
UO-22
1 21575U 91050B 97024.25789688 -.00000040 00000-0 78383-6 0 7460
2 21575 98.3190 89.7438 0007653 331.4949 28.5821 14.37053420289818
KO-23
1 22077U 92052B 97024.52893519 -.00000037 00000-0 10000-3 0 6363
2 22077 66.0773 86.0236 0014631 246.5421 113.4058 12.86300725209279
KO-25
1 22828U 93061F 97023.74411148 -.00000007 00000-0 14467-4 0 5082
2 22828 98.5537 101.3646 0009919 295.1428 64.8725 14.28165946141599
IO-26
1 22826U 93061D 97023.18470735 -.00000009 +00000-0 +13701-4 0 05380
2 22826 098.5625 100.7467 0009398 314.5041 045.5370 14.27824720173393
AO-27
1 22825U 93061C 97023.20516935 +.00000050 +00000-0 +37757-4 0 05455
2 22825 098.5614 100.5530 0008217 314.7274 045.3236 14.27716037173387
FO-29
1 24278U 96046B 97023.16046309 -.00000059 +00000-0 -23899-4 0 00664
2 24278 098.5618 084.0372 0350864 201.8346 156.7524 13.52627823021514
MO-30
1 24305U 96052B 97023.21061986 .00000203 00000-0 20364-3 0 668
2 24305 82.9201 101.7074 0028816 253.1155 106.6778 13.73089039 19160
Mir
1 16609U 86017A 97024.81818799 .00003175 00000-0 44034-4 0 9958
2 16609 51.6525 86.7680 0012054 0.2942 359.7962 15.60458586624643

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
January 28, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

331. CSETI Press Release: A Call For Government/Military Witnesses

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: "Steven Greer M.D." <103275.1472@compuserve.com>
Message-ID: <5cduhd$49h@mtinsc03.worldnet.att.net>
Source record: 20135

Please refer to the CSETI web site to find out more about this historic gathering and the release of national security oaths relating to this subject:
HTTP://www.cseti.com

PRESS RELEASE FOR MEDIA AND NEWSGROUPS

CSETI HEADQUARTERS, ASHEVILLE, N.C.
25 JANUARY 1997

BEGIN:

The Center for the Study of Extraterrestrial Intelligence (CSETI) through its Project Starlight initiative, has identified a significant number of first hand United States government, military and intelligence programs witnesses to UFOs of extraterrestrial origin.

In an effort to widen the scope of these investigations, CSETI is calling for additional government UFO witnesses to come forward, and for the US Congress to hold open hearings where these witnesses may testify without fear of reprisal.

CSETI has received legal opinions that the ongoing, extra-constitutional covert management of this subject is in violation of the US constitution, and that therefore the witnesses to these events are not legally bound to silence by pre-existing national security oaths on this subject (see attached documents).

In a letter dated 15 November 1996(enclosed) CSETI stated this position, and asked for relevant feedback from the White House, key members of Congress, the CIA, and other government officials. The letter also stated that, unless otherwise directed (UNODIR) we would regard these witnesses as free to speak openly about this matter as of 1 January 1997. None of the agencies or government leaders, all of whom acknowledged receipt of the letter, provided any policy, guidance or refuting materials by 1 January 1997 to correct this position.

Additionally, under current legal opinion, these witnesses are now considered free to speak without penalty, punishment or reprisal because of provisions provided by the Congress within the so-called 'Whistle Blower' legislation. This legislation, designed to allow government employees and government contractor employees to come forward with information regarding corruption and wrong-doing, protects these government UFO witnesses from any punishment or reprisals. This protection extends to both government employees and civilian employees of private

government contractors.

Given the illegal and extra-constitutional nature of current covert projects dealing with these issues, CSETI maintains that government and government contractor witnesses to UFO programs and events have a constitutional obligation to come forward with information on this subject, and are encouraged to do so .

CSETI will be convening a closed meeting of such witnesses in the early spring of 1997, and will be asking members of Congress to hold open hearings where these witnesses may testify.

Since the current covert management of this issue constitutes a grave and growing threat to the national security of the United States, CSETI is asking that these hearings take place by this summer.

Any government employee or government contract UFO witnesses who would like to cooperate with this initiative should contact CSETI's International Director Steven M. Greer M.D. as soon as possible. CSETI has determined that assembling numerous such witnesses in a coalition, to come forward in unison, is the safest and most credible way to move this subject to public disclosure.

These prospective witnesses should contact Dr. Greer at:

704-275-5671 or
Fax: 704-274-6766
email: 103275.1472@compuserve.com
or write: CSETI PO Box 15401 Asheville NC 28813

END PRESS RELEASE

EVALUATING THE VALIDITY OF NATIONAL SECURITY
OATHS RELATED TO THE UFO/EXTRATERRESTRIAL
SUBJECT

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A number of first hand military, intelligence and government-associated witnesses to covert projects dealing with UFOs and Extraterrestrial Intelligence (ETI) have been identified by CSETI's Project Starlight effort. Over the past three years, we have located several dozen such potential witnesses as part of a comprehensive strategy to collect adequate evidence for a global, definitive disclosure on this subject. The story which these important government witnesses can tell will make a credible, undeniable case for the reality of UFOs and the existence of extraterrestrial life forms in proximity to the earth.

One of the persistent obstacles to this testimony coming out into the public arena has been the issue of so-called national security oaths and restrictions placed on these witnesses. Some feel that

they are not free to speak unless 'released' from these national security oaths and restrictions, and so we have been working to encourage Congress and the White House to take actions which would remove these restrictions.

In the summer of 1995, a number of these witnesses gathered at a witnesses summit, and we all signed a letter to President Clinton asking him to take actions leading to the release of these restrictions. While receipt of this letter was acknowledged by a special assistant to the President, we still await specific action from the executive branch of the US government.

With this said, it is important to visit the question of whether or not such national security oaths and restrictions are themselves legally valid.

We have compelling witness testimony that the operations dealing with this subject currently exist, and have existed for several decades, outside of normal governmental projects. Members of the Project Starlight Team have met with very senior members of the Administration, Congress, the Joint Chiefs of Staff, the CIA and other relevant government agency operatives. The picture which emerges from these discussions is that of an operation dealing with UFOs which is functioning outside of the normal channels of government, as it is usually considered. Indeed, we have found that the most senior levels of the executive branch, Congress, the military etc. are totally out of the loop on this extraordinary matter.

This then brings up the sobering question of who is in the loop, and under what authorization are such projects operating? It is our assessment that for the large part, these operations do not fall under any constitutionally sanctioned avenues of authorization, and as such are, perforce, illegal.

Aside from the lack of oversight and authorization from the executive branch and Congress, these operations have, from time to time, engaged in deceptive practices which have frustrated the organs of constitutionally legal inquiries and democratic processes. Any such operation which behaves in this fashion unilaterally removes itself from the inherent legality and protection which exists for projects which are consonant with constitutional law.

This being the case (we are eager - nay, desperate- for someone to prove otherwise...) all of the so-called 'national security oaths' and other 'restrictions' placed on military, intelligence and government contract workers are null and void. That is, they appear to have no legal validity since the operations for which they were obtained are themselves illegal. In a constitutional democracy, it is a basic requirement of law that such operations be constitutionally legal, and if they are not, then all that flows from them - including such 'oaths'- are illegal and therefore non-binding. IF these operations are legal, nobody in the Congress, executive branch or senior

military with whom we have spoken knows of it. The production of a single current executive order or congressional directive authorizing these projects, which can be independently verified, would convice us otherwise.

More than one covert contact has told us that, indeed, any such witnesses can and should speak out at the right time and place since no legal entity would - or legally could - do anything about it. We agree.

Beyond this, it is the legal, moral and patriotic duty of such witnesses to come together, and at the highest, best and most credible venue possible, speak out in unison regarding the truth on this matter. Granted, if only one or two such persons come forward, the case will be weak, and the risk will be unacceptable. But if ten, twenty or more such witnesses come together, and united, resolve to share their information and experiences on this subject, then a definitive case will be made , and a great service to the world and their country will be fulfilled.

The return of this matter to the legal channels of government and the deliberation of the people is one of the great unfulfilled tasks of the post cold war era. Over half a decade has elapsed since the end of the cold war, and there can no longer be a justification (if there ever was) for this type of extraordinary secrecy and covert agenda. Both national and world security requires that this matter be returned to the world community as soon as possible.

We recommend that men and women of vision, courage and dedication join with us in fulfilling this task. Far from being a legal violation of 'security oaths', the public testimony by such witnesses is a highly moral and legal act. Further, is it not true that the continuation of this secrecy itself is illegal and immoral, given the inherent unconstitutionality of such programs? Credible witnesses, joining together and providing their testimony in a united strategy can return this subject to legal oversight and control, and thereby enable the people of our country and of the world to begin the public deliberations which should have occurred 50 years ago.

National Security Implications of the
UFO/ETI Subject: A brief summary

National Security Implications of the UFO/ETI subject are profound and far-reaching, albeit currently largely unrecognized.

These implications may be considered in separate but related aspects: those intrinsic to ET activity and those arising from current covert management of the issue.

Historical Background:
Early National Security considerations dealt with concern over

public panic arising from the detection of near earth and earth-landed extraterrestrial spacecraft (ETS)and from the technological implications of advanced Extraterrestrial material as it may impact the arms race and cold war. Additional concerns were related to the impact on religious belief systems, the political order and economic systems.

Importantly, once actual ETS were retrieved in 1947, thereby allowing Extraterrestrial hardware to be studied and back-engineered for possible human military applications, the need for complete secrecy regarding the matter was deemed paramount by authorities at that time. Given the tensions of the early atomic era and the mounting 'cold war' with the USSR, it is understandable that the introduction of Extraterrestrial technology was thought to be destabilizing to an already dangerous situation. Moreover, given the history of technological secrets related to atomic and hydrogen weapons being stolen by agents of the USSR, there was understandable concern that any technological breakthrough related to Extraterrestrial technology might find its way into Soviet hands. If such an event enabled the USSR to produce actual military applications before the US, obviously this would have placed the US military capability in a potentially catastrophic disadvantage.

Since the 1970's, we have reason to believe that a degree of cooperation on this matter has evolved with the USSR and the US and perhaps other nations. Certainly the end of the cold war has largely removed earlier concerns vis a vis technological breakthroughs and the fear of Soviet aggression.

Moreover, the psychological reasons for secrecy related to public panic are not valid today. At least 57% of the population accept that UFOs are real and are of Extraterrestrial origin. And 30-40 years of space exploration by human society has prepared the population for the possible existence of other Extraterrestrial civilizations capable of space travel. In short, the previous concerns motivating secrecy are not relevant today.

Intrinsically, there is no reason to believe that the Extraterrestrial presence poses a threat to the national or world security. If hostility and aggression were related to their purpose here, it is likely that events congruent with hostility would have transpired long before now. It is our assessment that the Extraterrestrials are not hostile, but are very concerned with human capability related to warfare and the militarization of space. Activity by Extraterrestrial assets related to the neutralization of ICBM facilities and to containing military oriented space exploration should be understood in light of their concern over a known history of human aggression which has been coupled with the advent of weapons of mass destruction and space exploration. Indeed, given the past history of human military assets focusing on and pursuing Extraterrestrial Spacecraft, we believe the Extraterrestrials have

responded with remarkable restraint.

Ironically, the threat to national security exists not with the Extraterrestrial presence, but the current covert management of the subject. In the absence of Extraterrestrial hostility over 50 years, current secrecy cannot be justified on the basis of fear of Extraterrestrial aggression. A disclosure related to the Extraterrestrial presence, if calmly and rationally presented, will not cause public panic in the US or elsewhere. 1995 is not 1945, and world society has evolved to the point where this information can be assimilated in a positive fashion.

In contrast, the covert and apparently extra-constitutional management of this matter is a real threat to national and world security, and undermines constitutional freedom and democracy. Unless it is terminated, this covert management will greatly harm US national security and the chances of a lasting world peace.

It is our assessment that the current covert management of this issue involves the following elements which are a direct, immediate and ongoing threat to the national security:

1. The continued denial of the Extraterrestrial presence creates a situation where a sudden, undeniable, public Extraterrestrial event could induce panic, since proactive disclosure efforts which could ameliorate public fears are non-existent. It is likely that such a public Extraterrestrial event will transpire within the next 2-10 years or sooner. Therefore secrecy and denial are a real threat to national and world security.

2. The current covert management of this issue appears to be operating independently and outside of the constitutional chain of command. The group controlling these operations, which involve reconnaissance, Extraterrestrial technology reverse-engineering, and space - based targeting of ETS (among others) is non-responsive to congressional or Executive branch oversight and control. This constitutes a real threat to the national security and to constitutional democracy and freedom.

3. We have credible, first hand sources who insist that extraterrestrial spacecraft have been targeted by human covert space weapons and on at least two occasions have been destroyed. If true, the risks to world peace and security are real and imminent, and the continuation of these covert activities constitute the gravest dangers to national and world security . Hostile actions taken by human covert assets against Extraterrestrial assets constitute a grave and immediate threat to the national security. A relatively small , covert entity , acting without consultation with the United Nations, the Congress, the President of the United States or the public is engaging in actions on behalf of all humans which endanger the earth and world peace. Unless controlled, these actions could precipitate interplanetary conflict and a disaster for the world

generally and the United States specifically. This covert management must be terminated and control of this issue returned to constitutional authority and to the public domain.

4. The concentration of the technological advances related to the reverse-engineering of Extraterrestrial technology into the hands of a small covert operation constitutes a threat to the national security, to world security and to the future of the earth. These Extraterrestrial technologies, which have been the object of covert research and development for over 45 years, are potentially of great benefit to humanity if used wisely for peaceful purposes, but are of immense danger when concentrated into a small covert operation which is unresponsive to the pubic or the legal and constitutional chain of command. The threat this poses to the US and world security is great, and the longer this situation continues, the greater the concentration of advanced technological power in the hands of a relative few. The secret control of such powerful technologies is inherently a threat to freedom, democracy and to our nation and the world. Its utilization for covert agendas outside constitutional control represents a grave danger to our country and must be restrained and reversed.

5. Importantly, secrecy and covert operatives per se constitute a real threat to the national security, since national security in a constitutional democracy can only be legitimately related to freedom and democratic government. Only in very rare and well-justified circumstances can extreme secrecy and covert operations exist, since by nature freedom and democracy cannot co-exist with unrestrained secrecy and secret power. The profound implications of the detection of Extraterrestrial civilizations cannot be allowed to be the exclusive domain of covert operations which are unrelated to public discourse and consultation. To do so is to undermine the US Constitution, democracy and freedom, and this constitutes a serious threat to the national security.

6. Finally, exclusive covert control of this matter has resulted and continues to result in the loss of opportunity for the world to come to terms with the Extraterrestrial presence in a peaceful and mutually beneficial fashion. This means that the people of the world, the United Nations and other international and national institutions are deprived of the opportunity to deal rationally with this issue. National and world security are therefore negatively impacted by the loss of opportunities in the following areas:

> The Environment, which is seriously at risk for large scale collapse over the next 100 years, would be profoundly improved if extraterrestrial technologies could be peacefully deployed. So-called zero point or free energy systems, which are non-polluting, would permit a sustainable technological civilization to exist on earth and would transform the earth environmentally and economically. Establishing peaceful and mutually beneficial

relations with extraterrestrial civilizations would eventually permit us to understand and apply such technologies.

>World unity and peace will be enhanced by the global realization that we are not alone in the universe. The acknowledgement of this fact will enhance the awareness that we are really one people living on the shared homeland of earth, and many of the conflicts currently afflicting the earth will be seen in a new perspective. This can be achieved without either deifying or demonizing the extraterrestrial presence, but rather placing it in a fair, scientific and neutral light. Eventually, world peace and a significant enhancement in the current geopolitical situation may result from the disclosure that we are not alone. An international infrastructure, and institutions capable of dealing peacefully with relations with extraterrestrial civilizations would, of necessity, evolve, and this in turn would strengthen world unity and cooperation.

>World culture, ideas, science and many other diverse areas may benefit through the development of peaceful relations with other worlds. While this process may take decades, if not centuries, its delay only puts off the time when the people of the earth will be united not only globally, but with other planetary civilizations as well.

In summary, it is imperative to the national security that the President and Congress undertake measures to terminate the secret, covert management of the UFO/ETI subject. Failure to place this matter in open, public discourse and control constitutes the gravest failure of democracy and government in the history of the world. That we do this is the test of our faith in democracy and our faith in the people. As the 21st century approaches, we must roll up the cancerous excesses of secrecy which are the legacy of the cold war and unfurl a new era wherein democracy is reaffirmed and a lasting world peace is given a chance.

HTTP://www.cseti.com

332. Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc0aa3$f6c84bc0$1fcab2cc@Psrklein>
Source record: 20136

Tubes and Test Equipment for Sale:

Old Tubes
Type
26, used, 10 available $4.00 each
27, used, 22 available $2.50 each
45, used, 9 available $11.00 each
80, used, 12 available $3.50 each
45, used, 9 available $11.00 each

227, used. Globe Type, 10 available, $5.00 each

Shipping in the USA 1 to 6 tubes $3.00 $0.07 above $0.50 per tube
---

JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin miniature,
made by Philips in the USA in 1986. =NEW= 10,000 available. $0.08 each
Shipping in the USA 1-199 tubes $3.00, 200 or more tubes shipping free.

Test Equipment (Working , but may need calibration and minor repairs)

(1) Boonton 190-A "Q" Meter---------- $40.00
(1) HP (Harrison) 6200A, Power Supply 0 to 40VDC, 12 Amps-------$100.00
(1) military AN/PRM-10 Grid Dip meter 2 to 400 MHz----------$40.00

For shipping cost, e-mail you full address and we will return e-mail
shipping cost.

Klystrons (New, Never Used)

(1) Varian VA-201B 8.5 to 9.6GHz, .065 Watts CW---------$20.00
(1) Varian VA-97B 32.6 to 34 GHz, 13 mW CW ----------$40.00

Shipping free in the USA

Please contact harlan@deltanet.com for more equipment.

333. Re: FO-29 Working?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32eb6055.5591221@news.monad.net>
Source record: 20137

On 25 Jan 1997 06:33:08 GMT, "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> wrote:

>Can anyone tell me if FO-29 is still active? I have listened for the
>beacon , but haven't heard it yet.
>
>I have also scanned the downlink for any activity without luck.
>
>73 de VE7MDL ....Erik.
>
>P.S. FO-20 seems to get through very well here.
>
FO-29 is currently in the digital mode, running 9600 baud BPSK.
The signal sounds a lot like an unsquelched FM receiver with no
signal. (See AMSAT news # 21, also posted to this group)
-Bruce, KA1ORB

334. Amsat News #21 satellite report

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32ec60d1.5715736@news.monad.net>
Source record: 20138

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--------------------[KO-23:23812]--------------------
From: N2OGB
To: ALL
Subject: Amsat News 021
Keywords: amsat
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SB SAT @ AMSAT $ANS-021.01
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 021.01 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-021.01

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
The JAS-2(FO-29) Digital mode at the current time.

[ANS thanks, Kazu Sakamoto, JJ1WTK for this update.]

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM
Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.
See ANS-012.01 for more information.
Those tracking the MIR should be sure their Keplerian elements
are post 97008 due to a maneuver MIR made on that date.
This Keplerian data came from Dr. TS Kelso's Celestial Web BBS on the
Grove server ( http://www.grove.net/~tkelso/) .
Mir
1 16609U 86017A 97009.12698316 .00022866 00000-0 28015-3 0 9471
2 16609 51.6519 165.6956 0007543 244.5338 115.4824 15.60228904622199
[ANS thanks Tom Smith, KC5MXA, for this update.]

SAFEX,
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater appears to be down at this time. See above bulletin for
further
information.
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RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat is giving extremely good downlink signals on 2 meters. In
this period of poor propagation on 15 m, the T-mode is providing very
easy access to the satellite. Interesting DX activity has been spotted
in Europe with stations in Egypt, Crete, Cameroon, etc.
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it's dead.

[ANS thanks Bob Johnson, W7LRD, for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 Frequency, for the best downlink efficiency, seems to be
approximately 2KHz low. The satellite operation, excluding this minor
anomaly, is performing well.

.
.
.KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 Normal operation
KO-25 returned to full service on 1/7/97. Operating Normally..

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Jan-06-97 11:26 UTC) It is working normally in its orbits on Europe.
It being listened to by stations in Germany, France, Spain, Canary Islands
(EA8), etc.

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.

[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz CW/USB)
Operating normally. Stacey E. (Chuck) Mills, W4SM, reports that
Ken Ernandes is attempting to obtain updated Keps, however the satellite is

apparently in an inopportune orbit to accomplish this. It has been
suggested that amateurs may be able to do better, at least for the next few
months by various ranging experiments of their own.. There have been
various discussion on AMSAT-BB on this. However, in the meantime, AO-10's
orbit doesn't change very fast. Parameters are now off by a bit,
especially at perigee. W4SM calculated the blon/blat, -125/5, about one
year ago and is waiting to see if predictions for this year hold up.

Below is a 14-day update on the AO-10 Keps from the NASA OIG RAID RBBS.
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
[ANS thanks Ken Ernandes, N2WWD, for these keps.]
.A lot of activity was noted this weekend when the sat was over
America. The bird was still workable up to phase 60. Still a bit of
FM-ing when operating in CW

[ANS thanks Stefano Badessi, PA3FWP, for this report.]

/EX

SB SAT @ AMSAT $ANS-021.02
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 021.02 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-021.02

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
It is working normally in its orbits on Europe.

Example of a lit orbit. (Jan-05-97 12:36:03 UTC)
The batteries load (About Tot.Bat/V = 10.865 Volts)
The RC/PSK TX-OUT= 0.633 - 0.704 Wtts.

Example of a nocturnal orbit. (Jan-05-97 23:57:05 UTC)
The batteries load (About Tot.Bat/V = 10.433 Volts)
The Transponder RC/PSK TX-OUT= 0.760 Watts..

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Strong downlink signal and very busy with activity.

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)
During the past month (18 December - 14 January) good, steady signals
have been received from OSCAR-11 on 145.826 MHz.

[ANS thanks Clive Wallis, G3CWV, for this information.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
Operating normally. TLM values are carried on AMSAT-BB.

[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
Jim White reports that DOVE had timed out on December second.
DOVE's software was then uploaded again to correct the
time out problem. Signals from Dove are once again being
received.

[ANS thanks Jim White, WD0E, and Sergio Adrian Gorgone,
LW7DXF, for this information.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB,
1200 Baud PSK AX.25.)
It is working excellently in its orbits on Europe.

Example of a lit orbit. (Jan-05-97 12:00:44 UTC)
The batteries in good state (Tot. Bat/V = 11.08 Volts)
The RC/PSK TX-OUT= 1.004 - 1.079 Wtts.
.
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]
.
WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
WeberSat (WO-18) is operational transmitting telemetry, and Week 4 WOD
CH#: 2F 30 35 36 3B 40. The new attic code has been loaded and a test
picture taken. There will be more to follow in the coming weeks as

testing of the software continues.

[ANS thanks Tommy Davis, IK3WVJ, for this report.]

[Please send your Satellite reports to bjarts@uslink.net or to wt0n@amsat.org]

/EX

335. HAM PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-01-25 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32EAFFC4.3FAC@mailhost.cyberramp.net>
Source record: 20139

http://www.cyberramp.net/~johnf

336. TRAKSAT 4.03 Released

Newsgroup: rec.radio.amateur.space
Date: 1997-01-26 00:00:00 UTC
From: "Paul E. Traufler" <wintrak@traveller.com>
Message-ID: <01bc0b23$d89c15c0$51ae1ace@traveller.com.traveller.com>
Source record: 20140

TRAKSAT Version 4.03 has been released!

This version adds the option to change the Star look direction on the fly
by pressing the N,E,S,W keys.

Paul
--
WinTrak Pro
Satellite Tracking Program For Win95/NT

http://www.hsv.tis.net/~wintrak
wintrak@traveller.com

337. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-01-26 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <32EB1C6D.743F@cyberramp.net>
Source record: 20141

http://www.cyberramp.net/~rnewland

338. Lowe Air-master

Newsgroup: rec.radio.amateur.space
Date: 1997-01-26 00:00:00 UTC
From: William Vynck <William.Vynck@ping.be>
Message-ID: <32EB762D.64F7@ping.be>
Source record: 20142
Cross-posted to:
be.forsale,rec.radio.amateur.space,fido.belg.fsfan,fido.belg.ham,fido.belg.ned.handel,fido.belg.ram,fido.belg.satellite

I'm looking for the program " LOWE Air-Master" to decode ACARS
Any information about building a decoder ar also welcome.

Thx

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

339. EIRP Recommendations

Newsgroup: rec.radio.amateur.space
Date: 1997-01-26 00:00:00 UTC
From: tsellic@ibm.net
Message-ID: <5cgog0$17e0$1@news-s01.ny.us.ibm.net>
Source record: 20143

Hi all
Has anyone seen a list of recommended EIRP values for different satellites?
Thanks in advance
Terry WA9TTY

340. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: sbabb@lpub.com
Message-ID: <5ch8ta$8bj@news-central.tiac.net>
Source record: 20144
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Thanks for the comments, Don. I haven't ventured into EME yet, but
it looks like 'gain is everything' when designing a station.

I'm looking for a relatively inexpensive entry into EME (if such
a thing can be done), and the antenna system looked like it could
be a place to trim costs if a decent 4 antenna array could be
constructed. Since I don't have the real estate for the usual
13+ element Yagi antennas, I'm looking into shorter-boomed
alternatives. A 6-to-8 element X-Q looks like a reasonable way
to get equivalent gain (16dBd+ per antenna) with a boom shorter
than the longest dimension of my house :-)

If spacing between adjacent element sides is 1/2 wavelength,
then the 4-bay X-Q array is only 1-1/2 wavelengths high and
wide, as opposed to 1 wavelength width and height in a 4-bay
array or regular quads. Sure, it takes about twice as much
wire to get about 3dB of gain, but it seems cheaper to go that
route rather than doubling the number of antennas in the array.

Scott

In article <854304218@infoway.com>, don.phelps@infoway.com (Don Phelps) wrote:
>The 2 element X-Q Quad has less gain per wavelength of element, than
>the corresponding regular qubical quad.
>
>For example, your 2 element x 2 wavelength loop= 9.5dBd/4 wavelenghts
>against 4 element x 1 wavelength loops=10.2dBd/4 wavelengths
>
>And since the regular quad is half the width, it probably
>has at least as good "stacking gain" for a given spacing
>within a 4 antenna array.
>
>Instead of a three element X-Q, use a 6 element regular Quad:
>6 elements x 1 wavelength loops=11.4dBd/4 wavelengths
>
>So there are a couple comments.
>Don, N6MCE

341. FS HP DC to 4GHz coax relay

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <32ECC3F0.5B5B@worldnet.att.net>
Source record: 20145

I have one slightly used Hewlett Packard Model 3331A coaxial switch.
Frequency range DC to 4GHz very low loss. Coil 15V (works on 13.8)
Data sheet included.

Price: $55 includes shipping.

George W3SAP
gakeller@worldnet.att.net

342. FO-29 in 9600 baud mode!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32f1fb8f.19657037@news.monad.net>
Source record: 20146

Greetings all! I managed to connect to JAS-2 (FO-29) this evening.
This satellite is currently operating in the digital mode, 9600 baud
AFSK. It operates like a terrestrial-based BBS system, with a few
differences from the standard commands. I have included here a copy of
the help file with the commands for those who are interested. The
uplink in this mode is 145.870 and the downlink is at 435.910. The BBS
callsign is 8J1JCS. If you would like more info on this bird, check
out: http://www.jarl.or.jp/jarl/jas-2/ejasmenu.htm

There is available on this site a schedule for the various modes that
this satellite supports.

My buffer copy:

*** CONNECTED to 8J1JCS

JAS2>H

------ JAS-2 Mailbox Availlable commands ------

B : List file headers addressed to ALL
F : List file headers from latest
F<MM/DD> : List file headers since posted day<MM/DD>
H : Show help message
K<nnnn> : Kill a file number<nnnn>
M : List file headers addressed to current user
Q : Disconnect(quit) JAS-2 mailbox
R<nnnn>+ : Read a file number<nnnn>+
U : List current user(s)
Y : More display
W : Write a file

JAS2>W

To ? ALL

Subject TEST OF JAS-2

Enter text <CR>.<CR> to end.
Hello to all. Bruce here in Newport, NH FN33.
First test of upload to JAS-2 73 to All
es Good Luck de KA1ORB.

.

Message written 126 byte(s).
JAS2>b

Total 28 File(s)

No. Date UTC To From Size Subject
0113 01/27 00:21 ALL KA1ORB 126 TEST OF JAS-2
0111 01/26 17:19 ALL DK5EC 32 test 9600 Bd from Koenigswinter
0110 01/26 16:00 ALL VE3BCG 0
0108 01/26 10:35 ALL F5TFQ 101 test and good morning
0105 01/25 11:07 ALL JA0AQZ 297 HELLO
0102 01/25 02:11 ALL K8TL 106 hello
0101 01/24 19:10 ALL OH2KXH 97 test from finland
0100 01/23 21:52 ALL F6HLG 194 FO29 TLM
0092 01/23 12:55 ALL JA0AQZ 677 HELLO OM
0089 01/23 11:07 ALL JA2HDW 402 CQ

-- MORE(Yes=Y)or(No=N) --n

JAS2>q

*** DISCONNECTED

73 All de Bruce, KA1ORB

343. FS again: PK900 with 9600 baud modem

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: rubenc@iglou1.iglou.com
Message-ID: <E4oo64.Bqp@iglou.com>
Source record: 20147
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.digital.misc

I have for sale (again - prior buyer backed out) a PK-900 with factory
9600 baud modem. WOrks all HF modes plus VHF packet at 1200 baud or
9600 baud. Works well with all 9600 baud satellites and with WISP.

Cost over $500.00 - sell for $350.00 + shipping

CHarlie KB8BWE
kb8bwe@amsat.org
rubenc@iglou.com

--
Charlie Rubenstein
rubenc@iglou.com
KB8BWE@N8ZFM.#CIN.OH.USA

344. ACARS

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: William Vynck <William.Vynck@ping.be>
Message-ID: <32ED1F84.3A6B@ping.be>
Source record: 20148
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Who would help me ?

I'm intrested in everything about ACARS
I have found a schematic to build a ACARS interface. I can't test the interface because i don't have the program to decode them.

Who would like to send me decoder software via email ? (something like LOWE)

I'ts above my budget to buy a LOWE interface with the software, if i could test my interface i could affort it.

So to all spotters, radio amateurs... who send me software to decode ACARS (maybe there is schareware to decode them ?)

If you have any other suggestions to help me and it's about the ACAR system, be free to email them.

THANKS VERY MUCH !!!!

73
William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

345. Satellite Rig TS790A

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc0ca5$dbd46c00$5e427fce@default>
Source record: 20149

I am planning on getting into satellites and have heard that the TS790 from Kenwood does not work well on digital modes because the downlink cannot be doppler shifted. Is anyone using a TS790 att for digital modes and what modifications (if any) are necessary for digital. I would be using a PK-232 with 9600/1200 baud PSK modem. I am not sure if I should go with the 790 or invest in a FT736r Yeasu. So if you are using a TS790A and have any ideas suggestion etc it would sure help me make a decission before my birthday in July (the big 50) and I want to get a satellite setup. You only turn 50 once so it will be a nice birthday present. Bill (KA7YAO)

346. Re: ACARS

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <32EDA096.109@erols.com>
Source record: 20150
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

William Vynck wrote:
>
> Who would help me ?
>
> I'm intrested in everything about ACARS
> I have found a schematic to build a ACARS interface. I can't test the
> interface because i don't have the program to decode them.
>
> Who would like to send me decoder software via email ? (something like
> LOWE)
>
> I'ts above my budget to buy a LOWE interface with the software, if i
> could test my interface i could affort it.
>
> So to all spotters, radio amateurs... who send me software to decode
> ACARS (maybe there is schareware to decode them ?)
>
> If you have any other suggestions to help me and it's about the ACAR
> system, be free to email them.
>
> THANKS VERY MUCH !!!!
>
> 73
> William
>
> --
> Visit my Homepage http://www.ping.be/RACO
> E-mail RACO@ping.be and/or William.Vynck@ping.be
> Fidonet 2:291/1800.15
> Radio Amateur ONL4021
> QSL via bureau UBA Belgium Hi Bill- much as I wish I didn't have to dash such a worthy
project to
date there is no shareware out there that handles ACARS. In addition, I
am told there are some (rather illegal) pirated copies of some of the
commercial software floating around...I am sorry to have to say
that...73s Mike (co-listowner ACARS listserver)

347. Re: Rebellions in Space!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: Dennis Newkirk <rusaerog@mcs.net>
Message-ID: <32ED387F.4FBD@mcs.net>
Source record: 20151

Bill Meara wrote:
> They also reported on a rebellion by a MIR crew. Disgusted with their
> ground controllers, they turned off their radios and wouldn't
> communicate for several weeks! Does anyone have info on this
> incident?

Every day emergency landing times are radioed to the crew. Cosmonauts
may be upset with each other or the ground, but eventually they must
communicate to survive. Every week or so they get to talk to
friends and family, I doubt anyone would pass up on that after
months in orbit. So your story seems far from reality.

---------------------------------+-----------------------------
Dennis Newkirk |
Editor - Russian Aerospace Guide | email: rusaerog@mcs.net
Cosmonautics Editor - Quest Mag. | http://www.mcs.net/~rusaerog/
---------------------------------+-----------------------------

348. NORAD Two-Line Orbital Element Sets (TLE936)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5cjcoi$cd1@blackbird.afit.af.mil>
Source record: 20152

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #936 -
Alouette 1
1 00424U 62049A 97027.18956843 .00000067 00000-0 67733-4 0 2637
2 00424 80.4630 62.7238 0023247 175.3751 184.7611 13.67886740712961
ATS 1
1 02608U 66110A 97015.21495196 -.00000154 00000-0 10000-3 0 9972
2 02608 14.5608 350.5405 0006833 101.3073 258.7888 1.00288901 26990
ATS 3
1 03029U 67111A 97025.24040265 -.00000113 00000-0 10000-3 0 6083
2 03029 14.9118 357.4018 0011428 270.6090 197.8650 1.00272656106998
Starlette
1 07646U 75010A 97024.86158706 -.00000110 00000-0 23924-4 0 290
2 07646 49.8285 353.9467 0206040 242.4741 115.5083 13.82192119109622
LAGEOS
1 08820U 76039A 97024.33741560 .00000011 00000-0 00000+0 0 2594
2 08820 109.8446 101.7906 0043664 80.5588 280.0164 6.38664512227950
ETS-2
1 09852U 77014A 97018.26314031 -.00000043 00000-0 10000-3 0 957
2 09852 13.4838 30.4753 0005772 151.8067 208.2517 1.00022232 19797
GOES 2
1 10061U 77048A 97025.36598598 .00000056 00000-0 10000-3 0 7915
2 10061 12.6603 34.5866 0010687 135.5685 270.6674 1.00289664 16673
IUE
1 10637U 78012A 97025.25253022 .00000041 00000-0 10000-3 0 3510
2 10637 35.8197 80.0129 1344721 63.6872 283.2203 1.00067275 22154
GOES 3
1 10953U 78062A 97021.34951318 -.00000116 00000-0 10000-3 0 7692
2 10953 11.6594 37.5747 0000800 257.6731 206.2670 1.00263813 21244

```
SeaSat 1
1 10967U 78064A 97026.71616026 -.00000059 00000-0 24997-4 0 5481
2 10967 107.9946 277.2782 0001915 275.2452 84.8472 14.38147471973584
Nimbus 7
1 11080U 78098A 97023.60563718 -.00000082 00000-0 -36621-4 0 6440
2 11080 98.9196 240.7829 0009519 90.1138 270.1104 13.83685751921657
GOES 5
1 12472U 81049A 97021.18021999 .00000070 00000-0 10000-3 0 9795
2 12472 8.5416 47.9857 0004187 82.3094 277.7808 1.00303696 15281
Cosmos 1383
1 13301U 82066A 97023.39286769 .00000015 00000-0 -17662-7 0 5601
2 13301 82.9332 332.3352 0027979 356.4024 3.6934 13.68079963727481
LandSat 4
1 13367U 82072A 97025.71343879 .00000033 00000-0 16995-4 0 401
2 13367 98.0460 75.5036 0006678 157.2671 202.8820 14.57196639772943
DMSP B5D2-1
1 13736U 82118A 97027.15695817 -.00000037 00000-0 26765-5 0 1654
2 13736 98.6195 217.9241 0009160 92.9010 267.3218 14.25816946732987
IRAS
1 13777U 83004A 97027.10186036 .00000110 00000-0 10592-3 0 5617
2 13777 98.9663 213.8715 0011674 194.8297 165.2523 13.99274050384687
Cosmos 1447
1 13916U 83021A 97024.53994633 .00000002 00000-0 -14033-4 0 6522
2 13916 82.9432 27.3178 0036281 255.2803 104.4306 13.74350072694147
TDRS 1
1 13969U 83026B 97024.72609978 -.00000297 00000-0 00000+0 0 7016
2 13969 9.3003 41.5392 0002301 251.7081 43.1684 1.00265476 23607
GOES 6
1 14050U 83041A 97021.35862422 -.00000058 00000-0 10000-3 0 6071
2 14050 7.3860 51.5908 0002242 39.1817 47.1298 1.00218024108382
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97027.22791311 .00000003 00000-0 10879-4 0 5860
2 14780 98.3051 90.6912 0002419 341.3258 18.7851 14.57064542686588
UO-11
1 14781U 84021B 97027.01973805 .00000038 00000-0 14234-4 0 9465
2 14781 97.8181 14.0269 0012614 91.9305 268.3346 14.69518614690529
Cosmos 1574
1 15055U 84062A 97025.56055123 .00000026 00000-0 11223-4 0 8525
2 15055 82.9576 81.9534 0029057 81.7734 278.6718 13.73643933631515
Cosmos 1602
1 15331U 84105A 97027.19422274 .00000184 00000-0 18807-4 0 5354
2 15331 82.5343 263.1452 0018913 291.0559 68.8633 14.84833628666218
ERBS
1 15354U 84108B 97026.87032893 -.00000073 00000-0 14887-4 0 2528
2 15354 56.9948 204.3009 0002465 146.6145 213.5048 14.95013957670294
NOAA 9
1 15427U 84123A 97026.77222158 .00000029 00000-0 39042-4 0 157
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2 15427 98.9227 97.5170 0015802 42.6846 317.5543 14.13832975625221
Mir
1 16609U 86017A 97026.86750504 .00000097 00000-0 74774-5 0 9993
2 16609 51.6518 76.4537 0011700 6.4593 353.6547 15.60460085624963
SPOT 1
1 16613U 86019A 97025.24491813 -.00000045 00000-0 00000+0 0 277
2 16613 98.8137 98.5843 0000842 18.3899 341.7312 14.19996782251829
Cosmos 1766
1 16881U 86055A 97025.12801056 .00000246 00000-0 26743-4 0 4492
2 16881 82.5177 322.7207 0019033 329.9246 30.0880 14.83805863566754
EGP
1 16908U 86061A 97027.16688294 -.00000083 00000-0 10000-3 0 1497
2 16908 50.0087 28.3934 0011508 222.8929 137.1008 12.44415648144293
NOAA 10
1 16969U 86073A 97026.83541879 -.00000006 00000-0 15577-4 0 9440
2 16969 98.5341 23.6220 0014279 62.0549 298.2075 14.25017375538450
MOS-1
1 17527U 87018A 97025.20851596 -.00000043 00000-0 00000+0 0 5099
2 17527 98.9100 88.0449 0020585 69.5738 290.7635 14.00431663506069
GOES 7
1 17561U 87022A 97025.24642328 -.00000167 00000-0 10000-3 0 2502
2 17561 3.5030 67.9015 0005011 322.3353 89.0232 1.00272450 19532
Kvant-1
1 17845U 87030A 97026.73942119 .00014972 00000-0 18376-3 0 8836
2 17845 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787559053
DMSP B5D2-3
1 18123U 87053A 97026.68161139 .00000011 00000-0 28117-4 0 7833
2 18123 98.7655 219.2686 0014320 340.1439 19.9176 14.15464731496115
RS-10/11
1 18129U 87054A 97023.96073714 .00000016 00000-0 14142-5 0 3104
2 18129 82.9255 345.3418 0010147 265.3030 94.6965 13.72373568480459
Meteor 2-16
1 18312U 87068A 97023.80665157 .00000037 00000-0 20266-4 0 5393
2 18312 82.5554 177.0896 0012278 328.3894 31.6529 13.84090709476690
Meteor 2-17
1 18820U 88005A 97027.10484566 .00000041 00000-0 23626-4 0 1629
2 18820 82.5412 228.9658 0017865 20.7751 339.4131 13.84768576454510
DMSP B5D2-4
1 18822U 88006A 97026.54167009 .00000040 00000-0 35759-4 0 4474
2 18822 98.3792 213.9311 0006975 71.8505 288.3433 14.23214756466343
Glonass 34
1 19163U 88043A 97024.54814132 -.00000003 00000-0 10000-3 0 1511
2 19163 65.3477 78.3817 0010284 142.0907 218.0274 2.13102338 66959
Glonass 36
1 19165U 88043C 97021.32049408 -.00000017 00000-0 10000-3 0 5588
2 19165 65.3232 78.4410 0005204 341.0322 19.0171 2.13102035 67509
METEOSAT 3
1 19215U 88051A 97019.13692810 -.00000067 00000-0 10000-3 0 3000
2 19215 3.6940 66.5686 0006020 131.6125 228.3499 0.96946940 19279
OKEAN 1
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1 19274U 88056A 97023.62379867 .00000174 00000-0 18511-4 0 1498
2 19274 82.5115 65.2544 0021114 115.2411 245.0997 14.82567007462038
Meteor 3-2
1 19336U 88064A 97024.46811930 .00000051 00000-0 10000-3 0 5459
2 19336 82.5371 9.8369 0018435 43.0968 317.1594 13.16980311408607
Glonass 39
1 19503U 88085C 97024.16680481 -.00000051 00000-0 10000-3 0 4427
2 19503 65.5001 317.3062 0003506 63.3766 296.6593 2.13101995 65051
NOAA 11
1 19531U 88089A 97026.83575839 .00000000 00000-0 25203-4 0 8348
2 19531 99.1697 56.5839 0011645 338.2086 21.8588 14.13118933430031
TDRS 3
1 19548U 88091B 97015.75173666 -.00000204 00000-0 10000-3 0 2653
2 19548 2.9170 70.7431 0006677 187.3994 212.9930 1.00274026 17665
Glonass 40
1 19749U 89001A 97024.20413465 -.00000003 00000-0 10000-3 0 6552
2 19749 65.3040 77.9056 0007191 255.3214 104.6803 2.13101524 62564
Glonass 41
1 19750U 89001B 97024.25890478 -.00000003 00000-0 10000-3 0 5618
2 19750 65.3116 77.9712 0008542 232.8474 127.1543 2.13101767 62580
GPS BII-01
1 19802U 89013A 97026.51043252 -.00000018 00000-0 00000+0 0 3484
2 19802 55.4314 101.7437 0019515 181.0103 179.0408 2.00561177 58193
Akebono
1 19822U 89016A 97026.97205572 .00006210 00000-0 32520-3 0 8529
2 19822 75.1227 353.5339 3726483 296.8184 30.0793 7.95807624184452
Meteor 2-18
1 19851U 89018A 97020.75022166 .00000067 00000-0 46822-4 0 5363
2 19851 82.5239 107.6175 0015734 85.7096 274.5862 13.84424896398932
MOP-1
1 19876U 89020B 97025.90859513 -.00000146 00000-0 00000+0 0 2436
2 19876 2.4403 70.8726 0017167 280.8067 79.0632 0.97110658 8786
TDRS 4
1 19883U 89021B 97 23.00278273 .00000000 00000-0 10000-3 0 3010
2 19883 0.2894 82.4269 0006674 184.7756 175.2201 1.00269900201318
GPS BII-02
1 20061U 89044A 97026.85070717 -.00000010 00000-0 10000-3 0 3454
2 20061 54.0544 277.1555 0160606 223.8450 135.9951 2.00563276 55945
Nadezhda 1
1 20103U 89050A 97026.79374119 .00000022 00000-0 69550-5 0 527
2 20103 82.9625 303.7635 0037706 148.4421 211.9002 13.73872894379381
GPS BII-03
1 20185U 89064A 97025.05117825 -.00000022 00000-0 00000+0 0 3858
2 20185 55.2299 102.2201 0016430 337.1122 22.8942 2.00552338 54487
GMS 4
1 20217U 89070A 97025.96951389 -.00000369 00000-0 10000-3 0 5235
2 20217 2.2204 73.7286 0004417 334.1663 185.9284 1.00263653 27652
INTERCOSMOS 24
1 20261U 89080A 97025.82524548 .00000106 00000-0 32507-4 0 5610
2 20261 82.5967 128.5376 1240004 255.3783 90.6915 12.47379385333666
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GPS BII-04
1 20302U 89085A 97026.71521777 .00000047 00000-0 10000-3 0 3649
2 20302 53.1949 216.8801 0026357 189.6627 170.2846 2.00571577 53312
Meteor 3-3
1 20305U 89086A 97026.33097274 .00000044 00000-0 10000-3 0 7406
2 20305 82.5538 330.3074 0006747 112.3008 247.8807 13.04435149347297
COBE
1 20322U 89089A 97025.02420706 .00000240 00000-0 18079-3 0 2770
2 20322 98.9327 42.4415 0009236 135.3299 224.8601 14.03466817368045
Kvant-2
1 20335U 89093A 97026.73942119 .00014972 00000-0 18376-3 0 8059
2 20335 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787408065
GPS BII-05
1 20361U 89097A 97026.23686919 -.00000047 00000-0 10000-3 0 1698
2 20361 56.1281 44.4668 0090572 140.7732 219.9333 2.00565824 42789
COSMOS 2054 (Altair-1)
1 20391U 89101A 97026.09025215 -.00000135 00000-0 00000+0 0 5009
2 20391 4.2682 62.0543 0002579 196.3356 243.5958 1.00273323 26235
SPOT 2
1 20436U 90005A 97026.00738629 -.00000044 00000-0 00000+0 0 1796
2 20436 98.7422 102.5934 0001758 70.1294 290.0080 14.20020774363465
UO-14
1 20437U 90005B 97024.79521235 -.00000044 00000-0 -98313-7 0 2428
2 20437 98.5310 109.5094 0010398 272.9412 87.0581 14.29946224365725
AO-16
1 20439U 90005D 97023.76528083 -.00000016 00000-0 10452-4 0 403
2 20439 98.5448 111.1267 0010391 276.3123 83.6874 14.29996249365594
DO-17
1 20440U 90005E 97023.20590470 -.00000026 00000-0 69028-5 0 419
2 20440 98.5495 111.3432 0010732 278.1082 81.8894 14.30138461365540
WO-18
1 20441U 90005F 97023.76023223 -.00000015 00000-0 11048-4 0 447
2 20441 98.5498 111.8048 0011291 275.9018 84.0877 14.30107204365623
LO-19
1 20442U 90005G 97025.20816135 .00000016 00000-0 22960-4 0 413
2 20442 98.5502 113.8228 0011270 270.6324 89.3570 14.30220163365854
GPS BII-06
1 20452U 90008A 97025.63656737 .00000007 00000-0 10000-3 0 2686
2 20452 54.0723 157.6833 0066574 94.1729 266.5483 2.00554294 51279
MOS-1B
1 20478U 90013A 97025.71030706 .00000045 00000-0 66997-4 0 194
2 20478 99.1055 98.2190 0005926 7.1173 353.0137 13.93970576275558
DEBUT
1 20479U 90013B 97024.51899076 -.00000034 00000-0 -42150-7 0 407
2 20479 99.0253 13.4916 0540794 342.2931 15.9950 12.83348410326294
FO-20
1 20480U 90013C 97023.56067486 -.00000031 00000-0 69925-5 0 9373
2 20480 99.0235 12.4725 0541156 345.1075 13.4590 12.83236150326152
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2 20508 82.9530 78.3127 0045902 102.9095 257.7192 13.73518112346578
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2 20546 94.1261 120.0957 0053242 217.8323 141.9187 15.49971435379602
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2 20580 28.4695 227.4409 0006075 340.8858 19.1560 14.91161162171848
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2 20608 89.9254 171.4528 0106805 353.9082 6.0800 14.64972326359097
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1 20619U 90045A 97025.97880335 -.00000041 00000-0 10000-3 0 3570
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2 20621 65.1055 316.4065 0012427 199.5293 160.4560 2.13102538 52064
Kristall
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2 20635 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787378895
ROSAT
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2 20638 52.9888 15.2424 0014271 87.4759 272.7863 15.07539316365935
Meteor 2-19
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2 20670 82.5460 170.1674 0016041 351.7141 8.3752 13.84128008332695
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1 20712U 90065A 97021.31002626 -.00000005 00000-0 27364-3 0 3851
2 20712 17.7101 161.3579 7175331 182.5865 169.1530 2.35827109 48267
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2 20724 55.0767 99.7313 0132705 188.4685 171.3602 2.00563978 45905
Feng Yun1-2
1 20788U 90081A 97025.92714131 .00000336 00000-0 25103-3 0 2331
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Meteor 2-20
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2 21007 65.3008 77.4837 0033532 179.4241 180.6385 2.13101082 47600
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2 21008 65.2806 77.1857 0008806 268.3863 91.5929 2.13098708 47748
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RS-12/13
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2 21140 0.9862 79.1605 0001440 170.7125 157.0291 1.00277133 23829
Nadezhda 3
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Glonass 52
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2 21218 64.8239 315.7951 0008807 306.4595 53.4872 2.13102579 45248
GRO
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Meteor 3-4
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2 21263 98.5449 45.3399 0013038 350.0075 10.0841 14.22686529296256
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2 21552 56.3461 40.3469 0075600 254.8029 104.4021 2.00572549 40703
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2 21578 98.3572 100.1186 0004584 322.7253 37.3621 14.39314695290469
TDRS 5
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Meteor 3-5
1 21655U 91056A 97025.21803113 .00000051 00000-0 10000-3 0 9510
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DMSP B5D2-6
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Glonass 53
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Glonass 54
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Glonass 55
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JERS-1
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2 21890 53.7357 217.4930 0061022 201.6049 158.1469 2.00558723 36095
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Glonass 57
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2 22057 64.6868 315.8843 0008982 320.5051 39.4493 2.13102436 34866
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FREJA
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TDRS 6
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Glonass 59
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1 22581U 93017A 97026.80682696 -.00000072 00000-0 10000-3 0 6370
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NOAA 13
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GPS BIIA-22
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Meteor 2-21
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UFO F2
1 22787U 93056A 97021.80613203 -.00000070 00000-0 00000+0 0 7053
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SPOT 3
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STELLA
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2 22829 98.5569 101.9402 0009387 292.5150 67.5037 14.28148490173588
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METEOSAT 6
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Meteor 3-6
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TUBSAT-B
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GOES 8
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STRV-1B
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Glonass 67
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RESURS 1-3
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Glonass 70
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LUCH (Altair-2)
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RS-15
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NOAA 14
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GMS 5
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1 23522U 95011B 97026.47468245 -.00000287 00000-0 10000-3 0 2001
2 23522 0.5157 30.4556 0000395 56.1812 349.9578 1.00266144 6697
DMSP B5D2-8
1 23533U 95015A 97026.67061846 .00000047 00000-0 49164-4 0 8457
2 23533 98.8441 32.3022 0007535 136.2344 223.9426 14.12772661 95185
OSC 1
1 23545U 95017A 97024.06255040 .00000055 00000-0 32579-4 0 1953
2 23545 69.9740 17.5712 0016589 239.3381 120.6113 14.45464955 95574
OSC 2
1 23546U 95017B 97023.47360272 -.00000006 00000-0 15471-4 0 2299
2 23546 69.9786 19.1510 0015890 233.9738 125.9921 14.45482245 95497
Microlab 1
1 23547U 95017C 97023.47589773 .00000134 00000-0 54853-4 0 1678
2 23547 69.9783 18.8153 0016076 234.8153 125.1474 14.45644374 95502
OFEQ 3
1 23549U 95018A 97026.51796611 .00019387 00000-0 44843-3 0 4355
2 23549 143.3618 154.6161 0205181 226.4668 131.8842 15.21208097100302
GFZ-1
1 23558U 86017JE 97027.20509974 .00002465 00000-0 31640-4 0 2039
2 23558 51.6517 62.0637 0005475 356.5217 3.5718 15.63692948625048
ERS-2
1 23560U 95021A 97027.25256696 -.00000031 00000-0 46224-5 0 3272
2 23560 98.5464 104.0800 0000935 85.8717 274.2575 14.32249142 92645
Spektr
1 23579U 95024A 97026.73942119 .00014972 00000-0 18376-3 0 5588
2 23579 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787 96375
GOES 9
1 23581U 95025A 97022.51724130 .00000074 00000-0 10000-3 0 3116
2 23581 0.0476 92.8930 0003939 212.2642 228.3689 1.00285472 6128
Helios 1A
1 23605U 95033A 97027.21094214 .00050719 00000-0 96500-2 0 4308
2 23605 98.1436 325.9240 0001262 64.1878 295.9431 14.63840731 83336
UPM SAT 1
1 23606U 95033B 97025.42373385 .00000118 00000-0 29549-4 0 2474
2 23606 98.1242 325.9451 0006752 197.0080 163.0896 14.67342933 83308
CERISE
1 23607U 95033C 97024.24179232 .00000033 00000-0 14519-4 0 1497
2 23607 98.1243 324.5540 0005529 198.4441 161.6569 14.66994183 83143
TDRS 7
1 23613U 95035B 97025.58990344 .00000095 00000-0 00000+0 0 2921
2 23613 1.1387 81.8024 0001668 213.6663 230.6263 1.00276441 5617
Glonass 74
1 23620U 95037A 97025.40518382 .00000051 00000-0 00000+0 0 2382
2 23620 64.8208 196.5412 0018838 163.2041 196.8471 2.13102968 11747
Glonass 75
1 23621U 95037B 97026.52164903 .00000060 00000-0 00000+0 0 2484
2 23621 64.8264 196.5062 0017916 173.1343 186.8765 2.13102172 11766
Glonass 76
1 23622U 95037C 97027.04890241 .00000066 00000-0 00000+0 0 2558
2 23622 64.8243 196.4890 0036951 163.2438 196.8817 2.13102502 11774
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Prognoz-M2
1 23632U 95039A 97022.79525280 .00000321 00000-0 00000+0 0 1087
2 23632 70.4440 248.5240 7646281 327.4860 322.0110 0.26340200 1429
SICH-1
1 23657U 95046A 97025.45955726 .00000119 00000-0 14777-4 0 1413
2 23657 82.5319 355.9613 0029757 49.1321 311.2455 14.73524774 75563
RADARSAT
1 23710U 95059A 97024.51732853 .00000142 00000-0 72025-4 0 2302
2 23710 98.5794 34.0473 0001114 48.4785 311.6493 14.29997840 63875
Glonass 79
1 23734U 95068A 97026.22846603 .00000057 00000-0 00000+0 0 2277
2 23734 64.8257 196.4333 0017243 328.0129 31.8684 2.13102059 8724
Glonass 78
1 23735U 95068B 97025.94795744 .00000055 00000-0 00000+0 0 2194
2 23735 64.8155 196.4303 0006258 200.4564 159.5050 2.13125188 8711
Glonass 77
1 23736U 95068C 97025.99361541 .00000055 00000-0 00000+0 0 2015
2 23736 64.8176 196.4362 0007210 187.1738 172.8024 2.13102631 8710
XTE
1 23757U 95074A 97025.89775940 .00000543 00000-0 16355-4 0 1179
2 23757 22.9788 335.6516 0013726 204.5346 155.4484 14.97762996 58895
Polar
1 23802U 96013A 97025.04221839 .00000078 00000-0 00000+0 0 1015
2 23802 86.3526 23.6499 6529252 275.2839 18.6855 1.36266119 4582
1996010E
1 23824U 96010E 97022.98991945 .00345690 00000-0 44699-1 0 1610
2 23824 47.3584 189.9008 6979696 85.6547 345.5170 2.68466707 7653
GPS BIIA-25
1 23833U 96019A 97025.26461189 -.00000082 00000-0 00000+0 0 1356
2 23833 54.6441 338.9633 0029781 141.1311 219.0838 2.00565477 6136
Priroda
1 23848U 96023A 97026.73942119 .00014972 00000-0 18376-3 0 2461
2 23848 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787 43466
MSX
1 23851U 96024A 97025.54043299 -.00000047 00000-0 00000+0 0 1790
2 23851 99.4016 15.7022 0006251 266.6957 93.3487 13.97440163 38555
SAX
1 23857U 96027A 97025.55624555 .00001423 00000-0 64711-4 0 498
2 23857 3.9557 291.4859 0014233 337.8351 22.0873 14.91716276 40401
MSTI 3
1 23868U 96031A 97027.06685954 -.00001189 00000-0 -22111-4 0 1077
2 23868 97.1155 219.6494 0010996 76.3501 283.8963 15.46640583 39417
TOMS-EP
1 23940U 96037A 97027.24663667 .00001947 00000-0 88528-4 0 805
2 23940 97.4330 295.9325 0011580 284.3151 75.6800 15.21883594 31703
GPS BIIA-26
1 23953U 96041A 97026.17795366 -.00000020 00000-0 00000+0 0 1118
2 23953 55.0956 99.3309 0019736 333.6166 26.3561 2.00558950 3944
ADEOS
1 24277U 96046A 97025.55935637 -.00000044 00000-0 00000+0 0 1353
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2 24277 98.6129 105.2995 0000846 154.9670 205.1555 14.27638183 23012
FO-29
1 24278U 96046B 97025.23168206 -.00000015 00000-0 21347-4 0 538
2 24278 98.5617 85.8309 0350842 196.4815 162.4679 13.52628277 21797
Soyuz TM-24
1 24280U 96047A 97026.73942119 .00014972 00000-0 18376-3 0 1502
2 24280 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787 25366
FAST
1 24285U 96049A 97023.67520590 .00001374 00000-0 14068-3 0 565
2 24285 82.9928 106.2339 2206298 248.0487 87.2643 10.81730337 16793
Microsat
1 24291U 96050A 97027.02279348 .00042106 63417-5 28763-3 0 1202
2 24291 62.7939 242.8165 0594085 129.2105 236.3463 14.70600290 22083
MO-30
1 24305U 96052B 97026.19828268 .00000203 00000-0 20364-3 0 673
2 24305 82.9375 99.5289 0028595 240.9385 118.8892 13.73087785 19570
GPS BIIA-27
1 24320U 96056A 97019.06002070 -.00000035 00000-0 00000+0 0 560
2 24320 54.6725 279.7114 0051757 114.3602 246.2670 2.00569474 2461
SAC-B/HETE
1 24645U 96061A 97022.20803415 .00000194 00000-0 16481-4 0 399
2 24645 37.9760 14.5725 0048012 208.8385 150.9721 15.14835429 11917
Progress M-33
1 24663U 96066A 97026.73942119 .00014972 00000-0 18376-3 0 631
2 24663 51.6503 77.0994 0012224 5.4674 354.6387 15.60469787 10602
BION 11
1 24701U 96073A 97007.63261992 .00018249 79897-5 30000-4 0 223
2 24701 62.7988 196.4152 0115614 109.2892 252.6962 15.93127811 2241
1996073B
1 24702U 96073B 97027.27490939 .03186941 87073-5 54777-3 0 1108
2 24702 62.7830 117.6557 0028354 93.6825 266.8117 16.31135198 5419
1996073C
1 24706U 96073C 97027.23606010 .00169513 81092-5 19762-3 0 312
2 24706 62.8044 119.7659 0093615 108.5935 252.5401 16.00005076 5377
1996073D
1 24707U 96073D 97026.71850390 .00155026 00000-0 11556-2 0 284
2 24707 62.8055 125.5822 0101386 34.2922 326.4695 15.65310910 3025
1996073E
1 24708U 96073E 97026.53856873 .00169854 16584-4 93224-3 0 260
2 24708 62.8095 125.2470 0078553 49.0047 311.7874 15.75125981 3015
1996073F
1 24709U 96073F 97023.34876326 .11031200 88338-5 15950-3 0 499
2 24709 62.8192 133.7876 0024100 114.4564 262.0771 16.46481024 2596
1996073G
1 24710U 96073G 97022.22605048 -.00158931 86260-5 -35489-4 0 64
2 24710 62.7916 136.9094 0042062 95.4835 265.1262 16.26841075 2407
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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349. Mir 440 Repeater Active

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc0ca6$14914360$5e427fce@default>
Source record: 20153

From KA7YAO Bill - the 440 repeater aboard Mir was heard here in Montana late last night 437.950 down 435.750 uplink with CTCSS 141.3. Caller was from Seattle, WA

350. Re: FS: AEA PK-900 with 9600 modem

Newsgroup: rec.radio.amateur.space
Date: 1997-01-27 00:00:00 UTC
From: rubenc@iglou.com
Message-ID: <E4oxvG.4AE@iglou.com>
Source record: 20154
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.digital.misc

Well, it WAS sold, but the guy today backed out. If you are interested
contact me email at kb8bwe@amsat.org.

Charlie KB8BWE

351. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970128040525.17255B-100000@prog1.caprica.com>
Source record: 20155
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in the from field is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Mon, 27 Jan 1997, Scott Babb wrote:

>
> Thanks for the comments, Don. I haven't ventured into EME yet, but
> it looks like 'gain is everything' when designing a station.

This is true. Reduction of your side and back lobes to the minimum so as to concentrate forward as much of your radiated power as you can is essential. I'm just breaking into this field myself and doing so on a cheap shoestring-budget,(I'm still looking for a cheap deal on a 2M all-mode to use for EME).

> I'm looking for a relatively inexpensive entry into EME (if such
> a thing can be done), and the antenna system looked like it could
> be a place to trim costs if a decent 4 antenna array could be
> constructed. Since I don't have the real estate for the usual
> 13+ element Yagi antennas, I'm looking into shorter-boomed
> alternatives. A 6-to-8 element X-Q looks like a reasonable way
> to get equivalent gain (16dBd+ per antenna) with a boom shorter
> than the longest dimension of my house :-)

I plan to use cubical-quads. I've resigned myself to using either a 21 to 30 element aluminum-boom cubical-quad for the job or a pair of 12 to 16 element quads on a cross-boom. We,(I and a friend of mine who designed a 12 Element on an aluminum boom that works great), are working on a design now. A large amount of real-estate is not needed, since what you will be tracking is the moon above, not the horizon, so what one needs is overhead air-space more than lateral acreage.

Remember, the closer the moon appears to the Earth's horizon, the further
away it is from you and the higher the degree the extra atmosphere may
refract and/or duct your beam path, so it becomes much too impractical to
try to do EME on any budget at more than 60 degrees from plumb,(straight
up). Even more than 45 deg. from plumb would probably be pretty tough
without running alot more power. As it is, you need at least 150W PEP
to make a reasonable contact. CQ VHF had a good article on this.

> If spacing between adjacent element sides is 1/2 wavelength,
> then the 4-bay X-Q array is only 1-1/2 wavelengths high and
> wide, as opposed to 1 wavelength width and height in a 4-bay
> array or regular quads. Sure, it takes about twice as much
> wire to get about 3dB of gain, but it seems cheaper to go that
> route rather than doubling the number of antennas in the array.
>
> Scott
>
>
> In article <854304218@infoway.com>, don.phelps@infoway.com (Don Phelps) wrote:
> >The 2 element X-Q Quad has less gain per wavelength of element, than
> >the corresponding regular qubical quad.
> >
> >For example, your 2 element x 2 wavelength loop= 9.5dBd/4 wavelenghts
> >against 4 element x 1 wavelength loops=10.2dBd/4 wavelengths
> >
> >And since the regular quad is half the width, it probably
> >has at least as good "stacking gain" for a given spacing
> >within a 4 antenna array.
> >
> >Instead of a three element X-Q, use a 6 element regular Quad:
> >6 elements x 1 wavelength loops=11.4dBd/4 wavelengths
> >
> >So there are a couple comments.
> >Don, N6MCE
>
>

352. used satellite equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: vincent@halcyon.com
Message-ID: <vincent-280197101441@blv-pm107-ip16.halcyon.com>
Source record: 20156

I am looking for sources for used all mode satellite equipment for 2 meters
and 440.I would also like info on transverters that I could use with my
ts-430s that do not cost an arm and a leg.
Yours truly:
Richard D. Vincent
vincent@halcyon.com

353. Re: FO-29 Working?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: Mancastroppa Marco <mancastroppam@bluewin.ch>
Message-ID: <01bc0d49$35e1dea0$03a0bd8a@mam>
Source record: 20157

The analogue transpondeur is active when the cw bacon is actice on 435.795.

The 10 and 11.januar the analogue transpondeur was open

Bye
HB9VAF - Mancastroppa Marco
mancastroppam@bluewin.ch

Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca> a crit dans l'article
<01bc0a8b$1b3dd420$8dd866cf@default>...
> Can anyone tell me if FO-29 is still active? I have listened for the
> beacon , but haven't heard it yet.
>
> I have also scanned the downlink for any activity without luck.
>
> 73 de VE7MDL ....Erik.
>
> P.S. FO-20 seems to get through very well here.
>
>

354. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan28.195519.6926@ke4zv.atl.ga.us>
Source record: 20158
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <Pine.BSF.3.91.970128040525.17255B-100000@prog1.caprica.com> Ted
<teddyb@die.spam.die> writes:
>Remember, the closer the moon appears to the Earth's horizon, the further
>away it is from you and the higher the degree the extra atmosphere may
>refract and/or duct your beam path, so it becomes much too impractical to
>try to do EME on any budget at more than 60 degrees from plumb,(straight
>up). Even more than 45 deg. from plumb would probably be pretty tough
>without running alot more power. As it is, you need at least 150W PEP
>to make a reasonable contact. CQ VHF had a good article on this.

It is *not true* that a high angle above the horizon is needed for
EME. In fact, the lowest power stations do much better when the
Moon is on the horizon. That's because of *ground reflection gain*.
That can give almost 3 db of gain to your signal, equivalent to
doubling the size of your array, for essentially free.

There are a number of stations using fixed arrays aimed at the horizon
to do EME. This is much cheaper than a steerable array, and takes advantage
of ground gain. It does limit the times when you can work EME of course.
There is a caveat. You do need an unobstructed horizon to use this technique.

If you are trying to do EME from a small urban backyard, first of all good
luck, you'll need it. But the main consideration you'll have is control of
sidelobes to minimize the terrestrial crud your antenna will pick up from
your neighbor's consumer electronics. You may need high rabbit wire fences
around your antenna setup to act as shields against this. In a tight urban
setting, you'll do better to forget 2m or 70cm. Concentrate on the higher
bands where you can use a dish, and fence the dish to avoid interference
pickup. The greater path loss of microwave will be more than offset by
the higher gain of the dish, and the much better controlled sidelobes.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

355. ARLK008 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk008.1997@arrl.org>
Source record: 20159
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK008
ARLK008 Keplerian data

ZCZC SK08
QST de W1AW
Keplerian Bulletin 8 ARLK008
From ARRL Headquarters
Newington, CT January 28, 1997
To all radio amateurs

SB KEP ARL ARLK008
ARLK008 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97028.04355353 .00000016 00000-0 14142-5 0 3111
2 18129 82.9257 342.3242 0010175 252.6614 107.3428 13.72373587481011
UO-11
1 14781U 84021B 97027.97300715 .00000036 00000-0 13984-4 0 09519
2 14781 97.8182 14.9403 0012679 89.5673 270.6987 14.69518723690664
RS-12/13
1 21089U 91007A 97028.11877421 .00000058 00000-0 45594-4 0 09752
2 21089 82.9201 22.5268 0029169 330.7141 29.2370 13.74076940299920
UO-14
1 20437U 90005B 97028.15389994 .00000070 00000-0 44107-4 0 02578
2 20437 98.5246 112.7986 0010241 260.2008 99.8025 14.29947667366207
RS-15
1 23439U 94085A 97028.02583214 -.00000039 00000-0 10000-3 0 02189
2 23439 64.8146 19.4869 0153283 158.7570 201.9800 11.27526576086134
AO-16
1 20439U 90005D 97028.24337537 -.00000006 00000-0 14633-4 0 418
2 20439 98.5446 115.5208 0010466 262.9223 97.0771 14.29996662366236
DO-17
1 20440U 90005E 97028.17329517 .00000033 00000-0 29542-4 0 00471
2 20440 98.5486 116.2206 0010639 261.7643 98.2335 14.30139356366255
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WO-18
1 20441U 90005F 97028.23798039 -.00000017 00000-0 10396-4 0 456
2 20441 98.5492 116.2011 0011201 261.9301 98.0612 14.30107365366268
LO-19
1 20442U 90005G 97028.07649357 -.00000031 00000-0 47861-5 0 00585
2 20442 98.5497 116.6399 0011266 261.6626 98.3267 14.30219881366261
FO-20
1 20480U 90013C 97028.00453420 .00000040 00000-0 16686-3 0 9388
2 20480 99.0243 16.0729 0540833 335.0453 22.5359 12.83236822326727
AO-21
1 21087U 91006A 97027.86006407 .00000093 00000-0 82657-4 0 07903
2 21087 82.9403 155.4341 0034809 302.5157 57.2636 13.74577075300879
UO-22
1 21575U 91050B 97028.15701038 .00000031 00000-0 24685-4 0 07706
2 21575 98.3190 93.5137 0007684 320.6070 39.4565 14.37054659290370
KO-23
1 22077U 92052B 97028.18319206 -.00000037 00000-0 10000-3 0 06602
2 22077 66.0770 78.3728 0014469 246.3745 113.5747 12.86300730209746
KO-25
1 22828U 93061F 97028.22793788 .00000009 00000-0 20851-4 0 5099
2 22828 98.5528 105.7556 0009845 280.6332 79.3734 14.28166493142239
IO-26
1 22826U 93061D 97028.16013928 .00000004 00000-0 19264-4 0 05395
2 22826 98.5617 105.6202 0009140 299.8237 60.2036 14.27825164174108
AO-27
1 22825U 93061C 97028.18098131 -.00000002 00000-0 16602-4 0 05487
2 22825 98.5613 105.4277 0008401 300.5786 59.4565 14.27716182174095
FO-29
1 24278U 96046B 97028.19057018 .00000011 00000-0 47385-4 0 00720
2 24278 98.5614 88.3935 0351019 188.8270 170.6596 13.52628640022192
MO-30
1 24305U 96052B 97028.16576607 .00000204 00000-0 20364-3 0 00849
2 24305 82.9360 98.0733 0028653 235.4702 124.3739 13.73088111019845
Mir
1 16609U 86017A 97028.53257177 .00000521 00000-0 12523-4 0 16
2 16609 51.6536 68.0747 0012130 13.7333 346.3983 15.60464830625229

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
February 1, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

356. Ham Radio Resource Site

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32eec0d9.16339916@news.primenet.com>
Source record: 20160

Check out the latest additions and updates
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Contest Calendars
Contest Clubs
CW (NEW)
DX Clubs
DX Clusters
DX Newsletters (UPDATED)
EME/Weak Signal (UPDATED)
Fun Stuff
Current GMT
Ham Radio Clubs (UPDATED)
Ham Radio Info (UPDATED)
HF Information
HF Nets
Logging Programs
Manufacturers (UPDATED)
MARS Information
Maritime HF Info
Morse Code (NEW)
OnLine Magazines
Packet Radio
Propagation
QRP
Radio Mods
Satellites (UPDATED)
Shortwave Listening
Six Meters
SoCal Ham Repeaters
VHF/UHF Scanning (NEW)

357. Re: EVERYONE READ THIS, VERY IMPORTANT, PLEASE READ THIS!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: GarryTrigger@compuserve.com
Message-ID: <32ee7fe3.416313782@nntp.ix.netcom.com>
Source record: 20161
Cross-posted to: alt.games.descent,comp.lang.java.programmer,comp.lang.javascript,comp.software.year-2000,gac.physics.astronomy,rec.aviation.aerobatics,rec.radio.amateur.space,sci.biology,sci.physics

Oh well I have few minutes spare so here goes my view.....I have
re-written the origial quote to make it more relevant.......

> This is not a joke. Serious business, guys. Please read and take
>some action.

>>>>>A group of Java Programmers are trying to form a newsgroup on Usenet called
>>>>>"comp.lang.java.programmer", so that they can get their message of Java is better than
>>>>>C++ out to young programmers using the Internet.

For those of you with time on your hands while the kettle is boiling,
could also do similar spots for MS v Sun, Sun v MS, Mac v
Windows....etc etc ooops kettles boiling gotta go.....

Garry Trigger

On Mon, 9 Dec 1996 15:00:52, dschultz@ti.com (Douglas A. Schultz II)
wrote:

>In article <01bbdd80$7aee2380$c94d22cf@jaclen.connect.ab.ca> "Intrepid"
<chrisb@connect.ab.ca> writes:
>
>> This is not a joke. Serious business, guys. Please read and take
>>some action.
>
>>>>>>A group of NEO-NAZIS are trying to form a newsgroup on Usenet called
>>>>>>"rec.music.white-power", so that they can get their message of hate out
>>>>>>to young people using the Internet.
>
>So I gather that censorship of individuals and groups is 'ok' if it suits YOUR
>agenda, "Intrepid"? Is that right? You wish to censor these individuals from
>the Internet and control their rights to access what is essentially a public
>forum????
>
>How very ironic, since one of the cornerstones of the Third Reich & Nazi
>Germany was censorship and control of individuals and information.
>
>Where does it end?
>
>Grab a clue,
>
>
>Douglas A. Schultz II <dschultz@ti.com>

>
> "Yeah, well, sometimes nuthin' can be a real cool hand."
> - C.H.L.
>

358. Amateur Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-01-28 00:00:00 UTC
From: f.warnke@on-line.de
Message-ID: <32ef5ee4.5439807@news.isys.net>
Source record: 20162

Hallo Satellite-Profi's,

can anyone tell me what amateur satellites are still active in the european area ?

in advance thanks
Freddi

359. Newbie questions regarding satcom

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: tgeyer@rain.org
Message-ID: <5cm7o5$n29$1@news.rain.org>
Source record: 20163

I'm interested in putting together a hamsat station. I've read a few articles and still have some questions. Any help would be greatly appreciated.

1) If I'm only interested in working packet with the satellites, do I need an all-mode (SSB, CW, etc) radio? Will any FM 2m/70cm radio do as long as I have enough power aperture to send/receive the signal?

2) Since the digital modes of the satellites vary (AFSK, FSK, PSK, etc.) and the packet speeds, do I need a separate TNC or modem for each satellite?

3) Is a rotator mandatory? If so, can one get by with only az rotation (supposedly cheaper) than as/el rotation?

4) I would like to test the system by sending myself e-mail. Can I send e-mail into the internet? If not the internet, are there unique commands that I need to know to send to my local packet BBS?

Thanks!

Tom

--

| Tom Geyer | tgeyer@rain.org |
| Santa Barbara, CA | |
---

360. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-2801971808290001@host06.cyberg8t.com>
Source record: 20164

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

361. Re: EVERYONE READ THIS, VERY IMPORTANT, PLEASE READ THIS!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: "Richard E. Martin" <martinr@roanoke.infi.net>
Message-ID: <01bc0ddb$de92e8e0$984498ce@Martinr>
Source record: 20165
Cross-posted to: alt.games.descent,comp.lang.java.programmer,comp.lang.javascript,comp.software.year-2000,gac.physics.astronomy,rec.aviation.aerobatics,rec.radio.amateur.space,sci.biology,sci.physics

The only action we can take in a free society is to NOT access the newsgroup... We could post messages of agitation also, but what would that accomplish?

Richard

Garry Trigger <GarryTrigger@compuserve.com> wrote in article <32ee7fe3.416313782@nntp.ix.netcom.com>...
> Oh well I have few minutes spare so here goes my view.....I have
> re-written the origial quote to make it more relevant.......
>
> > This is not a joke. Serious business, guys. Please read and take
> >some action.
>
> >>>>>A group of Java Programmers are trying to form a newsgroup on Usenet called
> >>>>>"comp.lang.java.programmer", so that they can get their message of Java is better than
> >>>>>C++ out to young programmers using the Internet.

> On Mon, 9 Dec 1996 15:00:52, dschultz@ti.com (Douglas A. Schultz II)
> wrote:
>
> >In article <01bbdd80$7aee2380$c94d22cf@jaclen.connect.ab.ca> "Intrepid" <chrisb@connect.ab.ca> writes:
> >
> >> This is not a joke. Serious business, guys. Please read and take
> >>some action.
> >
> >>>>>>A group of NEO-NAZIS are trying to form a newsgroup on Usenet called
> >>>>>>"rec.music.white-power", so that they can get their message of hate out
> >>>>>>to young people using the Internet.

362. HARC Winter Carnival Special Events Station

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: jdhaas@mtu.edu
Message-ID: <5cnqcl$imc@kirchhoff1.ee>
Source record: 20166

Hello there. I am Jim Haas, KG9IF, QSL/Contest/Awards Manager for the Husky Amateur Radio Club, W8YY, which is the amateur radio club of Michigan Technological University in Houghton, MI. Every year over a festival known up here as Winter Carnival, where everyone takes a couple of days off to enjoy the snow (we get a lot of that up here), we run a special event station. This year's station runs from 1100Z on 30 January 1997 (6:00 AM Eastern) to 1100Z on 1 February 1997.

"So Jim," you ask, "what do I get for working this station?" Well, if you work our station, just send us a self-addressed, stamped envelope suitable for holding a certificate and we will send you just that--a really nice certificate that says you worked W8YY over Winter Carnival.

Below is the frequency list, which is a general guideline and not a promise of where we will be. I can guarantee one thing--if you look around, we will be there. We may not be on, for example, 14.325 exactly, but we'll be on 20 somewhere. We may also do some HF digital modes (we still need a few connectors for that) and some satellite work as well. If there is enough interest among the station ops/control ops, we will work some CW as well.

If you have any questions, comments, or criticisms, just drop me a line at jdhaas@mtu.edu. We look forward to hearing you on the air.

73 de Jim Haas KG9IF

Band Mode Frequency
17 M USB 18.130.0 MHz

20 M USB 14.325.0 MHz
CW (maybe, if
there is 14.130.0 MHz
interest)

30 M CW (if there 10.125.0 MHz
is interest)

40 M LSB 7.262.5 MHz

75/ LSB 3.972.0 MHz
80 M

160 M LSB 1.932.0 MHz

363. Re: Newbie questions regarding satcom

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: Casey McCullough <askey@erols.com>
Message-ID: <32EF7198.3AC2@erols.com>
Source record: 20167

Tom,

You should check out www.amsat.org site. It has lots of info re sat ops.

To answer a few of your questions though, to operate packet through the sats you will pretty much need an all-mode radio. While only some of the sats require USB/LSB to operate, the all-mode radios give you the fine tuning ability required to properly follow the doppler shift during a pass.

The 1200 baud sats (AO-16 and LO-19 for example) require ssb receive and a special modem. The 9K6 baud sats also require a special modem. About the only sat that you can work packet through with a normal tnc is or was (I've not done sats in a couple years so not current with exactly what's up right now) the Japanese satellite JAS-20 (?) .

You don't really need a rotator to get started and it's probably a good idea to wait to see if you are going to like the mode before you invest in that kind of hardware. You should get some type of beam at least for the rx side. You don't need much though. As an example: I operated from my apt balcony while in Denmark using a cut down x-polarized beam of only three elements in each plane. I made a little stand and would aim the beam to about the middle portion of a pass I wanted to work. This would usually give me pretty good signal levels for about 80 % of the pass. Simple, cheap and it worked.

Paccomm is a good source for sat modems for both the 1200 and 9K6 sats. WWW.paccomm.com is their web site I believe.

Have fun.

Regards

364. Re: MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: northup@blackdog.sw.stratus.com
Message-ID: <5co71r$12m@transfer.stratus.com>
Source record: 20168

trandall@mhv.net writes:
: In article <01bc09b2$acad52c0$befb0b26@junior>, "Les Alverson" <docfester@aol.com>
wrote:
: >Unfortunately, where I live (Upstate SC) there is a VERY LOUD APRS station
: >that causes interference. I've been unable to "punch" through the QRM.
: >docfester@mindspring.com
:
: Don't give up, keep trying. After 2 years and hundreds of tries I finally
: got through and talked to John. Talk about exciting!
:
: Tom
:
:
:
:
: Tom Randall Amateur Radio - KB2SMS
: trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
: Member: AAVSO Solar Division
:
: Opinions herein are mine and may not be that of MHV.NET!

If you have a packet station send a BLN message to the APRS stations stating
the time of the pass and ask if they can turn there TX off during the pass.

Most of the people I know will turn the APRS transmitters off for the 10 - 15
minutes of the pass so you can make a contact, and may join in trying to make
a contact.

--
--

Bill Northup INTERNET: northup@sw.stratus.com
Stratus Computer Inc.
55 Fairbanks Boulevard
Marlboro, MA 01752

365. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129104003.28256U-100000@prog1.caprica.com>
Source record: 20169
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Wed, 29 Jan 1997 moritz@ipers1.e-technik.uni-stuttgart.de wrote:

> In article Ted writes:
> >
> >I plan to use cubical-quads. I've resigned myself to using either a 21=
=20
> >to 30 element aluminum-boom cubical-quad for the job or a pair of 12 to =
16=20
> >element quads on a cross-boom. We,(I and a friend of mine who designed a=
=20
> >12 Element on an aluminum boom that works great), are working on a desig=
n=20
> >now.
>=20
> What is the gain and the boom length you are aiming at?

At least 30 dB foward gain on a stacked pair of 12 to 16 element quads=20
each from 17.5 to 27 feet,(533cm to 762cm), long.

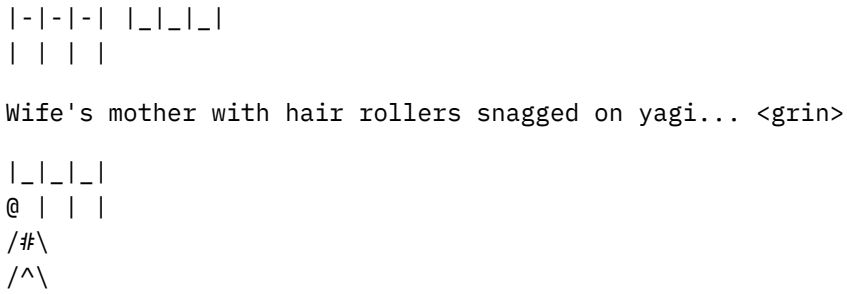
> Personally I am sure that all other EME=B4ers are using Yagi
> arrays because they are the most efficient way to go
> (space and material wise)

Not so at all. With the same length & the same number of logarithmically=20
spaced elements a vertically polarized quad has upto 50% more gain than a=
=20
vertically polarized yagi and while the vertical yagi's elements will=20
stick out about 50cm above and 50cm below the boom, the vertical quad's=20
elements only stand out about 25cm above and 25cm below the boom,(when=20

made for the 2M band).

Vertically Polerized:

Quad Yagi



Wife's mother with hair rollers snagged on yagi... <grin>

366. Re: Amateur Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: Casey McCullough <askey@erols.com>
Message-ID: <32EFC05A.396C@erols.com>
Source record: 20170

The vast majority of Amateur Satellites are in low earth orbit and are over every part of the earth at least a couple of times daily. All the sats you see in the Kep files are active. A nice www site for info is www.amsat.org.

Regards

367. Amsat News #26

Newsgroup: rec.radio.amateur.space
Date: 1997-01-29 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <32ef49af.984385@news.monad.net>
Source record: 20171

```
--------------------[KO-23:23A75]--------------------
From: N2OGB
To: ALL
Subject: Amsat News 026
Keywords: amsat
---------------------------------------
SB SAT @ AMSAT $ANS-026.01
NEXT SAREX FLIGHT INFO

HR AMSAT NEWS SERVICE BULLETIN 026.01 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.01

The STS-83's launch date has been adjusted. STS-83's the
next scheduled SAREX flight. Here's some preliminary information.

An article with background information is being planned for the March-April
issue of the "AMSAT Journal"

STS-83 - Microgravity Science Laboratory-1 (MSL-1)

Launch: April 3, 1997 2:19 p.m. EST
2 hr 30 min. launch window, 296 km. 28.5 degree inclination

Hams: Jim Halsell KC5RNI, Janice Voss KC5BTK, Don Thomas KC5FVF

Configuration: SAREX Configuration B (battery operated voice) - special
note - packet will only be performed if there is enough extra power
available. This will probably not occur until later in the flight.

Frequencies: Voice: downlink 145.55 MHz.
uplinks: 144.91, 144.93, 144.95, 144.97, and 144.99 Mhz.

Duration: 15 days, 17 hours

[ANS thanks Philip Chien, KC4YER, Earth News - space writer and
consultant for this bulletin.]

/EX

SB SAT @ AMSAT $ANS-026.02
GENEVA ELEMENTARY SCHOOL

HR AMSAT NEWS SERVICE BULLETIN 026.02 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.02
```

Geneva, Florida - On January 9th astronaut John Blaha, KC5TZQ, talked to students at Geneva Elementary School in Geneva, Florida. The contact took place just three days before the launch of the shuttle Atlantis on the STS-81 mission, Blaha's ride home.

During a near-perfect pass Blaha took the opportunity to answer questions from fifth grade students about life in space and aboard the Russian space station Mir. The students were originally introduced to ham radio by their teacher Glenda Loth, KE4BEZ, when they were in the second grade and ecstatic about their opportunity to talk to an astronaut in space. Many of the students were born in 1986 - the same year Mir's core module was launched.

Nine students got to ask Blaha questions about life aboard Mir. During the contact the students got an additional surprise - Russian Mir 22 commander Valeri Korzun came on the radio to send his greetings to the students - in flawless English. The students couldn't ask Korzun questions, due to current amateur radio regulations, but were still thrilled to hear his voice.

Geneva Elementary is located in Central Florida, approximately an hour's drive from the Kennedy Space Center. Many of the students went to KSC to watch the launch of STS-81 a couple of days later, carrying John Blaha's replacement Jerry Linenger.

The MIREX (MIR Radio Experiment) contact was supported by the Lake Monroe Amateur Radio Society (LMARS) , John Rothert, KC4IYO and Joe Singer, N4IPV a team which had supported previous Shuttle Amateur Radio Experiment (SAREX) contacts on the STS-37 mission with Lyman High School, STS-45 with a group of central Florida schools, and STS-65 with South Seminole Middle School. Hams participating in the contact include Fred N4NVW, Hal KK1B, Bob W2BZY, Joe N4IPV, John KC4IYO and many others. LMARS and the team plans to continue supporting Central Florida schools for future SAREX and MIREX contacts.

The students, teachers, and hams would especially like to thank AMSAT school mentor Will Marchant, KC6ROL, MIREX Educational coordinator Miles Mann, WF1F, and the other members of the MIREX and SAREX team for their assistance which made the contact possible. Of course much credit has to go to Rosalie White, WA1STO of ARRL. The school would also like to thank Philip Chien, KC4YER for his support and hand-outs he brought for the kids and AES for the use of a 160 watt Amp.

Geneva was one of nine schools in the United States and South Africa to take part in the program. This contact, and others in the U.S. were made possible because of the "third party" agreement concluded between the U.S. Government and Russian officials, which was in force through the duration of Blaha's stay on MIR.

[ANS thanks John Rothert, KC4IYO, for this news item.]

/EX

SB SAT @ AMSAT $ANS-026.03
STS-74 QSL CARDS

HR AMSAT NEWS SERVICE BULLETIN 026.03 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.03

The status of STS-74 QSL cards are they have arrived
from the printer and were mailed to the group that
will be sending them out. The mailing of the cards to
individuals who made contacts has begun. Many reports of the
cards being received have appeared on the Amsat-bb..

/EX

SB SAT @ AMSAT $ANS-026.04
MSGMAKER 2.10a UPDATE

HR AMSAT NEWS SERVICE BULLETIN 026.04 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.04

Roy Welch, W0SL has upload MSGMAKER 2.10a to both KO-23 and to the
AMSAT ftp site, ftp://ftp.amsat.org/amsat/software/win32/wisp .
This version makes a very minor correction in the headers of messages
created by MSGMAKER and provides no additional features.
The file will be MMKR210a.ZIP.

[ANS thanks Roy Welch, W0SL, for this update.]

/EX

SB SAT @ AMSAT $ANS-026.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 026.05 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.05

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in digital mode at the current time.

[ANS thanks, Kazu Sakamoto, JJ1WTK for this update.]

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM

Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater is back up again and active.

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat is giving extremely good downlink signals on 2 meters. In
this period of poor propagation on 15 m, the T-mode is providing very
easy access to the satellite. Interesting DX activity has been spotted
in Europe with stations in Egypt, Crete, Cameroon, etc.
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it's dead.

[ANS thanks Bob Johnson, W7LRD, for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23's Downlink efficiency is greater than 90% with the downlink frequency
set 2.0 KHz low.

KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 Normal operation
KO-25 returned to full service on 1/7/97. Operating Normally..

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Jan-06-97 11:26 UTC) It is working normally.

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length

TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.

[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
Operational

/EX

SB SAT @ AMSAT $ANS-026.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 026.06 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 26, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-026.06

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
It is working normally.

Example of a lit orbit. (Jan-05-97 12:36:03 UTC)
The batteries load (About Tot.Bat/V = 10.865 Volts)
The RC/PSK TX-OUT= 0.633 - 0.704 Wtts.

Example of a nocturnal orbit. (Jan-05-97 23:57:05 UTC)
The batteries load (About Tot.Bat/V = 10.433 Volts)
The Transponder RC/PSK TX-OUT= 0.760 Watts..

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)

During the past month (18 December - 14 January) good, steady signals
have been received from OSCAR-11 on 145.826 MHz.

[ANS thanks Clive Wallis, G3CWV, for this information.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
Operating normally. TLM values are carried on AMSAT-BB.

[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
Signals from Dove are strong.

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB,
1200 Baud PSK AX.25.)
It is working excellently in its orbits on Europe.

Example of a lit orbit. (Jan-05-97 12:00:44 UTC)
The batteries in good state (Tot. Bat/V = 11.08 Volts)
The RC/PSK TX-OUT= 1.004 - 1.079 Wtts.

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is fully operational broadcasting the following
status message:

22-Jan-97 1:35:30 UTC
Pacsat, DOVE, Webersat, Lusat -- seven years in space
Gathering/Sending Week 1 WOD -- arrays
Sending new pictures and spectra
73,
KB7KCL & IK3WVJ

The "tone" has returned, however at present does not interfere with
reception at this QTH. The command team is monitoring.

[ANS thanks Tommy Davis, IK3WVJ, for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

368. Prosat .dat file format

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: dsn01@uow.edu.au
Message-ID: <5cpcot$gc1$2@wabbit.its.uow.edu.au>
Source record: 19972

Does anyone know any details about the .dat file format used in the satellite image receiving program Prosat for Windows by Timestep to save the imagery from the geostationary satellites.

Thanks in advance

Dan.

369. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5cpmr6$1onc@info4.rus.uni-stuttgart.de>
Source record: 19973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <Pine.BSF.3.91.970129104003.28256U-100000@prog1.caprica.com>,
Ted <teddyb@die.spam.die> wrote:

>> What is the gain and the boom length you are aiming at?
>
>At least 30 dB foward gain on a stacked pair of 12 to 16 element quads=20
>each from 17.5 to 27 feet,(533cm to 762cm), long.

Well,

Your figures are a *real* break through, and therefore they are worth
somecloser examination. First of all, is it dBd or dBi?
second: How were this figure obtained? all experiments
or simulations I came across so far do *not* show
mor gain per boom length for long quads over yagis.

Quite frankly, the figure is out of this world.
a real "big gun" EME array consists of 48 (fourty eight!)
yagis, each several meters long, in order to achieve 28 or so dBd.

>With the same length & the same number of logarithmically
>spaced elements a vertically polarized quad has upto 50% more gain than a
>vertically polarized yagi

What is 50% more gain? it is 1.7 dB. This just does hardly justify the
effort of using full wave loop elements + supports. Even than, the
figure applies only for short (<10 dBd) antennas. sorry.

73, Moritz DL5UH

370. MIR & Leninger(sp?)

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5cpsk6$oj0@techsrv1.tech>
Source record: 19974

I finally talked to Jerry this morning. WOW, was that exciting! First time I ever talked to Mir before. The great thing is is Jerry is carrying with him a couple of momentos, one of which is a Michigan Technological University flag which is where I am attending right now. He was very happy and excited about hearing from us.

Now all I need is to find out how to get a QSL card for the contact? If any of you could supply the info it would be much appreciated!

Thanks in advance.

TTYL,
Mike

--
/\
\ Michael Long || President /
/ Callsign: N3YPA || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

371. Need schem Fodtrack rotor controller

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5cquv1$6ve$1@lscruz.scf.lmms.lmco.com>
Source record: 19975

Thanks to those who responed to my original post. I can't extract the schematics from the downloaded FODTRACK info. Does anybody have a copy and would be willing to send them to me? I would be glad to pay the usual postage and copying fees. Has anyone built this and have it running? Are there any bugs in it? I understand that Fodtrack has three interface.

I got a response from gregd, but I could get to him at the address in the response.

Thanks, Allen WB6RWU

allen@cruzio.com

allen@lmsc.lockheed.com

372. WTB: 432 All Mode Equip.

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <32F14431.23@terraworld.net>
Source record: 19976
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.misc

Looking to buy a good straight 432 All Mode rig, preferrabely an Icom
745 or a Kenwood TR-851-A.

Please send e-mail or call me at 316-421-6139

Mike Cobb, KB0QMF

373. Re: EVERYONE READ THIS, VERY IMPORTANT, PLEASE READ THIS!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: derekd@voicenet.com
Message-ID: <32f116b8.4276373@netnews.voicenet.com>
Source record: 19977
Cross-posted to: alt.games.descent,comp.lang.java.programmer,comp.lang.javascript,comp.software.year-2000,gac.physics.astronomy,rec.aviation.aerobatics,rec.radio.amateur.space,sci.biology,sci.physics

Oh no Mr. Bill

whatever...

374. Weird packets from DO-17

Newsgroup: rec.radio.amateur.space
Date: 1997-01-30 00:00:00 UTC
From: mconner@neonramp.com
Message-ID: <32f02ca9.3706518@news.neonramp.com>
Source record: 19978

I've copied over the past 2-3 days frames like this coming from DO-17:

DOVE>MBLCTL [01/30/97 05:06:27]: <UI>:
A
DOVE>MBLCTL [01/30/97 05:06:31]: <UI>:
A
DOVE>MBLCTL [01/30/97 05:06:34]: <UI>:
A
DOVE>MBLCTL [01/30/97 05:06:37]: <UI>:
A

DOVE>MBLCTL [01/30/97 05:06:40]: <UI>:
A

DOVE>MBLCTL [01/30/97 05:08:41]: <UI>:
V:9J EC:9F ST:8805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:33D0

21:0D 2E:89 31:AA 32:AB 0A:9F 0D:B5 10:AA

Most of the frames were like the first five - the last one is the only one that looks anything like telemetry. Is this unusual, or is the satellite transmitting in some other mode?

73 de Mark N9XTN

Mark D. Conner
Internet: mconner@neonramp.com
AMPRnet: N9XTN@WB0BLR.IA.USA.NA
"Paradigm shifting without a clutch" - Dogbert

375. Rockwell GPS Rcvr

Newsgroup: rec.radio.amateur.space
Date: 1997-01-31 00:00:00 UTC
From: Spunky <drsmith@vixa.voyager.net>
Message-ID: <32F21FEC.5784@vixa.voyager.net>
Source record: 19979

Hello,

Does anyone know where I can purchase a Rockwell/Collins or Motorola GPS receiver board (not enclosed) like the ones TAPR are selling.
I would like to send one up on my next high altitude balloon flight and I understand these units do not have the altitude restriction most other units have.
Thanks, Doug

376. Re: Newbie questions regarding satcom

Newsgroup: rec.radio.amateur.space
Date: 1997-01-31 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan31.160635.1490@ke4zv.atl.ga.us>
Source record: 19980

In article <5cm7o5$n29$1@news.rain.org> tgeyer@rain.org (Tom Geyer) writes:
>I'm interested in putting together a hamsat station. I've read a few
>articles and still have some questions. Any help would be greatly
>appreciated.
>
>1) If I'm only interested in working packet with the satellites, do I
>need an all-mode (SSB, CW, etc) radio? Will any FM 2m/70cm radio do as
>long as I have enough power aperture to send/receive the signal?

If you want to work the 1200 baud PSK birds, you'll need a SSB receiver.
Even with the 9600 baud FSK birds, you need smaller tuning steps than
most FM rigs offer to compensate for doppler. So a multimode is the way
to go.

>2) Since the digital modes of the satellites vary (AFSK, FSK, PSK, etc.)
>and the packet speeds, do I need a separate TNC or modem for each
>satellite?

Yes, unless you use one of the DSP units which can be loaded with the
appropriate DSP code for each modulation type.

>3) Is a rotator mandatory? If so, can one get by with only az rotation
>(supposedly cheaper) than as/el rotation?

No. You can get by with fixed antennas. The old standby crossed dipoles
can be used, or the better Lindenblad or Quadrafilar Helix designs can
be used. These are LEOs, so the signals aren't that weak. You don't need
much antenna gain. Circular polarization is a real plus, however, because
it reduces spin modulation.

A 3 or 4 element yagi with a fixed elevation of 30 degrees can also be
used with reasonable results. That sort of antenna has a main lobe about
60 degrees wide, so you only have to track in azimuth. There'll be a hole
in coverage when the satellite is directly overhead, but the satellite
will spend the majority of the time of a pass at an elevation of 30 degrees
or less, so the fixed elevation design will work for most of the pass.
You'll have more spin modulation, though, unless you use a CP yagi. I'd
suggest not bothering with a yagi unless you need the extra gain for
uplink, IE if you can't generate 30 to 40 watts to an omni antenna.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

377. ARLS003 Permission granted for Linenger to ham it up from Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-01-31 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls003.1997@arrl.org>
Source record: 19981
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS003
ARLS003 Permission granted for Linenger to ham it up from Mir

ZCZC AS03
QST de W1AW
Space Bulletin 003 ARLS003
From ARRL Headquarters
Newington, CT January 31, 1997
To all radio amateurs

SB SPACE ARL ARLS003
ARLS003 Permission granted for Linenger to ham it up from Mir

US ham-Astronaut Jerry Linenger, KC5HBR, has been granted permission for general QSOs and scheduled school radio contacts with unlicensed students and a control operator.

Getting permission involved approval by authorities in the US, Russia and Germany. Miles Mann, WF1F, Director of Educational Services for the Mir International Amateur Radio EXperiment (MIREX), and Dave Larsen, N6CO, director of the MIREX board, signed an agreement on behalf of MIREX, while Sergei Samburov, RV3DR, chief of the Cosmonaut Amateur Radio Department, signed for the Mir Amateur Radio EXperiment (MAREX), and Joerg Hahn, DL3LUM, international coordinator, signed for the German Space Amateur Funk EXperiment (SAFEX) group, which provided the ham equipment aboard Mir.

The FCC also has given approval for Linenger (and for Astronaut Colin ''Michael'' Foale, KC5UAC--who will take Linenger's place in May) for general QSOs and third-party traffic with schools, family and friends. Linenger recently arrived on Mir via STS-81.

According to Mann, applications for US school QSOs with cosmonauts are approved by MIREX, based on specific guidelines, before being sent on to Samburov and SAFEX. ''The Mir crews have busy work schedules, but our guidelines allow us to arrange--months in advance--school QSOs during crew off hours,'' he explained. The Cosmonaut Amateur Radio Department gives final approval for all QSOs and reserves the right to cancel at any time. Mir's daily experiments always have first priority over ham radio.

Because Mir crews now include a US astronaut, SAREX and MIREX have begun to work together. Currently the SAREX program has about 80 schools on its waiting list. To get a Mir school QSO application, send a self-addressed, stamped envelope to Educational Activities

Department, ARRL, 225 Main St, Newington CT 06111.

A word on random QSOs with the Mir space station: Mir crews make random voice QSOs only during off hours. Do not ask the crew to schedule QSOs, as they do not have the long-term calendar. The 2-meter Mir frequencies recently were changed: The uplink frequency is 145.200 MHz and the downlink is 145.800 MHz. This change resulted from a recommendation from IARU Region 1 (Europe). Please do not ask the crew about it, as the crew does not set policy on frequencies.
NNNN
/EX

378. INSTATRACKER PLEASE.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-01 00:00:00 UTC
From: kb0nza@dialnet.net
Message-ID: <5ctk24$54j@news.dialnet.net>
Source record: 19982

Had instatracker....lost it in an accadential drive format. Will
someone please stick it in my E-Mail at :

kb0nza@dialnet.net

Also, check out my web page at :

http://www.dialnet.net/users/kb0nza

Thanx,

Brad

.

379. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-01 00:00:00 UTC
From: sbabb@lpub.com
Message-ID: <5cueet$dp@news-central.tiac.net>
Source record: 19983
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <5cpmr6$1onc@info4.rus.uni-stuttgart.de>,
moritz@ipers1.e-technik.uni-stuttgart.de () wrote:
>In article <Pine.BSF.3.91.970129104003.28256U-100000@prog1.caprica.com>,
>Ted <teddyb@die.spam.die> wrote:
>
>>> What is the gain and the boom length you are aiming at?
>>
>>At least 30 dB foward gain on a stacked pair of 12 to 16 element quads
>>each from 17.5 to 27 feet,(533cm to 762cm), long.
>
>Well,
>
>Your figures are a *real* break through, and therefore they are worth
>somecloser examination. First of all, is it dBd or dBi?
>second: How were this figure obtained? all experiments
>or simulations I came across so far do *not* show
>mor gain per boom length for long quads over yagis.

Perhaps someone has mistaken decibels for a linear scale or
made an error extrapolating from the dBA scale where 10 dB
sounds twice as loud. It looks like Ted was talking about
a quad antenna in the 15-20 dBd range for a single bay. He may
have either taken a 15 dBd figure and doubled it for two antennas
(instead of the actual 3 dB increase) or he may have started with
a 20 dBd figure and added 10 dB for doubling the number of antennas
in the array (a la dBA scale.)

>>With the same length & the same number of logarithmically
>>spaced elements a vertically polarized quad has upto 50% more gain than a
>>vertically polarized yagi
>
>What is 50% more gain? it is 1.7 dB. This just does hardly justify the
>effort of using full wave loop elements + supports. Even than, the
>figure applies only for short (<10 dBd) antennas. sorry.

Again, the 50% number may not be power gain. A 2-el quad has about
50% more *decibels* of gain than a 2-el Yagi when you measure it
against an isotropic. Of course, that doesn't translate to an 50%
increase in power gain, nor does it scale linearly to longer booms
with more elements.

At best, I would think that Ted's 2-bay, 12-to-16 element quad
array would be in the 20+ dBd range. Still, not too bad for a
relatively small array.

>73, Moritz DL5UH

Scott wa1vht

380. ARLK009 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-01 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk009.1997@arrl.org>
Source record: 19984
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK009
ARLK009 Keplerian data

ZCZC SK09
QST de W1AW
Keplerian Bulletin 9 ARLK009
From ARRL Headquarters
Newington, CT February 1, 1997
To all radio amateurs

SB KEP ARL ARLK009
ARLK009 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97031.39729530 .00000021 00000-0 69623-5 0 03340
2 18129 82.9280 339.8468 0010134 241.1002 118.9137 13.72373863481479
UO-11
1 14781U 84021B 97031.51371750 .00000110 00000-0 26306-4 0 9471
2 14781 97.8191 18.3336 0012949 79.1368 281.1297 14.69520208691183
RS-12/13
1 21089U 91007A 97031.46835390 .00000007 00000-0 -83229-5 0 09723
2 21089 82.9202 20.0417 0028787 321.3115 38.5978 13.74076513300388
UO-14
1 20437U 90005B 97031.30267007 -.00000147 00000-0 -40398-4 0 02552
2 20437 98.5246 115.8813 0010260 250.4989 109.5065 14.29946843366657
RS-15
1 23439U 94085A 97031.39619796 -.00000039 00000-0 10000-3 0 02177
2 23439 64.8142 14.0373 0153107 158.1614 202.5927 11.27526505086510
AO-16
1 20439U 90005D 97031.25209544 -.00000021 00000-0 88792-5 0 00616
2 20439 98.5440 118.4726 0010447 253.1581 106.8459 14.29996785366660
DO-17
1 20440U 90005E 97031.32164147 .00000014 00000-0 22132-4 0 431
2 20440 98.5492 119.3145 0010641 252.7298 107.2706 14.30139585366704
```

```
WO-18
1 20441U 90005F 97031.24646719 -.00000035 00000-0 32347-5 0 00606
2 20441 98.5490 119.1556 0011298 252.2532 107.7422 14.30107458366694
LO-19
1 20442U 90005G 97031.29462160 -.00000008 00000-0 13875-4 0 00501
2 20442 98.5497 119.8020 0011312 252.2204 107.7744 14.30220264366720
FO-20
1 20480U 90013C 97031.43489350 -.00000011 00000-0 54022-4 0 09588
2 20480 99.0244 18.8507 0540540 327.2738 29.5925 12.83236408327161
AO-21
1 21087U 91006A 97031.42680252 .00000093 00000-0 82657-4 0 07939
2 21087 82.9402 152.7943 0034802 292.4945 67.2527 13.74577177301369
UO-22
1 21575U 91050B 97031.22059948 .00000021 00000-0 21244-4 0 07622
2 21575 98.3190 96.4759 0007433 311.1982 48.8540 14.37054961290813
KO-23
1 22077U 92052B 97031.21544706 -.00000037 00000-0 10000-3 0 06526
2 22077 66.0771 72.0251 0014424 246.2375 113.7132 12.86300817210139
KO-25
1 22828U 93061F 97031.24050877 .00000024 00000-0 27166-4 0 05262
2 22828 98.5532 108.7074 0009774 271.0947 88.9112 14.28166879142660
IO-26
1 22826U 93061D 97031.24350564 -.00000004 00000-0 16033-4 0 05367
2 22826 98.5613 108.6408 0008882 289.9306 70.0915 14.27825288174544
AO-27
1 22825U 93061C 97031.26458328 -.00000026 00000-0 69058-5 0 05411
2 22825 98.5610 108.4477 0008320 291.0295 68.9995 14.27716141174532
FO-29
1 24278U 96046B 97031.22343155 .00000052 00000-0 88960-4 0 00659
2 24278 98.5608 91.0191 0351303 180.9476 179.1012 13.52629328022604
Mir
1 16609U 86017A 97031.47844042 .00001345 00000-0 22290-4 0 103
2 16609 51.6513 53.2503 0011630 22.7100 337.4459 15.60476684625685

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
February 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

381. WTT:FT-726R+$$ --> FT-736

Newsgroup: rec.radio.amateur.space
Date: 1997-02-01 00:00:00 UTC
From: "Reed C." <rsc@cougarnet.byu.edu>
Message-ID: <32F3E884.1E56@cougarnet.byu.edu>
Source record: 19985
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.space

Hello,
I have an ft-726r fully loaded that I would like to upgrade to a 736 for computer control and 1.2 GHZ capabilities. The 726 has the Sat module, 6m, 430,2m and has be re-aligned by the factory. The unit is physically in mint condition. It also has a tone encoder.
I would like to trade it for an ft-736. I know that the ft-736 are hard to come by and costly evin used these days. Which is why I am offering cash in addition. I would exepect that in just about any case the 736 would be worth the 726 fully loaded + cash.

Thanks
73's
Reed
rsc@cougarnet.byu.edu
1-801-371-4613

382. Re: Weird packets from DO-17

Newsgroup: rec.radio.amateur.space
Date: 1997-02-01 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5d0jqjnlg3@news.mhv.net>
Source record: 19986

In article <5d01d3$v90$1@news.mhv.net>, trandall@mhv.net wrote:
>In article <32f02ca9.3706518@news.neonramp.com>, mconner@neonramp.com (Mark D.
> Conner) wrote:
>>I've copied over the past 2-3 days frames like this coming from DO-17:
>>
>>DOVE>MBLCTL [01/30/97 05:06:27]: <UI>:
>
>
> Oh I HOPE she isn't messed up again. On 1/20/97 I got good telemetry.
>Usually we see the above if something's not right....
>
>Tom

As an update to my post I copied the 1608utc pass today. She's still
putting out MBLCRT data. What does that stand for and mean? Anyone?

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

383. FS: IC 271 A w/ Internal PS

Newsgroup: rec.radio.amateur.space
Date: 1997-02-02 00:00:00 UTC
From: Bob Smith <nothing@127.1.1.1>
Message-ID: <01bc10bc$1659c810$01a447cc@bsmith>
Source record: 19987
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap

Near Mint ICOM 271A 25W 2M All Mode with Internal AC Power Supply. Have
IC820H so this is surplus. $500/OBO. Thanks for reading.

--

Bob Smith N3FTU
Suwanee, GA
NOTE: Reply Address scrambled to thwart spammers
please use rsmith at internermci.com.

384. Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-02 00:00:00 UTC
From: Narfum <Narfum@aol.com>
Message-ID: <01bc1140$6a062ce0$91d1f3cd@twolf>
Source record: 19988

I'm new to listening in on Mir and the Space Shuttle. I've been trying to find the current frequencies, but I'm not sure which are right. Could anyone help me?

Narfum

385. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-02 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <32F4FEC7.D30@ix.netcom.com>
Source record: 19989

Narfum wrote:
>
> I'm new to listening in on Mir and the Space Shuttle. I've been trying to
> find the current frequencies, but I'm not sure which are right. Could
> anyone help me?
>
> Narfum

Hello Narfum -- KG5AI's web page shows:

Mir
Uplink/Dnlink 145.550 AX.25 & FM voice
New Information
70 cm voice: Uplink 435.725 FM 70 cm packet: Uplink 435.775 FM
Dnlink 437.925 FM Dnlink 437.975 FM
2m voice: Uplink 145.200 FM (cannot interfere with repeater activity)
Dnlink 145.800 FM
Notes: Very large-can be seen by naked eye at dawn or dusk.
Packet robot callsign is R0MIR-1.

This link and more SATELLITE links can be found on the AC6V DX Reference
pages at URL:
http://pw2.netcom.com/~ac6v/pagew.html#SA

73
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V

386. trade: 32 meg simms for sattelite gear?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: Joe Serocki <jserocki@allstate.com>
Message-ID: <01bc1180$e9cddc80$01646464@486-desktop>
Source record: 19990

I have 32 meg 70 ns parity simms, valued at $150 each.

I am looking for a 726 for trade, in equivilant value to the above simms.

let me know whatcha got at jserocki@wwa.com

387. Re: X-Q antennas for EME?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5d4gff$19cq@info4.rus.uni-stuttgart.de>
Source record: 19991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

>At best, I would think that Ted's 2-bay, 12-to-16 element quad
>array would be in the 20+ dBd range. Still, not too bad for a
>relatively small array.

Hi Scott,

The point is, that there is no reason to believe that with two
multielement quads of 2,5 to 4 wl boom length more gain
should be available than from a pair of yagis with the same boom length.

73, Moritz DL5UH

388. Re: MIR & Leninger(sp?)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5d53bo$qo1$1@news.mhv.net>
Source record: 19992

In article <5cpsk6$oj0@techsrv1.tech>, cmlong@mtu.edu (Mike) wrote:
>I finally talked to Jerry this morning. WOW, was that exciting! First
>time I ever talked to Mir before. The great thing is is Jerry is carrying
>with him a couple of momentos, one of which is a Michigan Technological
>University flag which is where I am attending right now. He was very happy
>and excited about hearing from us.
>
>Now all I need is to find out how to get a QSL card for the contact?
>If any of you could supply the info it would be much appreciated!
>
>Thanks in advance.
>
>TTYL,
>Mike

N6CO
Dave Larsen
P.O.Box 1501
Pine Grove,Calif. 95665

Congrats by the way! I talked to John on Jan. 4th after 2 years of trying to
make a voice contact with Mir. Persistance pays off!

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

389. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: WB4YUC
Message-ID: <5d4q25$j05@lana.zippo.com>
Source record: 19993

In article <32F4FEC7.D30@ix.netcom.com>, AC6V says...
>
>Narfum wrote:
>>
>> I'm new to listening in on Mir and the Space Shuttle. I've been trying to
>> find the current frequencies, but I'm not sure which are right. Could
>> anyone help me?
>>
>> Narfum
>---
>Hello Narfum -- KG5AI's web page shows:
>
>Mir
>Uplink/Dnlink 145.550 AX.25 & FM voice
>New Information
>70 cm voice: Uplink 435.725 FM 70 cm packet: Uplink 435.775 FM
> Dnlink 437.925 FM Dnlink 437.975 FM
>2m voice: Uplink 145.200 FM (cannot interfere with repeater activity)
> Dnlink 145.800 FM
>Notes: Very large-can be seen by naked eye at dawn or dusk.
> Packet robot callsign is R0MIR-1.
>
>-------------

The 145.800 Downlink and 145.200 Uplink are also the same frequencies for
Mir packet operation. There are two ways to do this. First you can digipeat
through Mir at R0MIR. Second, you can connect to the packet mailbox at R0MIR-1.

73,

Bruce, WB4YUC

390. Re: Weird packets from DO-17

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: Mike Cat <foobar@abc.xyz>
Message-ID: <32F62C4E.6D80@abc.xyz>
Source record: 19994

Mark D. Conner wrote:
>
> I've copied over the past 2-3 days frames like this coming from DO-17:
>
> DOVE>MBLCTL [01/30/97 05:06:27]: <UI>:
> Aï¿½
> DOVE>MBLCTL [01/30/97 05:06:31]: <UI>:
> Aï¿½
> DOVE>MBLCTL [01/30/97 05:06:34]: <UI>:
> Aï¿½
> DOVE>MBLCTL [01/30/97 05:06:37]: <UI>:
> Aï¿½ï¿½
> DOVE>MBLCTL [01/30/97 05:06:40]: <UI>:
> Aï¿½ï¿½
> DOVE>MBLCTL [01/30/97 05:08:41]: <UI>:
> V:9J EC:9F ST:8805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:33D0
> 21:0D 2E:89 31:AA 32:AB 0A:9F 0D:B5 10:AA

On the 01/30/97 0315 UTC pass I copies the following data:

DOVE>MBLCTL/V: <UI>:
V:9J EC:9E ST:0805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:0540
21:0D 2E:84 31:AA 32:A9 0A:9E 0D:B5 10:AA

We here have no idea what this is at all. The second line could be
interpreted as telemetry data but alow of the first line has non hex
values.

Does anyone know? Please help!

Thanks,

Mike Cat
catman@codem.com

391. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: Mike Cat <foobar@abc.xyz>
Message-ID: <32F62D73.423A@abc.xyz>
Source record: 19995

> Mir
> Uplink/Dnlink 145.550 AX.25 & FM voice
> New Information
> 70 cm voice: Uplink 435.725 FM 70 cm packet: Uplink 435.775 FM
> Dnlink 437.925 FM Dnlink 437.975 FM

I have been trying to hear MIR's 70cm FM Voice repeater on the 437.925 frequency for weeks and have had no luck. Then, someone out here stated that the FM Voice repeater can be found on:

Uplink: 435.750
Dwnlnk: 437.950

and I have been hearing it just find on each and every pass since using these new frequencies, so please make note of it!

Mike Cat
catman@codem.com

392. TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: Tone <n2izl@dorsai.org>
Message-ID: <32F63239.4A73@dorsai.org>
Source record: 19996

I just finished assembling the kit.
tested unit worked ok except for lcd, it did not come with kit.
talked to TAPR they are sending it next week.
Problem i am having with unit is it accepts nasa keps but not
amsat keps.
does anyone know what the problem may be?
please let me know.

393. MO-30 status

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: dj0my@aol.com
Message-ID: <19970203210501.QAA18933@ladder01.news.aol.com>
Source record: 19997

Hello everybody !

Does anybody know the current status of MO-30 ???

I've heard this sat some time ago after it has been launched,
but then never again. There is no official statement on the
UNAMSAT homepage so far.......

Any infos welcome.....

73 de Oscar, DJ0MY

394. Re: Mir (please don't digipeat)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: Will Marchant <kc6rol@amsat.org>
Message-ID: <32F60D64.17B4@amsat.org>
Source record: 19998

WB4YUC wrote:
>
> Mir packet operation. There are two ways to do this. First you can digipeat
> through Mir at R0MIR. Second, you can connect to the packet mailbox at R0MIR-1.

Please don't digipeat through Mir. As Phil Chien relays in his Mir FAQ:

>The packet system was put aboard Mir solely for the purpose of
>communications to and from the cosmonauts. It should *NOT* be used as a
>packet E-mail box for other hams, for digipeating of any kind, APRS, or any
>other purpose. The U.S. MIREX team allow unproto packet (non APRS) when
>the mailbox is in a timeout loop.

--
Will Marchant, KC6ROL
mailto:kc6rol@amsat.org
http://www.citizen.infi.net/~wmarchan

395. Re: MIR & Leninger(sp?)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-03 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5d54k3$jv@techsrv1.tech>
Source record: 19999

```
trandall@mhv.net wrote:
: N6CO
: Dave Larsen
: P.O.Box 1501
: Pine Grove,Calif. 95665
:
: Congrats by the way! I talked to John on Jan. 4th after 2 years of trying to
: make a voice contact with Mir. Persistance pays off!
:
A big thanks to everyone who has supplied information on getting QSL's from
contacting the MIR.

TTYL,
Mike

--
/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
\ Michael Long || President /
/ Callsign: N3YPA || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/
```

396. Re: TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: apbiddle@worldnet.att.net
Message-ID: <32f888e7.4123207@netnews.worldnet.att.net>
Source record: 20000

That is not a bug, that is a feature. <grin> Seriously, some time back Sueo took out the ability to read AMSAT formatted keps to make room for other features. Fortunately, most distribution channels send out both formats. Also, there are programs which will convert between the two, though I don't have one handy to send you.

73,

Alan
WA4SCA

397. Re: Weird packets from DO-17

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: mconner@neonramp.com
Message-ID: <32f6ba33.87517838@news.neonramp.com>
Source record: 20001

mconner@neonramp.com (Mark D. Conner) wrote:
>trandall@mhv.net wrote:
>>In article <5d01d3$v90$1@news.mhv.net>, trandall@mhv.net wrote:
>>>In article <32f02ca9.3706518@news.neonramp.com>, mconner@neonramp.com (Mark D.
>>> Conner) wrote:
>>>>I've copied over the past 2-3 days frames like this coming from DO-17:
>>>>
>>>>DOVE>MBLCTL [01/30/97 05:06:27]: <UI>:
>>>
>>>
>>> Oh I HOPE she isn't messed up again. On 1/20/97 I got good telemetry.
>>>Usually we see the above if something's not right....
>>>
>>>Tom
>>
>> As an update to my post I copied the 1608utc pass today. She's still
>>putting out MBLCRT data. What does that stand for and mean? Anyone?
>>
>
>Here's an excerpt from the ANS bulletin:
>>DO-17(DOVE)
>>(Downlink 145.825MHz FM, 1200 Baud AFSK.)
>>Jim White, WD0E, is in the process of reloading DO-17 again using some
>>new ground software that has some improvements. Dove should be back in
>>normal mode in a few days. The S-band is off right now but should be back
>>on also in a few days.
>
>>[ANS thanks Jim White, WD0E, for this report.]
>
>I've got a pass coming up later this evening, so will see if it's back
>up.

Here is what I copied this evening (4/04Z):
DOVE>MBLCTL [02/04/97 04:14:06]: <UI>:
V:9J EC:BC ST:0805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:30B0
21:0D 2E:83 31:A9 32:AA 0A:9E 0D:B5 10:AA

DOVE>MBLCTL [02/04/97 04:22:04]: <UI>:
V:9J EC:BC ST:0805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:1A00
21:0D 2E:87 31:AA 32:AA 0A:A0 0D:B5 10:AB

DOVE>MBLCTL [02/04/97 04:23:18]: <UI>:
V:9J EC:BC ST:0805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:1EC0
21:0D 2E:87 31:AB 32:AB 0A:9F 0D:B6 10:AC

DOVE>MBLCTL [02/04/97 04:23:25]: <UI>:
V:9J EC:BC ST:0805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:0940
21:0D 2E:88 31:AB 32:AB 0A:A0 0D:B6 10:AC

Looks like it's still not completely back in operation yet.

Mark D. Conner
Internet: mconner@null.net
AMPRnet: N9XTN@K0FG.IA.USA.NA
"Paradigm shifting without a clutch" - Dogbert

398. Re: Weird packets from DO-17

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: mconner@neonramp.com
Message-ID: <32f6b43c.85991136@news.neonramp.com>
Source record: 20002

trandall@mhv.net wrote:
>In article <5d01d3$v90$1@news.mhv.net>, trandall@mhv.net wrote:
>>In article <32f02ca9.3706518@news.neonramp.com>, mconner@neonramp.com (Mark D.
>> Conner) wrote:
>>>I've copied over the past 2-3 days frames like this coming from DO-17:
>>>
>>>DOVE>MBLCTL [01/30/97 05:06:27]: <UI>:
>>
>>
>> Oh I HOPE she isn't messed up again. On 1/20/97 I got good telemetry.
>>Usually we see the above if something's not right....
>>
>>Tom
>
> As an update to my post I copied the 1608utc pass today. She's still
>putting out MBLCRT data. What does that stand for and mean? Anyone?
>

Here's an excerpt from the ANS bulletin:
>DO-17(DOVE)
>(Downlink 145.825MHz FM, 1200 Baud AFSK.)
>Jim White, WD0E, is in the process of reloading DO-17 again using some
>new ground software that has some improvements. Dove should be back in
>normal mode in a few days. The S-band is off right now but should be back
>on also in a few days.

>[ANS thanks Jim White, WD0E, for this report.]

I've got a pass coming up later this evening, so will see if it's back
up.

Mark D. Conner
Internet: mconner@null.net
AMPRnet: N9XTN@K0FG.IA.USA.NA
"Paradigm shifting without a clutch" - Dogbert

399. SNR improvement algorithms

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: Uli Schnaidt <uschnaid@ba-stuttgart.de>
Message-ID: <32F6FB37.5F566AEB@ba-stuttgart.de>
Source record: 20003

Hi there!

I'm looking for any algorithm that improves the SNR.
Is there anything available? I'm especially interested in
algorithms that gives a improvement in Morse decoding.

If you have something please let me know by sending me a mail.

Thank you ver much,
Uli

400. NORAD Two-Line Orbital Element Sets (TLE939)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5d5v5v$eig@blackbird.afit.af.mil>
Source record: 20004

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #940 -
Alouette 1
1 00424U 62049A 97031.57820063 .00000027 00000-0 21614-4 0 2644
2 00424 80.4629 58.3922 0023388 163.7561 196.4338 13.67886703713568
ATS 1
1 02608U 66110A 97033.16243435 -.00000129 00000-0 10000-3 0 11
2 02608 14.5557 350.3488 0006815 102.9576 257.1603 1.00288114 27172
ATS 3
1 03029U 67111A 97033.32110642 -.00000109 00000-0 10000-3 0 6128
2 03029 14.9106 357.3104 0011684 273.0799 232.5196 1.00272920107073
Starlette
1 07646U 75010A 97033.24844257 -.00000139 00000-0 88060-6 0 313
2 07646 49.8300 320.8524 0205966 270.1684 87.5613 13.82191852110786
LAGEOS
1 08820U 76039A 97033.26311404 .00000009 00000-0 00000+0 0 2616
2 08820 109.8396 104.8542 0043767 78.6944 281.8757 6.38664577228524
ETS-2
1 09852U 77014A 97031.25959412 -.00000121 00000-0 10000-3 0 989
2 09852 13.5035 30.3404 0005417 150.0590 210.0267 1.00024459 19928
GOES 2
1 10061U 77048A 97033.44626171 .00000061 00000-0 10000-3 0 7952
2 10061 12.6685 34.4827 0010626 133.8157 309.9516 1.00292760 16758
IUE
1 10637U 78012A 97033.52058413 .00000066 00000-0 10000-3 0 3568
2 10637 35.8342 79.8823 1345527 63.9068 21.7072 1.00070561 22249
GOES 3
1 10953U 78062A 97033.38879167 -.00000104 00000-0 10000-3 0 7721
2 10953 11.6740 37.4494 0002203 245.9103 243.8494 1.00264850 21363

```
SeaSat 1
1 10967U 78064A 97030.75049297 -.00000042 00000-0 30529-4 0 5491
2 10967 107.9949 285.6259 0001894 270.7103 89.3822 14.38148187974167
Nimbus 7
1 11080U 78098A 97033.51208383 -.00000040 00000-0 75249-6 0 6461
2 11080 98.9124 250.1751 0009685 66.8723 293.3454 13.83686177923022
GOES 5
1 12472U 81049A 97031.14940263 .00000078 00000-0 10000-3 0 9817
2 12472 8.5587 47.8865 0004084 80.7101 279.4177 1.00307438 15382
Cosmos 1383
1 13301U 82066A 97031.87662771 .00000021 00000-0 71345-5 0 5628
2 13301 82.9338 326.1169 0027591 333.2704 26.7022 13.68079974728647
LandSat 4
1 13367U 82072A 97030.17671132 .00000038 00000-0 18157-4 0 411
2 13367 98.0449 79.8124 0006948 143.6668 216.4990 14.57197600773590
DMSP B5D2-1
1 13736U 82118A 97033.82358915 -.00000023 00000-0 86971-5 0 1706
2 13736 98.6218 224.4855 0009708 76.1630 284.0632 14.25817237733933
IRAS
1 13777U 83004A 97033.53731123 -.00000110 00000-0 -45819-4 0 5673
2 13777 98.9676 220.1750 0011871 177.7397 182.3821 13.99272148385588
Cosmos 1447
1 13916U 83021A 97032.91226807 .00000000 00000-0 -15333-4 0 6548
2 13916 82.9437 21.1222 0036389 231.2455 128.5453 13.74350078695293
TDRS 1
1 13969U 83026B 97033.27326340 -.00000294 00000-0 00000+0 0 7056
2 13969 9.3106 41.4418 0002635 274.7233 225.3952 1.00262310 23698
GOES 6
1 14050U 83041A 97033.21927477 -.00000034 00000-0 10000-3 0 6110
2 14050 7.4054 51.4847 0001495 33.0739 12.6304 1.00219809108505
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97031.55422471 .00000033 00000-0 17693-4 0 5874
2 14780 98.3047 95.0032 0002134 330.6523 29.4563 14.57065309687217
UO-11
1 14781U 84021B 97031.51371750 .00000110 00000-0 26306-4 0 9471
2 14781 97.8191 18.3336 0012949 79.1368 281.1297 14.69520208691183
Cosmos 1574
1 15055U 84062A 97033.57294962 .00000053 00000-0 40201-4 0 8541
2 15055 82.9547 76.0408 0029056 61.0705 299.3358 13.73644454632617
Cosmos 1602
1 15331U 84105A 97031.23757608 .00000159 00000-0 15810-4 0 5360
2 15331 82.5311 259.3566 0018558 275.9393 83.9723 14.84834639666815
ERBS
1 15354U 84108B 97030.88235488 -.00000138 00000-0 89125-5 0 2530
2 15354 56.9950 188.2647 0002198 140.2427 219.8771 14.95014111670892
NOAA 9
1 15427U 84123A 97033.99065455 .00000049 00000-0 49346-4 0 233
```

```
2 15427 98.9218 104.7173 0015615 22.9595 337.2271 14.13834717626245
Mir
1 16609U 86017A 97033.84793518 .00000812 00000-0 15972-4 0 159
2 16609 51.6534 41.3310 0012018 33.4261 326.7457 15.60481435626051
SPOT 1
1 16613U 86019A 97031.72744076 -.00000045 00000-0 00000+0 0 291
2 16613 98.8126 105.0337 0000417 30.3125 329.8075 14.19997378252740
Cosmos 1766
1 16881U 86055A 97033.82722015 .00000238 00000-0 25816-4 0 4519
2 16881 82.5186 314.5701 0018126 300.2402 59.7015 14.83809052568046
EGP
1 16908U 86061A 97031.18255018 -.00000083 00000-0 10000-3 0 1500
2 16908 50.0090 16.0478 0011643 232.6559 127.3215 12.44415582144795
NOAA 10
1 16969U 86073A 97033.99729200 -.00000004 00000-0 16499-4 0 9522
2 16969 98.5358 30.5893 0014206 42.5326 317.6952 14.25017921539477
MOS-1
1 17527U 87018A 97032.21022171 -.00000043 00000-0 00000+0 0 5110
2 17527 98.9103 94.8732 0020385 52.1727 308.1275 14.00428691507046
GOES 7
1 17561U 87022A 97033.42733799 -.00000163 00000-0 10000-3 0 2634
2 17561 3.5180 67.8571 0006541 339.3960 145.2112 1.00271843 19611
Kvant-1
1 17845U 87030A 97033.97601350 .00007358 00000-0 93547-4 0 8901
2 17845 51.6511 40.6892 0012000 33.8340 326.3323 15.60488612560182
DMSP B5D2-3
1 18123U 87053A 97033.96244025 .00000007 00000-0 25935-4 0 7917
2 18123 98.7656 226.4267 0013996 319.1330 40.8790 14.15465344497145
RS-10/11
1 18129U 87054A 97032.34509224 .00000023 00000-0 87871-5 0 3125
2 18129 82.9279 339.1464 0010131 238.0125 122.0047 13.72373885481609
Meteor 2-16
1 18312U 87068A 97031.90315909 .00000027 00000-0 11389-4 0 5418
2 18312 82.5554 170.6684 0011830 304.9825 55.0224 13.84090973477811
Meteor 2-17
1 18820U 88005A 97033.82454257 .00000043 00000-0 25446-4 0 1689
2 18820 82.5409 223.6195 0017476 3.2700 356.8572 13.84768906455444
DMSP B5D2-4
1 18822U 88006A 97034.06414904 -.00000005 00000-0 16065-4 0 4537
2 18822 98.3793 221.0931 0006923 52.4356 307.7453 14.23215222467410
Glonass 34
1 19163U 88043A 97033.46411337 .00000014 00000-0 10000-3 0 1535
2 19163 65.3534 78.0801 0010593 144.1641 215.9896 2.13102404 67146
Glonass 36
1 19165U 88043C 97033.99054654 .00000018 00000-0 10000-3 0 5617
2 19165 65.3303 78.0136 0005892 345.4162 14.6245 2.13101989 67771
METEOSAT 3
1 19215U 88051A 97030.48343724 -.00000117 00000-0 10000-3 0 3015
2 19215 3.7159 66.5070 0006021 131.8869 228.2737 0.96947997 19386
OKEAN 1
```

```
1 19274U 88056A 97032.53276095 .00000222 00000-0 24565-4 0 1510
2 19274 82.5120 56.9133 0021761 87.4781 272.8925 14.82570912463357
Meteor 3-2
1 19336U 88064A 97032.90092490 .00000051 00000-0 10000-3 0 5471
2 19336 82.5423 3.8696 0018365 23.8795 336.3163 13.16980392409715
Glonass 39
1 19503U 88085C 97031.67509955 -.00000038 00000-0 10000-3 0 4444
2 19503 65.4838 317.0397 0002791 87.7021 272.3714 2.13101602 65214
NOAA 11
1 19531U 88089A 97033.98700618 -.00000006 00000-0 21608-4 0 8428
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2 19548 2.9474 70.5700 0005909 217.4263 191.6007 1.00270634 17849
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2 19750 65.3206 77.7900 0008781 242.0611 117.8867 2.13102693 62717
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2 19802 55.4351 101.4646 0019441 184.3875 175.6516 2.00562107 58335
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2 19822 75.1289 350.0735 3726350 292.3379 32.7624 7.95909820184927
Meteor 2-18
1 19851U 89018A 97029.56750516 .00000045 00000-0 26652-4 0 5385
2 19851 82.5227 100.5894 0015722 62.3818 297.8939 13.84425277400154
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TDRS 4
1 19883U 89021B 97032.02035301 -.00000263 00000-0 10000-3 0 3040
2 19883 0.3477 86.6716 0003655 217.3251 153.6468 1.00269772201400
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2 20061 54.0446 276.9143 0155510 223.6335 135.2116 2.00563245 56060
Nadezhda 1
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2 20103 82.9619 298.6086 0038137 129.0156 231.4404 13.73873089380343
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2 20217 2.2204 73.7286 0004417 334.1663 185.9284 1.00263653 27652
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Meteor 3-3
1 20305U 89086A 97033.84780373 .00000044 00000-0 10000-3 0 7476
2 20305 82.5486 325.1094 0008222 105.0144 255.1822 13.04424006348271
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2 20322 98.9336 49.3743 0009721 115.6793 244.5375 14.03463488369032
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2 20441 98.5488 120.1859 0011379 249.0984 110.8981 14.30107322366846
LO-19
1 20442U 90005G 97033.32344099 -.00000015 00000-0 11081-4 0 434
2 20442 98.5492 121.7943 0011399 246.3404 113.6566 14.30220449367018
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2 20478 99.1038 105.6425 0005746 347.9452 12.1569 13.93969295276603
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OKEAN 2
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2 20959 55.2623 101.6077 0115142 237.2310 121.7079 2.00554847 45252
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Glonass 59
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NOAA 13
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KO-25
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2 22877 55.7922 40.0254 0050011 312.9070 46.7126 2.00558627 24009
METEOSAT 6
1 22912U 93073B 97 30.58304859 .00000000 00000-0 10000-3 0 5977
2 22912 0.2745 333.8247 0002482 159.7150 200.2978 1.00421244 10142
HST Array
1 22920U 90037C 97031.26255304 .00006173 00000-0 39017-3 0 5863
2 22920 28.4688 74.9732 0003011 61.2998 298.7920 15.07033350173831
Meteor 3-6
1 22969U 94003A 97033.53244291 .00000051 00000-0 10000-3 0 3192
2 22969 82.5594 97.9904 0016479 25.2411 334.9515 13.16741106145362
TUBSAT-B
1 22970U 94003B 97030.26183538 .00000051 00000-0 10000-3 0 3085
2 22970 82.5608 100.1759 0017757 29.4446 330.7669 13.16828418144948
GPS BIIA-24
1 23027U 94016A 97034.10363434 -.00000063 00000-0 10000-3 0 4855
2 23027 55.0360 340.4985 0069981 208.4066 151.2350 2.00571257 21332
Glonass 62
1 23043U 94021A 97033.01176622 -.00000038 00000-0 00000+0 0 4632
2 23043 64.5586 315.8647 0004905 204.6229 155.3841 2.13103264 21906
Glonass 63
1 23044U 94021B 97033.83271001 -.00000037 00000-0 00000+0 0 4358
2 23044 64.5487 315.8338 0029337 205.9898 153.8950 2.13103361 21920
Glonass 64
1 23045U 94021C 97032.13363902 -.00000038 00000-0 00000+0 0 4321
2 23045 64.5396 315.8973 0011495 27.1915 332.8991 2.13102718 21889
GOES 8
1 23051U 94022A 97033.11720969 -.00000252 00000-0 10000-3 0 6367
2 23051 0.2661 268.3292 0003199 5.2755 186.4469 1.00272200 17679
MSTI 2
1 23101U 94028A 97034.10639720 .00005498 00000-0 79165-4 0 4039
2 23101 97.0715 231.1912 0009865 176.8841 183.2416 15.56399386155180
STRV-1A
1 23125U 94034B 97033.65203755 .00000871 00000-0 17978-3 0 3960
2 23125 6.9721 137.9410 7242628 257.9374 19.5815 2.33011596 21498
STRV-1B
1 23126U 94034C 97033.64929559 .00000586 00000-0 10755-3 0 3438
2 23126 6.9887 137.7632 7240677 258.3068 19.4714 2.33159160 21535
Nadezhda 4
1 23179U 94041A 97033.52845366 .00000045 00000-0 30637-4 0 2547
```

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2 23179 82.9450 65.8883 0035510 198.7850 161.2002 13.75689945128462
Glonass 65
1 23203U 94050A 97032.74022503 .00000099 00000-0 00000+0 0 3926
2 23203 64.7631 196.4141 0007902 135.3457 224.7170 2.13102309 19296
Glonass 66
1 23204U 94050B 97032.97367818 .00000098 00000-0 00000+0 0 4169
2 23204 64.7495 196.4315 0014752 354.6119 5.3696 2.13102425 19295
Glonass 67
1 23205U 94050C 97032.38666079 .00000101 00000-0 00000+0 0 3957
2 23205 64.7590 196.4424 0000974 16.7322 343.2713 2.13102927 19286
DMSP B5D2-7
1 23233U 94057A 97033.89510303 .00000084 00000-0 68597-4 0 1026
2 23233 98.7975 94.9407 0011726 245.9061 114.0888 14.12774605125406
OKEAN 1-7
1 23317U 94066A 97032.88360829 .00000049 00000-0 39532-5 0 2179
2 23317 82.5435 207.7052 0027508 54.6256 305.7518 14.74072760124372
ELEKTRO (GOMS)
1 23327U 94069A 97026.79675870 -.00000104 00000-0 00000+0 0 2413
2 23327 0.4827 98.1582 0000091 27.8174 3.3605 1.00271567 8242
RESURS 1-3
1 23342U 94074A 97033.98720084 .00000038 00000-0 14283-4 0 6707
2 23342 97.9354 91.1565 0001419 62.8727 297.2611 14.69897043120717
Glonass 68
1 23396U 94076A 97033.63880098 .00000016 00000-0 00000+0 0 3724
2 23396 65.1885 76.4609 0029406 194.6506 165.3370 2.13102602 17158
Glonass 69
1 23397U 94076B 97033.81533609 .00000017 00000-0 00000+0 0 3662
2 23397 65.1752 76.4593 0013425 312.4482 47.5142 2.13102287 17158
Glonass 70
1 23398U 94076C 97033.22988871 .00000013 00000-0 00000+0 0 3793
2 23398 65.1620 76.4499 0004858 278.5623 81.4574 2.13101961 17151
LUCH (Altair-2)
1 23426U 94082A 97033.57438877 -.00000274 00000-0 00000+0 0 4753
2 23426 0.9656 262.2800 0002270 52.5656 120.0139 1.00276699 7817
RS-15
1 23439U 94085A 97033.43615715 -.00000039 00000-0 10000-3 0 1956
2 23439 64.8150 10.7388 0153001 157.7137 203.0528 11.27526519 86749
NOAA 14
1 23455U 94089A 97033.99901151 .00000022 00000-0 37072-4 0 9252
2 23455 98.9738 345.1015 0009302 316.9171 43.1268 14.11643304108017
Glonass 71
1 23511U 95009A 97034.12551475 -.00000037 00000-0 00000+0 0 2946
2 23511 64.5693 316.1056 0005872 231.9129 128.0644 2.13104008 14894
Glonass 72
1 23512U 95009B 97033.77738180 -.00000037 00000-0 00000+0 0 2992
2 23512 64.5611 316.1158 0007127 323.0822 36.9004 2.13101593 14888
Glonass 73
1 23513U 95009C 97033.12961299 -.00000038 00000-0 00000+0 0 3230
2 23513 64.5710 316.1559 0012432 208.5626 151.3991 2.13102956 14878
GMS 5
```

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1 23522U 95011B 97033.48605672 -.00000287 00000-0 10000-3 0 2030
2 23522 0.5205 29.3733 0000698 119.4922 298.5696 1.00263576 6760
DMSP B5D2-8
1 23533U 95015A 97033.96531498 .00000068 00000-0 60280-4 0 8536
2 23533 98.8452 39.5060 0007784 116.4980 243.6995 14.12773782 96210
OSC 1
1 23545U 95017A 97032.92022714 .00000017 00000-0 21892-4 0 1973
2 23545 69.9734 357.0097 0016400 227.6391 132.3360 14.45466612 96856
OSC 2
1 23546U 95017B 97031.91598214 -.00000017 00000-0 12308-4 0 2317
2 23546 69.9777 359.5579 0016003 222.5607 137.4288 14.45482426 96710
Microlab 1
1 23547U 95017C 97031.91731922 .00000142 00000-0 57087-4 0 1694
2 23547 69.9779 359.2197 0015645 224.9624 135.0257 14.45648014 96720
OFEQ 3
1 23549U 95018A 97033.73699557 .00016522 00000-0 37623-3 0 4455
2 23549 143.3600 199.0034 0204759 287.5438 70.3099 15.21497782101402
GFZ-1
1 23558U 86017JE 97030.46440955 .00003350 00000-0 40894-4 0 2040
2 23558 51.6509 45.5820 0005829 9.8621 350.2488 15.63718194625553
ERS-2
1 23560U 95021A 97033.53998471 -.00000031 00000-0 46224-5 0 3296
2 23560 98.5457 110.2761 0001086 94.3997 265.7311 14.32249644 93545
Spektr
1 23579U 95024A 97033.97601350 .00007358 00000-0 93547-4 0 5653
2 23579 51.6511 40.6892 0012000 33.8340 326.3323 15.60488612 97504
GOES 9
1 23581U 95025A 97022.51724130 .00000074 00000-0 10000-3 0 3116
2 23581 0.0476 92.8930 0003939 212.2642 228.3689 1.00285472 6128
Helios 1A
1 23605U 95033A 97031.85912890 .00000114 00000-0 30860-4 0 4361
2 23605 98.1434 330.5173 0001282 68.2873 291.8466 14.63810363 84010
UPM SAT 1
1 23606U 95033B 97033.26572144 .00000116 00000-0 29149-4 0 2495
2 23606 98.1233 333.7200 0007138 170.8487 189.2851 14.67345587 84452
CERISE
1 23607U 95033C 97032.35847343 .00000050 00000-0 17556-4 0 1519
2 23607 98.1267 332.5997 0006081 171.2865 188.8445 14.66995799 84337
TDRS 7
1 23613U 95035B 97032.65573921 .00000101 00000-0 00000+0 0 2978
2 23613 1.1548 81.7430 0001785 229.0659 246.1067 1.00279236 5688
Glonass 74
1 23620U 95037A 97033.85183024 .00000092 00000-0 00000+0 0 2421
2 23620 64.8219 196.2565 0018600 162.9211 197.1360 2.13103025 11923
Glonass 75
1 23621U 95037B 97033.56053763 .00000095 00000-0 00000+0 0 2519
2 23621 64.8302 196.2683 0017904 173.8021 186.2156 2.13102353 11918
Glonass 76
1 23622U 95037C 97033.61851162 .00000094 00000-0 00000+0 0 2581
2 23622 64.8238 196.2680 0036824 163.3896 196.7274 2.13102541 11916
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Prognoz-M2
1 23632U 95039A 97030.79525280 .00000399 00000-0 00000+0 0 1092
2 23632 70.4400 248.4990 7643304 327.4270 1.4810 0.26353000 1454
SICH-1
1 23657U 95046A 97033.87987536 .00000152 00000-0 19819-4 0 1433
2 23657 82.5330 348.2125 0029279 23.4773 336.7771 14.73526908 76806
RADARSAT
1 23710U 95059A 97032.91382343 .00000142 00000-0 72025-4 0 2344
2 23710 98.5807 42.3270 0001146 69.1943 290.9361 14.29970762 65079
Glonass 79
1 23734U 95068A 97033.26736694 .00000097 00000-0 00000+0 0 2338
2 23734 64.8269 196.1986 0017316 327.5520 32.3362 2.13102370 8879
Glonass 78
1 23735U 95068B 97032.98610724 .00000098 00000-0 00000+0 0 2232
2 23735 64.8146 196.1915 0006255 202.3054 157.6615 2.13124897 8867
Glonass 77
1 23736U 95068C 97033.50177643 .00000095 00000-0 00000+0 0 2057
2 23736 64.8131 196.1859 0007249 187.8091 172.1756 2.13102224 8870
XTE
1 23757U 95074A 97030.16131558 .00000520 00000-0 14466-4 0 1183
2 23757 22.9788 306.6177 0013530 254.3975 105.4989 14.97764743 59539
Polar
1 23802U 96013A 97033.11484328 .00000118 00000-0 00000+0 0 1033
2 23802 86.3568 23.5573 6531074 274.8497 18.8989 1.36265951 4695
1996010E
1 23824U 96010E 97030.37948634 .00275430 00000-0 38957-1 0 1646
2 23824 47.4198 187.2592 6947227 88.1527 341.0018 2.72501600 7856
GPS BIIA-25
1 23833U 96019A 97033.24179633 -.00000063 00000-0 00000+0 0 1396
2 23833 54.6408 338.6342 0028828 143.2892 216.9239 2.00565533 6292
Priroda
1 23848U 96023A 97033.97601350 .00007358 00000-0 93547-4 0 2536
2 23848 51.6511 40.6892 0012000 33.8340 326.3323 15.60488612 44594
MSX
1 23851U 96024A 97032.48549237 -.00000047 00000-0 00000+0 0 1839
2 23851 99.4031 22.8081 0005785 239.5989 120.4554 13.97433586 39527
SAX
1 23857U 96027A 97029.83504361 .00001131 00000-0 36553-4 0 517
2 23857 3.9542 260.2423 0014254 38.0439 322.0647 14.91715780 41048
MSTI 3
1 23868U 96031A 97032.56622198 .00002225 00000-0 46256-4 0 1110
2 23868 97.1155 225.0529 0011005 57.3298 302.9013 15.46661514 40262
TOMS-EP
1 23940U 96037A 97034.21607194 .00001957 00000-0 88888-4 0 825
2 23940 97.4314 302.8150 0011535 259.1846 100.8069 15.21914660 32764
GPS BIIA-26
1 23953U 96041A 97031.16384669 -.00000024 00000-0 00000+0 0 1139
2 23953 55.0673 99.1004 0021183 331.3511 28.5834 2.00558746 4040
ADEOS
1 24277U 96046A 97034.17987805 -.00000044 00000-0 00000+0 0 1388
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2 24277 98.6080 113.7938 0001286 124.6026 235.5277 14.27640029 24243
FO-29
1 24278U 96046B 97034.18232339 -.00000008 00000-0 26556-4 0 552
2 24278 98.5611 93.5814 0351561 173.2696 187.3350 13.52629046 23000
Soyuz TM-24
1 24280U 96047A 97033.97601350 .00007358 00000-0 93547-4 0 1576
2 24280 51.6511 40.6892 0012000 33.8340 326.3323 15.60488612 26494
FAST
1 24285U 96049A 97030.24213034 .00001591 00000-0 16142-3 0 586
2 24285 82.9992 103.1862 2206838 236.4502 100.6305 10.81750465 17509
1996049B
1 24286U 96049B 97031.48579526 .00002129 00000-0 21297-3 0 692
2 24286 83.0056 102.7084 2206090 233.9665 103.6582 10.82149698 17631
Microsat
1 24291U 96050A 97033.88887996 .00044755 63901-5 30212-3 0 1243
2 24291 62.7906 220.4879 0591650 130.3260 235.1094 14.71279293 23096
MO-30
1 24305U 96052B 97034.21395908 .00000204 00000-0 20364-3 0 698
2 24305 82.9337 93.6008 0028605 217.4661 142.4489 13.73088783 20677
GPS BIIA-27
1 24320U 96056A 97028.03415738 -.00000011 00000-0 00000+0 0 582
2 24320 54.6612 279.3493 0052786 112.0134 248.5597 2.00569603 2647
SAC-B/HETE
1 24645U 96061A 97031.89778100 .00000514 00000-0 32797-4 0 424
2 24645 37.9776 316.6865 0049654 284.9267 74.6002 15.14848202 13382
Progress M-33
1 24663U 96066A 97033.97601350 .00007358 00000-0 93547-4 0 706
2 24663 51.6511 40.6892 0012000 33.8340 326.3323 15.60488612 11730
1996073C
1 24706U 96073C 97034.23022776 .00161240 81559-5 17029-3 0 402
2 24706 62.8019 92.2287 0086728 108.4827 252.5752 16.02465452 6490
1996073D
1 24707U 96073D 97033.61093954 .00198729 19003-4 13634-2 0 391
2 24707 62.8100 99.8050 0095707 34.7206 326.0170 15.68325310 4108
1996073E
1 24708U 96073E 97034.21013675 .00253669 28565-4 11815-2 0 387
2 24708 62.8039 96.0997 0071763 49.3506 311.4338 15.79156857 4227
1996073F
1 24709U 96073F 97023.34876326 .11031200 88338-5 15950-3 0 499
2 24709 62.8192 133.7876 0024100 114.4564 262.0771 16.46481024 2596
1996073G
1 24710U 96073G 97034.10032516 .00129412 86043-5 42309-4 0 88
2 24710 62.7868 88.4224 0008798 23.0145 336.7961 16.25707276 4347
1997002A
1 24713U 97002A 97034.06461443 -.00000099 00000-0 00000+0 0 142
2 24713 0.7708 271.2283 1725426 183.4729 285.1381 1.27149549 52
1997002B
1 24714U 97002B 97033.97002507 -.00000155 00000-0 10000-4 0 165
2 24714 0.2492 272.1380 0495081 185.2034 268.4104 1.07416458 56
1997002C

```
1 24715U 97002C 97033.33436624 .00003508 00000-0 92724-3 0 95
2 24715 7.4728 272.1643 7300403 185.5588 155.8127 2.26044927 51
1997002D
1 24716U 97002D 97033.76877639 .00050033 00000-0 50683-2 0 113
2 24716 7.0241 276.0962 7295542 181.5592 173.5474 2.28547622 68
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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401. Re: SNR improvement algorithms

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <E53qys.F1K@cix.compulink.co.uk>
Source record: 20005

I'm especially interested in algorithms that gives a improvement in winning the lottery, easy by comparison......hi hi

Steve Walters: G7VFY: 0956-544202

402. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5d632r$enq@blackbird.afit.af.mil>
Source record: 20006

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

403. Info on YAESU 746?? Sat Radio?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: rmra@inconnect.com
Message-ID: <32f7bfc9.931047@news.inconnect.com>
Source record: 20007

Anyone heard anything about this radio, what it covers, etc..
Heard that one might come out of the closet for Dayton...anyone seen
any ads at all???

404. ARLK010 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk010.1997@arrl.org>
Source record: 20008
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK010
ARLK010 Keplerian data

ZCZC SK10
QST de W1AW
Keplerian Bulletin 10 ARLK010
From ARRL Headquarters
Newington, CT February 4, 1997
To all radio amateurs

SB KEP ARL ARLK010
ARLK010 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97034.89685289 .00000024 00000-0 94895-5 0 03296
2 18129 82.9270 337.2601 0010117 230.3028 129.7221 13.72373951481953
UO-11
1 14781U 84021B 97035.53105716 .00000102 00000-0 25055-4 0 9486
2 14781 97.8193 22.1814 0012926 67.0859 293.1695 14.69521544691779
RS-12/13
1 21089U 91007A 97035.03638402 .00000055 00000-0 43079-4 0 09714
2 21089 82.9199 17.3933 0028552 311.0884 48.7804 13.74076946300879
UO-14
1 20437U 90005B 97035.15116706 -.00000112 00000-0 -26627-4 0 02537
2 20437 98.5242 119.6499 0010474 238.2813 121.7354 14.29947097367203
RS-15
1 23439U 94085A 97035.03264509 -.00000039 00000-0 10000-3 0 02057
2 23439 64.8152 8.1569 0153015 157.4523 203.3211 11.27526542086922
AO-16
1 20439U 90005D 97034.75060458 .00000032 00000-0 29318-4 0 00566
2 20439 98.5440 121.9068 0010568 242.8995 117.1107 14.29997771367163
DO-17
1 20440U 90005E 97035.09965722 -.00000011 00000-0 12508-4 0 00644
2 20440 98.5486 123.0244 0010661 240.2433 119.7680 14.30139820367245
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WO-18
1 20441U 90005F 97034.74470780 .00000006 00000-0 19094-4 0 00584
2 20441 98.5485 122.5900 0011386 240.7724 119.2326 14.30107993367193
LO-19
1 20442U 90005G 97034.79258668 -.00000007 00000-0 13914-4 0 00520
2 20442 98.5479 123.2350 0011394 241.2859 118.7179 14.30220695367227
FO-20
1 20480U 90013C 97035.02118840 -.00000053 00000-0 -38796-4 0 09587
2 20480 99.0251 21.7562 0540450 319.1486 37.0204 12.83236155327627
AO-21
1 21087U 91006A 97034.84795990 .00000093 00000-0 82657-4 0 07934
2 21087 82.9402 150.2620 0034712 282.8665 76.8614 13.74577523301836
UO-22
1 21575U 91050B 97035.18934034 .00000024 00000-0 22272-4 0 07657
2 21575 98.3179 100.3118 0007337 300.3996 59.6465 14.37055563291380
KO-23
1 22077U 92052B 97035.18070448 -.00000037 00000-0 10000-3 0 06499
2 22077 66.0780 63.7272 0014696 244.3777 115.5719 12.86300713210647
KO-25
1 22828U 93061F 97035.09379797 -.00000037 00000-0 27004-5 0 05249
2 22828 98.5524 112.4801 0009513 257.4075 102.5996 14.28166674143210
IO-26
1 22826U 93061D 97035.09771321 -.00000020 00000-0 93714-5 0 05339
2 22826 98.5610 112.4168 0008618 276.9535 83.0641 14.27825411175093
AO-27
1 22825U 93061C 97035.18916754 -.00000010 00000-0 13619-4 0 05388
2 22825 98.5609 112.2927 0007991 277.9385 82.0894 14.27716369175098
FO-29
1 24278U 96046B 97035.14396243 -.00000005 00000-0 30161-4 0 00604
2 24278 98.5608 94.4135 0351566 170.7798 190.0025 13.52629151023133
MO-30
1 24305U 96052B 97035.16126708 .00000204 00000-0 20364-3 0 00761
2 24305 82.9335 92.9000 0028646 213.9971 145.9279 13.73088798020805
Mir
1 16609U 86017A 97035.44893939 .00000712 00000-0 14781-4 0 195
2 16609 51.6512 33.2753 0011905 37.7522 322.4342 15.60485121626309

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
February 8, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

405. Receiver- Kit for Weather Sat.'s

Newsgroup: rec.radio.amateur.space
Date: 1997-02-04 00:00:00 UTC
From: abom@iaehv.nl
Message-ID: <32f7b66c.9988385@news.iaehv.nl>
Source record: 20009

Hallo, weather satellite- fans

Last year I developed a weather satellite receiver for receiving all
polar satellites. The receiver will be connected to the soundblaster
card in the computer. In combination with a shareware file beautiful
pictures can be received.

Because we had such a good results we intend to publish the complete
electronic design inclusive the print- layout on internet.

Some technical details.

* Manual tuning from 136- 139 MHz.
* Kepler compensated
* Squelched Loudspeaker output.
* Non- squelched soundblaster output.
* Signal strength indication.
* Very Sensitiv for weak signals (0.12 uV/ 12dB sinad)

When you are interested in rebuilding the receiver, please mail us.
At sufficient interest it will be possible for us to order
professional print boards and to supply the special components.
Further it will be possible to give technical support during building
the receiver.
When you are interested in building a low cost and a good performance
weather- receiver let us know.

Best regards,

A.Bom
Veldhoven
tel: +31 40 2539851
email: abom@iaehv.nl
email: pa0axb@amsat.org

406. WTB: Icom 575

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: "Alan K. Adamson" <ne1h@ne1h.radio.org>
Message-ID: <01bc130e$2455bd80$b7c41cce@typhoon.ne1h.radio.org>
Source record: 20010

All,

Looking for a good used Icom 575. Respond to ne1h@ne1h.radio.org

TNX,
Alan Adamson
Atlanta, GA
ne1h@ne1h.radio.org

407. MIR pass on 02/05/97 about 00:45 UTC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: Mike Cat <foobar@abc.xyz>
Message-ID: <32F8A351.4505@abc.xyz>
Source record: 20011

FOR DIRECT MAIL REPLIES, SEE BELOW.

Hi all,

The MIR pass (of about 82 degrees elevation here in New England) on 02/05/97 at about 00:45 UTC failed to produce any signals on both the 2 meter and 70cm downlink frequencies.

Can anyone else verfy this information as well so I can sleep without thinking I'm going crazy?

I have been successfully listening to MIR on 145.800 on packet and on 437.950 FM Voice for over a week now, except for this pass. Did they turn off the robot and repeater for some specific reason?

Perhaps they were disabled for the state of the union address or because they were using the spare power to watch the breaking news on OJ? Or maybe they knew this pass was a "prime time" pass of 1/3 of the US?

Clueless in New Englad,
Mike Cat
catman@codem.com <=== Use this address for all email

408. P3D EIRP for S-Band

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: Hakan Kayal <Hakan.Kayal@dlr.de>
Message-ID: <32F8A3F5.57E2@dlr.de>
Source record: 20012

I am currently making some link-budget calculations and would like
to know what will be the EIRP for the S-band transmitter of
the P3D satellite. Thank you.

Hakan Kayal

Hakan.Kayal@dlr.de

409. Re: MIR pass on 02/05/97 about 00:45 UTC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <32F8AF96.35AB@ix.netcom.com>
Source record: 20013

Mike,

I heard them just fine, on voice at about 00:40 EST. In fact, I may
have worked them, though he moved on to another station quite quickly,
so I'm not 100% sure.

The max elevation here in Southern New England was only about 41
degrees, but the signal was pegging my meter (ain't line of sight
wonderful :-)

Good luck for future passes.

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

Mike Cat wrote:
>
> FOR DIRECT MAIL REPLIES, SEE BELOW.
>
> Hi all,
>
> The MIR pass (of about 82 degrees elevation here in New England) on
> 02/05/97 at about 00:45 UTC failed to produce any signals on both the 2
> meter and 70cm downlink frequencies.
>
> Can anyone else verfy this information as well so I can sleep without
> thinking I'm going crazy?
>
> I have been successfully listening to MIR on 145.800 on packet and on
> 437.950 FM Voice for over a week now, except for this pass. Did they
> turn off the robot and repeater for some specific reason?
>
> Perhaps they were disabled for the state of the union address or because
> they were using the spare power to watch the breaking news on OJ? Or
> maybe they knew this pass was a "prime time" pass of 1/3 of the US?
>
> Clueless in New Englad,
> Mike Cat
> catman@codem.com <=== Use this address for all email

410. Re: Amateur Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: Buzz Gorsky <drbuzz@sprynet.com>
Message-ID: <01bc131a$23f27160$48b7aec7@70353.3572.compuserve.com>
Source record: 20014

Freddi Warnke <f.warnke@on-line.de> wrote in article
<32ef5ee4.5439807@news.isys.net>...
> Hallo Satellite-Profi's,
>
> can anyone tell me what amateur satellites are still active in the
european
> area ?
>
> in advance thanks
> Freddi
>

There are a wide variety of amateur satellites available for use by radio amateurs. All have some time above the horizon in Europe.
Are you a radio amateur?
Are you interested in digital or analog satellites?
Do you have any experience or equipment for VHF, HF, or UHF activity?
Buzz

411. Re: MIR pass on 02/05/97 about 00:45 UTC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: kf6dgn@aol.com
Message-ID: <19970205182300.NAA21054@ladder01.news.aol.com>
Source record: 20015
Body handling: HTML body converted to readable text

What kind of radio's and how power are you using?

KF6DGN,

David

412. Updated Satellite page

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: n4okl@amsat.org
Message-ID: <01bc1389$d3853120$8aac63ce@Pjharmon.newwave>
Source record: 20016

Hello all,
I have just returned from my vacation in Florida, what a month, and have updated my satellite homepage.
Besides the freq changes for Mir and rs-16 i have changed the frames around and made it more friendly for lower res viewing. It is still best viewed at 1024x768 tho...

Let me know how you like the changes, layout, and content!

73, John - N4OKL

http://www.newwave.net/~jharmon

NoFrames page at http://www.newwave.net/~jharmon/noframes.htm

413. Re: Info on YAESU 746?? Sat Radio?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: "Richard L. Tannnehill" <rickw7rt@mailhost.ibag.com>
Message-ID: <32F93139.1B82@mailhost.ibag.com>
Source record: 20017

rmra@inconnect.com wrote:
>
> Anyone heard anything about this radio, what it covers, etc..
> Heard that one might come out of the closet for Dayton...anyone seen
> any ads at all???

Yaesu keeps telling me this radio is nothing but vaporware, as they are unwilling to invest in the design and production of an all new radio until they see that Phase IIID is up, running, and there is a lot of interest in it. Also, there is little incentive to upgrade the venerable FT736 right now since it is still considered the best sat radio on the market. I have encouraged them to do some minor upgrades to the 736, including built-in 9600 bps, and an FSK/PSK modem too. They don't seem too interested yet.

Rick T.
W7RT

414. Passing schedules?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-05 00:00:00 UTC
From: Kerim&#65533;en lukio <kerim&#65533;en.lukio@pp.kolumbus.fi>
Message-ID: <32F95751.C25@pp.kolumbus.fi>
Source record: 20018

Hi! Where can I find passing schedules of NOAA-satellites?
73' de Mikko

415. (no subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: nsallay@internext.COM.BR
Message-ID: <32F9276C.495@internext.com.br>
Source record: 20019

unsubsribe

416. Re: P3D EIRP for S-Band

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: "John B. Stephensen" <john.stephensen@isocor.com>
Message-ID: <32F96153.4431@isocor.com>
Source record: 20020

Hakan Kayal wrote:
>
> I am currently making some link-budget calculations and would like
> to know what will be the EIRP for the S-band transmitter of
> the P3D satellite. Thank you.
>
> Hakan Kayal
>
> Hakan.Kayal@dlr.de

I don't have it available here, but the 1997 ARRL Handbook has dowlink and uplink requirements for all P3D analog and digital transponders. March, 1997 QST will have an article that might have more info on the microwave transponders.

73,

- John, KD6OZH

417. Re: TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: Rafael Garcia <rafael@sat.cide.upm.es>
Message-ID: <32F9A210.290B2EAB@sat.cide.upm.es>
Source record: 20021

Tone wrote:

> Problem i am having with unit is it accepts nasa keps but not
> amsat keps.

Latest firmware releases does not accept amsat keps, but only 2line
nasa format.

--
Rafael,
ETSIA, Lab. Aerodinamica
Madrid (SPAIN)

418. DOVE data from 03:16 UTC on 02/06/97

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: Mike Cat <NotValid@email.address>
Message-ID: <32F9E5EA.2596@email.address>
Source record: 20022

Dove is still in it's MBLCTL mode. Thanks to Stacey Mills:

> The MBLCTL stands for "microsat boot loader control".
> Radiation damage has altered the 555 reset/watchdog timers on the
> microsats and the new software works around this.

Here is the data I gathered on 02/06/97 at 03:16 UTC.

DOVE>MBLCTL/V: <UI>:
V:9J EC:CD ST:8805 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:0170
21:0D 2E:83 31:AB 32:AC 0A:9E 0D:B6 10:AB

Also, transmissions from dove are few and far between. During the last
two high elevation passes over me (which lasted over 10 minutes), I was
only able to receive ONE DO-17 transmission.

Does anyone know how often DOVE transmits when it's in this MBLCTL mode?

Thanks!
Mike Cat
catman@codem.com

419. R0MIR data for 02/06/97 00:10 UTC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: Mike Cat <NotValid@email.address>
Message-ID: <32F9EBFB.2A4E@email.address>
Source record: 20023

Just for fun I am posting all the packet data that I got from MIR's pass in my neck of the woods (New Hampshire, USA) from 02/06/97 at approximately 00:10 UTC. If you know any of these amateurs or are one yourself, it's a neat way to get a followup QSL via a newgroup posting.

```
R0MIR-1>KD8JN/V: <<DM>>:
R0MIR-1>KD8JN/V: <<DM>>:
R0MIR-1>N3NRI/V: <<DM>>:
R0MIR-1>KD8JN/V: <<DM>>:
R0MIR>N2OLA/V: <<rr0>>:
R0MIR-1>KB2WQM/V: <<DM>>:
R0MIR-1>N1MDZ/V: <<DM>>:
R0MIR-1>KE4QPN/V: <<D>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<DM>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<DM>>:
R0MIR-1>WA2GSY/V: <<DM>>:
R0MIR-1>WA2GSY/V: <<DM>>:
R0MIR-1>KE4QPN/V: <<D>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<DM>>:
R0MIR-1>WA2GSY/V: <<UA>>:
R0MIR-1>WA2GSY/V: <<I00>>:
Logged on to R0MIR's Personal Message System

R0MIR-1>WA2GSY/V: <<I10>>:
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>

R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<UA>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<UA>>:
R0MIR-1>WA2GSY/V: <<RR0>>:
R0MIR>N2OLA/V: <<RR0>>:
R0MIR-1>WA2GSY/V: <<I00>>:
Logged on to R0MIR's Personal Message System

R0MIR-1>WA2GSY/V: <<I10>>:
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>

R0MIR-1>WA2GSY/V: <<UA>>:
R0MIR-1>WA2GSY/V: <<RR0>>:
R0MIR>N2OLA/V: <<RR0>>:
```

R0MIR>N2OLA/V: <<RR0>>:

More data to come in the future!

73 de Mike Cat
catman@codem.com

420. newbie transmit question

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: stevem14@aol.com
Message-ID: <19970206163400.LAA07106@ladder01.news.aol.com>
Source record: 20024

I just got a 726 yaseu and am puting a sat station together and am thinking about a single 144 &432 mhz j-pole (with 2 feeds) like is in the ARRL handbook for an antenna for the l.e.o. sats. My dumb question for the day is this:
Won't I be transmitting directly into my reciever and smoke the thing when I try crossband full duplex communications?

If you feel like it, resopnd to murdock@graceland.edu instead of a general post but that will work for me too.
TNX
Steve Murdock (N0ZYE)

421. MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <32FA0B73.6EBA@ping.be>
Source record: 20025

Please send me the voice frequenties to hear the MIR or Shuttle Flights.

Thanks VERY much !!!

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

422. New C. I. INTERNATIONAL 10X

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: rcnoll@ix.netcom.com
Message-ID: <5dd2e5$7vq@sjx-ixn10.ix.netcom.com>
Source record: 20026

Channel Islands Chapter 10X International of Oxnard, Ca. Meets every
Wednesday on 28400 MHz. 10am-12noon and 6pm-8pm. Members and Nonmembers
can report in. PLEASE DO. 73
--
Ralph C. Noll | Retired | KD6BYI

423. Re: Mir (please don't digipeat)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: WB4YUC
Message-ID: <5dcqvu$o6p@lana.zippo.com>
Source record: 20027

In article <32F60D64.17B4@amsat.org>, Will says...
>
>WB4YUC wrote:
>>
>> Mir packet operation. There are two ways to do this. First you can digipeat
>> through Mir at R0MIR. Second, you can connect to the packet mailbox at R0MIR-1.
>
>Please don't digipeat through Mir. As Phil Chien relays in his Mir FAQ:
>
>>The packet system was put aboard Mir solely for the purpose of
>>communications to and from the cosmonauts. It should *NOT* be used as a
>>packet E-mail box for other hams, for digipeating of any kind, APRS, or any
>>other purpose. The U.S. MIREX team allow unproto packet (non APRS) when
>>the mailbox is in a timeout loop.

Where is this FAQ and how old is it??? - WB4YUC

424. Radio Meteor Obs. Bull. Jan 1997: Quadrantids

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.104.32FA661E@vvs.innet.be>
Source record: 20028

Radio Meteor Observation Bulletin No. 42 February 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

January 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Jan	UT											
1997	21h	22	23	00	01	02	03	04	05	06	07	08	09
1- 2	13	16	10	18	24	15	19	14	23	26	33	29	27
2- 3	16	27	35	58	51	&	&	&	&	&	&	&	&
3- 4	&	&	&	&	&	&	&	&	&	&	&	19	47
4- 5	5	4	14	14	21	17	9	31	32	25	33		
5- 6	17	14	29	15	32	24	40	38	43	34	27		
6- 7	5	6	12	21	30	21	50	35	25	43	27		
7- 8	5	7	26	20	18	19	34	28	38	39	33		
8- 9													
9-10													

```
10-11 | 6 16 14 14 41 23 49 33 55 & &
11-12 | 7 4 13 15 19 17 23 33 33 52 41
12-13 | 12 12 16 12 30 37 36 30 33 31 34
13-14 | 10 19 17 18 23 23 29 28 33 43 48
14-15 | 1 7 11 10 31 33 25 36 36 35 48
15-16 | 6 8 5 14 16 25 26 20 18 24 32
16-17 | 9 10 9 11 25 27 36 23 20 31 33
17-18 | 7 26 17 20 34 37 26 38 33 35 50
18-19 |
19-20 | 7 21 24 24 30 35 42 43 44 44 36
20-21 | 5 33 18 18 28 42 38 40 44 39 30
21-22 | 12 14 23 27 33 34 49 34 49 21 &
22-23 | 11 19 16 23 27 41 17 & & & &
23-24 | 9 15 20 24 38 20 42 38 44 51 40
24-25 | 11 12 19 30 & & & & & & &
25-26 | 10 14 18 27 36 27 25 48 44 40 43
26-27 | 5 23 13 30 26 27 26 28 31 32 41
27-28 | 6 7 18 34 26 32 44 48 43 29 29
28-29 | 13 16 21 27 35 55 30 30 37 42 51
29-30 | 16 27 24 26 22 36 40 40 37 63 46
30-31 | 11 20 30 26 34 31 38 34 43 36 44
31-01 | 7 21 12 23 25 18 30 22 39 85 136
------+-------------------------------------------------------------------
1997 | 21 22 23 00 01 02 03 04 05 06 07 08 09
Jan | UT
```

Notes:
. & hardware trouble
. local time = UT + 1 hour.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 degs
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anticoincindence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.

When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic E.

| Nov 1996 | 10x % reflec. time | horiz: day | vert: time |

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---
0 | 34 34 37 49 34 31 36 43 43 52 2 40 36 1 61
1 | 44 41 43 57 39 48 44 49 55 73 50 47 69 6 46
2 | 51 52 69 66 44 44 47 62 68 50 47 49 70 10 56
3 | 109 91 77 102 83 72 85 86 80 72 76 71 80 27 138
4 | 85 62 87 104 77 63 95 112 71 63 97 85 106 76 94
5 | 102 72 90 88 109 85 93 71 84 57 87 58 61 52 90
6 | 81 61 69 79 93 111 74 79 74 74 55 63 64 50 82
7 | 65 47 78 67 84 61 60 42 83 39 89 83 42 61 71
8 | 59 63 74 32 35 33 30 37 63 62 40 25 50 30 54
9 | 42 55 47 18 33 51 47 40 93 34 67 34 25 28
10 | 44 52 58 15 25 31 25 33 59 40 25 49 21 41
11 | 30 44 60 12 17 16 19 28 78 60 21 31 32 33
12 | 55 30 38 15 17 26 7 13 66 44 63 6 17 21 32
13 | 17 46 45 21 13 16 8 15 46 34 42 9 14 9 15
14 | 14 28 26 7 17 9 14 10 36 27 23 8 34 5 21
15 | 21 18 28 10 9 15 7 3 22 24 14 17 8 7 29
16 | 12 30 16 10 17 21 13 14 44 21 16 10 25 19 23
17 | 15 21 20 30 21 24 31 23 34 19 23 14 23 15 27
18 | 14 30 31 28 34 44 32 39 31 22 30 26 38 31 24
19 | 31 38 45 54 60 38 36 44 49 30 42 26 35 42 61
20 | 43 52 58 65 48 57 64 44 59 43 43 40 48 49 44
21 | 57 59 58 56 49 45 65 55 70 59 53 62 57 40 68
22 | 47 55 40 33 51 39 46 49 46 55 38 58 38 28 64
23 | 42 41 80 35 49 40 47 39 53 57 39 43 19 48 53
---+---
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

| Nov 1996 | 10x % reflec. time | horiz: day | vert: time |

| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+---
0 | 39 132 40 22 36 39 24 32 36 34 13 35 54 45 40
1 | 67 312 37 32 32 37 26 64 45 32 20 81 42 54 47
2 | 51 436 42 64 40 52 27 60 37 48 17 44 47 43 37
3 | 93 567 134 77 84 101 65 83 61 91 50 94 60 62 74
4 | 122 529 147 89 61 121 53 70 67 69 36 69 56 64 72
5 | 119 503 144 72 63 80 35 72 63 54 32 73 66 63 49
6 | 101 517 100 38 56 57 28 64 52 66 43 71 44 61 59
7 | 98 520 101 57 23 44 22 50 48 47 48 36 33 54 44
8 | 135 339 25 3 44 42 32 53 49 14 20 27 36 41 94
9 | 25 264 42 54 29 28 12 47 35 19 23 29 36 54 44
10 | 47 141 21 16 17 42 16 59 34 11 18 19 33 29 46

```
11 | 68 122 44 34 21 24 14 45 28 22 21 21 23 36 44
12 | 67 23 8 24 30 23 26 35 21 14 30 22 13 17 29
13 | 16 41 11 17 9 6 15 30 24 10 47 30 22 17 31
14 | 6 21 9 4 9 7 10 27 17 10 13 8 15 10 21
15 | 14 13 26 17 4 7 6 15 13 12 33 8 12 5 22
16 | 18 26 6 15 15 13 10 17 29 6 18 20 15 11 21
17 | 14 28 19 26 12 17 11 18 20 6 18 18 15 30 35
18 | 33 25 24 22 19 10 21 16 22 18 20 23 20 28 35
19 | 23 40 31 25 27 15 41 25 28 24 44 26 24 39 37
20 | 28 59 44 43 27 27 49 43 31 21 45 42 44 67 61
21 | 46 62 45 44 63 22 52 56 47 21 40 54 59 56 68
22 | 34 58 25 28 25 17 46 37 28 15 38 65 41 55 47
23 | 53 58 25 37 31 18 38 32 33 18 41 58 64 55 66
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

. strong Leonid activity between November 15-18, and in particular on Nov 17.

```
------------------------------------------------------------
| Dec 1996 | 10x % reflec. time | horiz: day | vert: time |
------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+------------------------------------------------------------
0 | 44 53 24 35 58 25 23 43 43 59 54 97 206 208 55
1 | 46 62 53 41 44 37 41 43 58 57 54 92 179 165 38
2 | 72 69 83 54 55 35 56 68 52 53 50 57 100 130 49
3 | 58 82 68 70 57 43 92 61 68 104 100 88 157 207 71
4 | 66 110 86 69 73 72 104 62 86 79 99 116 153 188 52
5 | 62 61 58 65 47 77 63 50 79 60 79 86 172 167 52
6 | 59 51 40 48 39 74 51 45 24 61 89 139 196 175 65
7 | 67 62 51 52 38 58 54 54 21 84 69 175 175 153 51
8 | 78 21 34 34 42 35 43 38 40 75 48 152 152 99
9 | 71 27 68 13 26 52 42 24 23 32 93 101 94 104
10 | 53 19 50 27 22 20 39 24 36 13 23 35 75 104 69
11 | 32 17 39 45 24 16 13 18 20 14 28 12 31 23 60
12 | 46 22 13 9 21 11 10 25 10 11 21 9 14 19 26
13 | 24 39 18 20 19 6 20 16 9 15 7 16 22 22 27
14 | 29 33 18 12 11 6 15 12 8 9 9 10 31 16 22
15 | 59 4 19 8 8 5 45 5 11 6 25 14 48 17 17
16 | 24 21 9 10 9 9 14 21 17 22 23 9 62 21 11
17 | 31 20 33 23 19 17 15 15 15 13 39 68 135 25 26
18 | 30 25 28 16 18 19 21 18 37 22 28 69 210 26 25
19 | 51 31 42 23 21 22 29 16 40 34 40 118 267 33 28
20 | 85 53 53 47 38 33 30 15 52 47 73 147 312 47 38
21 | 73 43 77 42 61 42 40 44 69 93 135 265 418 61 52
22 | 81 48 61 33 47 43 34 44 62 59 124 277 367 49 41
23 | 72 39 51 28 29 37 33 65 57 82 134 199 299 43 62
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

```
-------------------------------------------------------------
| Dec 1996 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
-------------------------------------------------------------------
0 | 35 41 35 24 28 28 36 21 19 3 36 20 13 21 12 11
1 | 21 52 27 30 29 25 107 41 27 8 19 17 36 10 36 12
2 | 35 36 30 36 25 65 59 30 11 18 22 25 22 21 15 21
3 | 38 67 45 31 57 58 83 39 25 32 26 28 36 35 22 22
4 | 71 102 86 39 40 64 54 53 37 45 42 50 43 39 21 25
5 | 28 53 32 60 30 59 55 46 38 50 28 51 22 42 30 26
6 | 28 89 37 67 27 36 56 38 18 29 25 40 19 14 32 38
7 | 60 68 30 43 38 51 77 61 21 53 50 31 14 24 23 18
8 | 42 54 26 49 37 50 79 30 29 44 32 29 16 32 31 33
9 | 13 41 25 22 54 52 60 22 18 45 19 28 15 23 19 12
10 | 26 69 34 25 25 63 50 28 18 38 14 20 11 36 28 18
11 | 23 40 19 21 25 51 61 18 12 21 17 9 19 24 28 18
12 | 24 31 33 12 12 25 67 10 13 12 32 18 24 25 21 24
13 | 20 27 11 11 34 22 41 9 11 17 17 13 11 13 49 26
14 | 9 13 11 20 8 13 28 6 24 11 13 11 8 11 12 8
15 | 8 6 6 9 16 7 19 4 7 10 7 3 12 5 4 16
16 | 6 10 18 9 13 22 7 9 7 10 4 13 10 5 10 4
17 | 13 13 7 12 15 17 9 8 11 10 3 17 14 11 5 14
18 | 21 15 10 8 14 19 18 12 10 6 8 10 5 9 11 15
19 | 20 20 17 21 14 24 11 14 15 13 8 8 6 16 9 34
20 | 28 27 18 25 19 45 26 25 13 23 8 20 9 19 16 55
21 | 30 37 24 29 27 65 13 20 14 22 14 21 14 20 30 45
22 | 25 27 21 23 26 57 15 15 8 21 10 11 23 36 12 20
23 | 28 27 14 18 16 67 16 11 6 16 7 18 29 22 11 31
---+---------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

. Geminid activity between December 12-14

Pierre De Groote / comments by Chris Steyaert

```
-------------------------------------------------------------------------------
Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi
Receiver: AR-8000 at 48.2500 MHz, SSB mode, no preamplifier.
Transmitter: 150 kW TV video carrier in Madrid (Spain), distance 1550 km,
southwest.
Observing method: automatic setup using FFTDSP42t software by AF9Y to
record the audio signal. 20 channels of 2 Hz width are used for
meteor identification.
More details see <http://www.net4you.co.at/user/kuneth/info.html>
```

From the saved graphic files, the following duration distribution was computed:

Duration distribution for Jan 1-5, 1997, counts are calculated to full hour

---

+------------------------- 0.5 seconds duration
 +---------------------- 1.0 - 1.5 sec
  +------------------ 2.0 - 3.0 sec
   +-------------- 3.5 - 6 sec
    +---------- 6.5 - 12.5 sec
     +------- 13 - 25.5 sec
      +---- 26 - 49.5 sec
       +- >=50 sec
        +- 'x' means precision degraded
         +-recording duration
+-begin of hour (minutes of good data)
v v v v v v v v v v
1Jan97, 0:00 119, 22, 11, 2, 2, 2, 0, 0, ,60
1Jan97, 1:00 146, 34, 7, 4, 2, 0, 0, 0, ,57
1Jan97, 2:00 167, 40, 9, 4, 1, 0, 1, 0,x,60
1Jan97, 3:00 157, 26, 9, 3, 4, 1, 0, 0,x,60
1Jan97, 4:00 183, 43, 5, 4, 8, 0, 0, 0,x,60
1Jan97, 5:00 200, 31, 12, 7, 3, 1, 0, 0, ,60
1Jan97, 6:00 189, 37, 10, 3, 0, 0, 0, 0, ,47
1Jan97, 7:00 113, 24, 10, 4, 2, 0, 0, 0, ,53
1Jan97, 8:00 164, 42, 9, 5, 3, 1, 0, 0, ,60
1Jan97, 9:00 140, 30, 6, 4, 4, 0, 0, 0, ,60
1Jan97,21:00 60, 24, 0, 0, 0, 0, 0, 0, ,20
1Jan97,22:00 72, 25, 10, 0, 1, 0, 0, 0, ,43
1Jan97,23:00 75, 22, 3, 1, 0, 0, 0, 0, ,60
2Jan97, 0:00 78, 26, 2, 1, 0, 2, 0, 0, ,50
2Jan97, 1:00 78, 15, 7, 7, 0, 0, 0, 0, ,37
2Jan97, 2:00 99, 28, 2, 3, 1, 0, 0, 0,x,53
2Jan97, 3:00 89, 22, 2, 2, 2, 0, 0, 0,x,57
2Jan97, 4:00 122, 31, 6, 4, 2, 0, 1, 0,x,53
2Jan97, 5:00 195, 41, 10, 6, 4, 0, 0, 0, ,50
2Jan97, 6:00 204, 40, 17, 8, 1, 1, 0, 0, ,47
2Jan97, 7:00 123, 36, 5, 8, 0, 0, 0, 0, ,23
2Jan97, 8:00 191, 40, 18, 6, 8, 2, 0, 0, ,53
2Jan97, 9:00 185, 39, 13, 6, 2, 2, 0, 0, ,60
2Jan97,10:00 163, 36, 13, 6, 3, 3, 0, 0, ,47
2Jan97,11:00 118, 25, 5, 2, 1, 0, 0, 0, ,60
2Jan97,12:00 99, 25, 11, 4, 0, 0, 0, 0, ,27
2Jan97,14:00 78, 6, 0, 0, 0, 0, 0, 0,x,10
2Jan97,15:00 64, 13, 2, 2, 3, 0, 0, 0, ,60
2Jan97,16:00 67, 13, 4, 0, 0, 0, 0, 0,x,13
2Jan97,17:00 30, 12, 0, 6, 0, 0, 0, 0,x,10
2Jan97,19:00 49, 11, 2, 1, 0, 0, 0, 0, ,53
2Jan97,20:00 41, 9, 3, 4, 1, 0, 0, 0, ,60
2Jan97,21:00 54, 10, 2, 1, 1, 0, 0, 0, ,60
2Jan97,22:00 83, 23, 2, 2, 0, 1, 0, 0, ,57
2Jan97,23:00 135, 27, 8, 8, 1, 1, 0, 0, ,47
3Jan97, 0:00 113, 27, 4, 9, 2, 0, 0, 0, ,33
3Jan97, 1:00 107, 25, 4, 1, 1, 0, 1, 0, ,53

3Jan97, 2:00 101, 24, 6, 7, 1, 0, 0, 0,x,53
3Jan97, 3:00 141, 29, 7, 1, 1, 0, 0, 0,x,43
3Jan97, 4:00 196, 52, 21, 6, 9, 3, 0, 0,x,40
3Jan97, 5:00 467,104, 66, 50,33,10, 1, 0, ,60
3Jan97, 6:00 419, 73, 57, 47,48,30, 3, 0, ,60
3Jan97, 7:00 388, 87, 46, 35,65,16, 5, 0, ,60
3Jan97, 8:00 394, 77, 44, 39,63,37,21, 0, ,53
3Jan97, 9:00 393, 75, 46, 50,42,36,19, 0, ,57
3Jan97,10:00 377, 77, 45, 48,27,34,18, 0, ,33
3Jan97,11:00 357, 76, 47, 27,22,38,13, 0, ,27
3Jan97,12:00 393, 88, 54, 41,33,23,12, 0, ,60
3Jan97,13:00 332, 76, 34, 37,26,21,11, 0, ,60
3Jan97,14:00 272, 65, 34, 24,18, 7, 8, 0, ,50
3Jan97,15:00 242, 60, 23, 12,10, 4, 2, 0, ,60
3Jan97,16:00 145, 42, 12, 10, 4, 4, 1, 0, ,40
3Jan97,17:00 80, 23, 6, 2, 1, 1, 0, 0, ,50
3Jan97,18:00 65, 15, 7, 3, 1, 1, 0, 0, ,60
3Jan97,19:00 55, 8, 6, 0, 0, 1, 0, 0, ,57
3Jan97,20:00 58, 22, 4, 1, 4, 1, 0, 0, ,57
3Jan97,21:00 57, 4, 0, 7, 0, 4, 0, 0,x,17
3Jan97,22:00 88, 18, 6, 6, 1, 0, 0, 0, ,60
3Jan97,23:00 118, 31, 4, 6, 1, 1, 0, 0, ,60
4Jan97, 0:00 138, 44, 9, 9, 1, 0, 0, 0, ,60
4Jan97, 1:00 120, 36, 8, 3, 0, 0, 0, 0, ,60
4Jan97, 2:00 87, 21, 5, 1, 1, 0, 0, 0,x,47
4Jan97, 3:00 102, 23, 2, 1, 0, 0, 0, 0,x,50
4Jan97, 4:00 117, 25, 3, 0, 1, 0, 0, 0,x,60
4Jan97, 5:00 168, 30, 8, 9, 3, 0, 0, 0, ,60
4Jan97, 6:00 154, 29, 8, 2, 2, 1, 0, 0, ,53
4Jan97, 7:00 163, 38, 4, 5, 2, 1, 0, 0, ,50
4Jan97, 9:00 176, 34, 18, 2, 2, 0, 0, 0, ,30
4Jan97,10:00 229, 40, 16, 4, 6, 0, 0, 0, ,30
4Jan97,11:00 141, 29, 7, 2, 0, 0, 0, 0, ,27
4Jan97,14:00 73, 20, 2, 0, 0, 0, 0, 0, ,37
4Jan97,15:00 62, 15, 7, 1, 0, 0, 0, 0, ,43
4Jan97,16:00 51, 15, 3, 2, 0, 1, 0, 0, ,60
4Jan97,17:00 35, 10, 1, 1, 1, 0, 0, 0, ,57
4Jan97,21:00 66, 19, 7, 1, 0, 0, 0, 0, ,43
4Jan97,22:00 73, 27, 3, 0, 0, 0, 0, 0, ,60
4Jan97,23:00 96, 23, 6, 1, 0, 0, 0, 0, ,60
5Jan97, 0:00 130, 33, 6, 3, 2, 0, 1, 0, ,60
5Jan97, 1:00 120, 33, 7, 1, 0, 0, 0, 0, ,60
5Jan97, 2:00 117, 28, 6, 2, 0, 0, 0, 0,x,60
5Jan97, 3:00 154, 34, 11, 7, 0, 0, 0, 0,x,60
5Jan97, 4:00 131, 28, 4, 3, 3, 0, 0, 0,x,60
5Jan97, 5:00 192, 35, 5, 5, 3, 1, 0, 0, ,60
5Jan97, 6:00 157, 27, 10, 3, 0, 1, 0, 0, ,60
5Jan97, 7:00 217, 38, 12, 10, 7, 0, 2, 0, ,60
5Jan97, 8:00 204, 44, 12, 11, 1, 0, 0, 0, ,43

5Jan97, 9:00 171, 45, 3, 9, 6, 0, 0, 0, ,20
5Jan97,10:00 173, 34, 2, 13, 4, 0, 0, 0, ,27

Notes:
. the Quadrantids showed up well only in Jan, 3rd.
. From 02h00 - 04h00 UT a different transmitter is reported.
Precision is therefore lower during that period.
. local time conversion: 1 hours ahead of UT (07h00 UT is 08h00 local)

Werfried Kuneth

Observer: Kimio Maegawa
Transmitter: 50 W Continuous Carrier with FSK ID every 10 minutes
on 53.7500 MHz
Transmitter antenna: 2 element Cross Yagi 4dBi, zenith
Transmitting Location: Sabae city (136 11' E, 35 56' N)
Receiver: IC706 2.4kHz BW USB, sensitivity -150 dBm at 50 ohm
Receiver antenna: 3el Yagi 7 dBi (elev 70 deg, az 150 deg = SE)
height 10 m
Receiving Location: Ohno city (136 53' E, 36 00' N)
Data processing : Receiver output is fed into Sound Board of 486DX2-66 MHz PC
and analyzed by AF9Y's FFTDSP42 software (same as W. Kuneth)
Then stored every 10.5 min automaticaly with GIF format.
Play back GIF files and count echoes manually rejecting
tropo signal or airplane echo by the doppler shift.

1997 Quadrantids hourly echo counts

A: all echoes L1: long echoes (T > 2.5 s)

| 1 Jan 1997 2 Jan 1997 3 Jan 1997 4 Jan 1997
---+---
UT | A L1 A L1 A L1 A L1
00 | - - 67 5 170 15 123 8
01 | 85 4 98 5 221 23 101 1
02 | 71 1 101 2 211 23 113 11
03 | 80 0 52 0 148 13 77 3
04 | 57 1 54 1 146 11 54 2
05 | 30 1 27 1 121 10 40 2
06 | 28 0 24 0 104 8 37 0
07 | 11 0 19 0 82 5 19 0
08 | 13 0 20 0 47 1 25 0
09 | 13 0 32 0 25 0 21 0
10 | 26 0 25 0 @25 0 23 1
11 | 67 0 46 0 31 0 35 1
12 | 52 2 75 0 50 1 58 3
13 | 69 0 72 0 55 0 73 1
14 | 97 0 106 0 97 3 79 5
15 | 125 7 114 1 134 8 102 2
16 | 121 9 153 7 146 20 116 6
17 | 148 9 174 17 146 21 138 9

18 | 137 8 136 13 199 22 89 3
19 | 165 7 136 18 195 17 85 4
20 | @184 @13 @167 @16 @140 @11 102 2
21 | 143 16 181 16 133 17
22 | 119 10 162 18 115 19
23 | 84 3 120 13 89 6
---+---
| 1 Jan 1997 2 Jan 1997 3 Jan 1997 4 Jan 1997

Notes:
. @ means less than 60 min.
. local time = JST = UT + 9 hours
. additional information is available at
Home Page http://www.tcp-ip.or.jp/~kaze/rmd.htm
Anonymous FTP ftp:rasc5.kurasc.kyoto-u.ac.jp/pub/nakamura/hro

Kimio Maegawa

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

Jan | UT
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
-----+---+-----------
1 | 8 16 12 13 27 22 19 27 24 28 19 22 | 16.3 23.2
2 | 6 19 27 15 19 22 23 34 30 31 33 34 | 18.0 30.8
3 | 3 9 13 29 32 49 46 37 47 32 33 21 | 22.5 36.0
4 | 3 14 8 13 8 18 22 32 27 20 15 20 | 10.7 22.7
5 | 7 11 13 11 14 18 20 17 20 22 23 11 | 12.3 18.8
6 | 2 11 12 20 20 7 14 21 18 21 16 10 | 12.0 16.7
7 | 17 18 10 15 12 17 16 20 18 20 26 14 | 14.8 19.0
8 | 10 8 9 15 13 18 29 17 25 19 19 | 11.0 21.2
9 | 8 13 12 16 11 16 18 20 22 24 21 15 | 12.7 20.0
10 | 12 7 4 16 17 19 17 16 22 27 27 23 | 12.5 22.0
11 | 11 10 7 11 8 21 23 19 26 20 15 17 | 11.3 20.0
12 | 11 7 8 19 11 19 12 22 19 20 14 20 | 12.5 17.8
13 | 5 10 16 12 13 13 24 18 22 15 17 14 | 11.5 18.3
14 | 8 10 18 10 19 15 19 24 24 16 13 15 | 13.3 18.5
15 | 8 11 10 12 13 15 16 20 | 11.5 18.0
16 | 8 8 9 14 14 14 20 23 28 18 16 19 | 11.2 20.7
17 | 7 10 11 16 11 15 19 16 22 19 22 14 | 11.7 18.7
18 | 11 13 22 28 20 14 19 14 10 12 10 11 | 18.0 12.7
19 | 6 14 14 8 13 13 7 13 15 11 9 15 | 11.3 11.7
20 | 11 8 15 15 15 21 20 16 18 12 | 12.3 17.0

```
21 | 5 8 7 10 9 10 18 20 9 11 12 18 | 8.2 14.7
22 | 16 8 7 7 7 12 18 20 13 15 13 13 | 9.5 15.3
23 | 10 13 10 8 17 8 18 10 19 7 16 10 | 11.0 13.3
24 | 5 11 11 10 19 11 | 11.2
25 | 12 7 15 13 9 8 14 11 12 11 11 9 | 10.7 11.3
26 | 9 13 15 16 9 14 15 19 13 12 | 12.7 14.8
27 | 7 15 18 18 16 10 21 12 13 13 17 17 | 14.0 15.5
28 | 8 12 20 17 11 12 17 18 20 19 10 20 | 13.3 17.3
29 | 6 8 10 22 9 11 18 15 16 13 18 11 | 11.0 15.2
30 | 6 8 10 22 9 11 18 15 16 | 11.0 16.3
31 | 9 10 15 16 12 20 24 15 12 13 9 | 12.4 15.5
-----+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Jan | UT
```

* (1) average hourly rate between 11-17 UT
**(2) average hourly rate between 17-23 UT

- local time = JST = UT + 9 hours

Chikara Shimoda

Observer: Kazuhiro Suzuki
HRO (Radio Meteor Observation using HAM)
Location: Toyokawa Meteor Observatory (137.32 deg E, 34.81 deg N)
Shiinoki, Toyokawa-city, Aichi, 442, Japan
Transmitter: JA9BOH 53.7500 MHz, CW 50 W
Antenna: Dipole (height 7 m, to zenith)
Receiver: IC-575 (ICOM) LSB BW 2.5 kHz
Transmitter location: Sabae (in Fukui pref.), about 150 km
north north-west from receiving station.
Method of echo sampling: after image procedure was done by PC with FFT
software, echoes(>10 dB(S/N)) were counted.

Total echo rates

```
Jan | UT
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
------+------------------------------------------------------------------------
31- 1 | 23 35 37 53 55 38 53 39@42 31 39 27 30 24 25 19 16 17 16@19@21 12 23 27
1- 2 | 28 25 27 42 45 41 61 47 38 31 31@25 24 22 19 17 16 17 17@18@18 31 32 23
2- 3 | 35 39 61 57 69 85106100112 94@90 99100 68 81 61 36 16 15 14@24 26 25 47
3- 4 | 65 61 86 69 86 86 88 71 63 69 51 43 35 28 22 25 16 12 13@14@17 21 21 27
4- 5 | 28 27 31 37 40 42 37 43 43 42 24 28 23 25 22 16 18 15 15@15@18 34 22 28
5- 6 | 23 31 40 48 37 51 40 41 39 30 31 25 25 22 27 21 19 16 12@17@15 21 20 21
6- 7 | 23 43 31 41 34 32 47 47 31 36 32 25 21 24 20 16 14 15 12@17@17 18 32 25
7- 8 | 29 29 36 41 43 35 46 34 29 32 27 30 29 19 16 12 11 13 16@14@15 22 24 30
8- 9 | 27 33 35 47 49 43 39 37 33 34 27 28 22 27 21 17 14 13 16@17 17 21 18 29
9-10 | 33 28 48 39 46 44 37 30 38 33 36 31 30 24 25 16 14 17 10@17@14 16 26 18
10-11 | 24 36 25 37 40 38 33 50 24 24 26 20 24 19 17 15 12 14 11@16@16 26 23 27
11-12 | 42 30 42 50 45 43 31 29 36 32 39 29 33 17 15 13 17 12 13@19@21 17 22 20
```

```
12-13 | 26 32 40 41 38 38 37 38 37 38 35 27 31 24 16 14 13 14 15@16 20
13-14 | 31 30 40 42 41 48 36 29 27 36 32 32 19 21 17 15 15 14 19 13 @21 23 30
14-15 | 22 21 32 35 33 50 34 36 24 22 19 32 22 18 19 17 15 15 15@19 17 18 17 25
15-16 | 19 31 33 54 51 47 42 36 37 33 35 35 27 29 22 14 15 13 16@20@14 19 27 28
16-17 | 24 31 33 39 45 49 45 29 25 29 29 26 32 18 23 18 17 16 17@13 20 24 29 24
17-18 | 28 31 36 35 49 44 30 39 37 34 37 38 25 20 21 22 16 13 12@14@13 26 23 24
18-19 | 27 21 32 42 44 50 40 38 29 31 28 25 18 19 18 14 16 12 18 15@20 16 19 23
19-20 | 18 30 32 33 35 45 37 33 40 36 35 25 31 23 24 17 11 15 16@16@20 18 23 16
20-21 | 21 29 40 35 41 31 32 41 39 32 39 28 31 21 18 19 15 17 17 13@19 12 17 28
21-22 | 30 24 31 37 35 45 42 37 38 38 32 35 30 23 17 25 16 14 16 16@20 21 30 32
22-23 | 35 44 38 44 45 33 35 37 38 25 33 28 29 24 20 17 10 12 14 15@14 22 23 29
23-24 | 24 26 35 43 39 46 36 34 38 30 31 35 20 24 15 19 14 15 14@19@15 16 21 25
24-25 | 28 31 33 36 34 30 39 34 37 36 25 20 26 17 16 14 13 16 19 16@25 15 23 19
25-26 | 29 31 40 37 32 32 23 34 33 32 24 21 19 19 19 15 17 15 14@18 14 15 21 23
26-27 | 25 24 33 41 40 30 35 38 35 22 27 23 21 17 19 12 11 11 12@16@14 17 25 22
27-28 | 29 29 31 27 34 37 24 37 34 34 23 24 26 24 21 15 14 12 15@14@14 17 20 20
28-29 | 18 25 24 42 27 32 26 22 32 29 27 26 19 17 17 14 12 14 14@16@12 19 22 21
29-30 | 15 22 29 44 30 35 29 27 35 28 24 29 20 15 15 14 13 18 13@14@21 17 22 21
30-31 | 24 36 37 31 31 33 30 36 39 25 31 26 24 21 18 23 20 15 16@16@22 15 15 34
------+------------------------------------------------------------------------
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Jan | UT
```

425. WAS ON AO-10

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: Toby Wellenstein <wb0yqt@worldnet.att.net>
Message-ID: <32FA6945.21FC@worldnet.att.net>
Source record: 20029

I would like to make schedules for working the following states on
AO-10:

Arkansas, Delaware, Mississippi, and Nebraska.

Please contact me at my E-mail address.

Thanks for your help

426. Re: newbie transmit question

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: Casey McCullough <askey@erols.com>
Message-ID: <32FA6E92.2900@erols.com>
Source record: 20030

The frequencies are far enough apart that you won't damage your receiver but you probably will "hear" your tx signal in your receiver unless you use some type of filtering.

I have used a 726 for sat work and feel that you would be much better off and most likely much happier with your results if you use two antennas separated by as much as you can. Mount your tx ant higher than the rx ant.

You're about to have a whole lot of fun. Enjoy.

Regards KF6OQ/OZ2USA/9L1CM/5H3CM/KF6OQ/DU3

427. Re: MIR pass on 02/05/97 about 00:45 UTC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-06 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <32FAA8F9.41B1@ix.netcom.com>
Source record: 20031
Body handling: HTML body converted to readable text

Hi, David.

A Radio Shack HTX-202 with the R/S brick amplifier, about 35W, into a
homemade 1/4 wave groundplane antenna up at 20 feet.

Direct line of sight is such a neat thing :-)
--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

KF6DGN wrote:
>
> What kind of radio's and how power are you using?
>
> KF6DGN,
>
> David
>
>

428. Cross Band Couplers

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: Roger Rehr <rrehr@epix.net>
Message-ID: <01bc14ab$43a41080$4442e0c7@regor>
Source record: 20032

Where can I get a couple of cross band couplers so that I can use my single run of hard line for full-duplex 2m/432 communications?

The ARRL antenna manual discusses these devices (page 17-9 in the 17th Edition)
but Not where to get them.

I'm not worried about cost.

Thanks

Roger
WA3JYM

429. Weather images

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <32FB23B4.6D2A@ping.be>
Source record: 20033
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

Wanted :

Freq's for receiving weather images like NOAA - Meteosat for Europe

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

430. Re: newbie transmit question

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5dfve6$po2$1@tilde.csc.ti.com>
Source record: 20034

In article <19970206163400.LAA07106@ladder01.news.aol.com>, stevem14@aol.com says...
>
>I just got a 726 yaseu and am puting a sat station together and am
>thinking about a single 144 &432 mhz j-pole (with 2 feeds) like is in the
>ARRL handbook for an antenna for the l.e.o. sats. My dumb question for
>the day is this:
>Won't I be transmitting directly into my reciever and smoke the thing when
>I try crossband full duplex communications?
>~~~~~~
If you must use a single antenna, buy a splitter designed to
drive two antennas (450 and 144) from a single radio. Install
it in reverse to drive a single antenna.

Ken K5MBV

431. Re: Weather images

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <32FBDCAE.466D@erols.com>
Source record: 20035
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

William Vynck wrote:
>
> Wanted :
>
> Freq's for receiving weather images like NOAA - Meteosat for Europe
>
> --
> Visit my Homepage http://www.ping.be/RACO
> E-mail RACO@ping.be and/or William.Vynck@ping.be
> Fidonet 2:291/1800.15
> Radio Amateur ONL4021
> QSL via bureau UBA Belgium Hi Bill; one of the best sources to be had on this topic can be found
on Marius Rensen's home page which is:
http://ourworld.compuserve.com/homepages/HFFAX
As the name implies, it concerns itself with FAX and SSTV. Software,
frequencies, skeds, you name it within that topic, he probably covers it
or has links to those that do.

(And you thought you could get away from me here- HAH fat chance!)
73s...(yep, it's me again...) Mike

432. Re: Ham-Space Digest V97 #42

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: mano@spidernet.COM.cy
Message-ID: <199702072115.XAA11137@mail0.spidernet.net>
Source record: 20036

>
>------------------------------
>Can you help me by sending me some information you
have for some uplinks and downlinks freq. (phone) of a few satellites ?

im new on these subject and i need somewhere to start from.

all replyes appreciated ... 5B4 AFQ

>

433. ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: Joe Romanosky <saywhat@erols.com>
Message-ID: <32FC2F1F.A7D@erols.com>
Source record: 20037
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anyone have any experience/info on using a Icom 735
with a transverter? The 735 manual is skimpy on info
on the transverter jack on the rear panel. any hints
or kinks are appreciated....

I would like to homebrew a transverter(s) for 144 and 220.

73 de K3KN

434. DO-17 back on the air!

Newsgroup: rec.radio.amateur.space
Date: 1997-02-07 00:00:00 UTC
From: mconner@neonramp.com
Message-ID: <32facb1b.172243841@news.neonramp.com>
Source record: 20038

Copied this data this evening (07/06Z) from DO-17:

```
>DOVE-1>TIME-1 [02/07/97 06:12:28]: <UI>:
>PHT: uptime is 000/11:23:34. Time is Fri Feb 07 06:12:27 1997
>
>SWITCH>SWITCH [02/07/97 06:12:29]: <DM>:
>DOVE-1>TLM [02/07/97 06:12:32]: <UI>:
>00:57 01:57 02:84 03:33 04:57 05:57 06:6C 07:53 08:70 09:70 0A:9F
>0B:E9 0C:E8 0D:D6 0E:00 0F:25 10:D0 11:9F 12:00 13:02 14:B0 15:95
>16:8D 17:90 18:90 19:90 1A:8B 1B:90 1C:94 1D:90 1E:26 1F:5A 20:9E

>DOVE-1>TLM [02/07/97 06:12:33]: <UI>:
>21:99 22:1A 23:17 24:14 25:41 26:00 27:00 28:00 29:01 2A:00 2B:00
>2C:00 2D:30 2E:00 2F:9C 30:C8 31:9B 32:00 33:00 34:C4 35:A4 36:AA
>37:A9 38:B6

>DOVE-1>STATUS [02/07/97 06:12:34]: <UI>:
> 80 00 00 1E 0B 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00 0F 04 01

>DOVE-1>BRAMST [02/07/97 06:12:34]: <UI>:

>S-band is on
>Power 1 W day/night
>DOVE Command Team
>(WD0E)

I'm guessing that the uptime means it actually came up on 06/18Z. In
any case, it's good to see DOVE is up and running again.

>DOVE-1>BCRXMT [02/07/97 06:12:35]: <UI>:
>vmax=757390 battop=766771 temp=437013

>DOVE-1>LSTAT [02/07/97 06:12:35]: <UI>:
>I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

>SWITCH>SWITCH [02/07/97 06:12:35]: <DM>:

Mark D. Conner
Internet: mconner@null.net
AMPRnet: N9XTN@K0FG.IA.USA.NA
"Paradigm shifting without a clutch" - Dogbert
```

435. Re: DO-17 back on the air!

Newsgroup: rec.radio.amateur.space
Date: 1997-02-08 00:00:00 UTC
From: trandall@mhv.net
Message-ID: <5diujfojo1@news.mhv.net>
Source record: 20039

In article <32facb1b.172243841@news.neonramp.com>, mconner@neonramp.com (Mark D. Conner) wrote:
>Copied this data this evening (07/06Z) from DO-17:

>>S-band is on
>>Power 1 W day/night
>>DOVE Command Team
>>(WD0E)
>
>I'm guessing that the uptime means it actually came up on 06/18Z. In
>any case, it's good to see DOVE is up and running again.

Awww, Mark you beat me to it! I was just going to post about it! Copied her this morning at the 1603 pass. Nice to see her back!

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

436. Re: Cross Band Couplers

Newsgroup: rec.radio.amateur.space
Date: 1997-02-08 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb8.191718.8226@ke4zv.atl.ga.us>
Source record: 20040

In article <01bc14ab$43a41080$4442e0c7@regor> "Roger Rehr" <rrehr@epix.net> writes:
>Where can I get a couple of cross band couplers so that I can use my single
>run of hard line for full-duplex 2m/432 communications?
>
>The ARRL antenna manual discusses these devices (page 17-9 in the 17th
>Edition)
>but Not where to get them.
>
>I'm not worried about cost.

They're called diplexers. You can get ordinary ones at any major
amateur dealer. Comet sells them, Diamond sells them, as do others,
for use with dual-band mobile installations. They cost about $60.
However, the loss through these ordinary diplexers is likely to offset
any loss savings you might have with the hardline, so using them to
create a low loss system is futile.

But there is hope. Tx-Rx Systems, Sinclair, and other duplexer
manufacturers, can supply you with high quality cavity combiners
which won't have such high losses. Lucky for you that cost is
no object, because these units sell for more than $1,000 each.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

437. ARLK011 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk011.1997@arrl.org>
Source record: 20041
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK011
ARLK011 Keplerian data

ZCZC SK11
QST de W1AW
Keplerian Bulletin 11 ARLK011
From ARRL Headquarters
Newington, CT February 8, 1997
To all radio amateurs

SB KEP ARL ARLK011
ARLK011 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97037.88605856 .00000036 00000-0 22479-4 0 03235
2 18129 82.9269 335.0510 0010228 220.2120 139.8277 13.72374173482366
UO-11
1 14781U 84021B 97037.98231441 .00000060 00000-0 18007-4 0 09675
2 14781 97.8197 24.5299 0012899 60.3576 299.8911 14.69521813692131
RS-12/13
1 21089U 91007A 97038.09469754 .00000025 00000-0 10350-4 0 09617
2 21089 82.9201 15.1248 0028482 302.4769 57.3631 13.74076794301298
UO-14
1 20437U 90005B 97038.15999032 .00000044 00000-0 33652-4 0 02461
2 20437 98.5247 122.5962 0010414 229.3888 130.6389 14.29948510367638
RS-15
1 23439U 94085A 97038.13693115 -.00000039 00000-0 10000-3 0 01981
2 23439 64.8134 3.1355 0153163 156.8780 203.9129 11.27526283087277
AO-16
1 20439U 90005D 97037.82929484 -.00000007 00000-0 14264-4 0 00499
2 20439 98.5447 124.9302 0010560 233.4047 126.6142 14.29997537367603
DO-17
1 20440U 90005E 97038.17804052 .00000003 00000-0 17895-4 0 00570
2 20440 98.5488 126.0487 0010646 230.0640 129.9608 14.30140148367685
```

```
WO-18
1 20441U 90005F 97038.17298394 -.00000011 00000-0 12424-4 0 00536
2 20441 98.5484 125.9567 0011437 229.7095 130.3092 14.30108181367681
LO-19
1 20442U 90005G 97037.80083724 -.00000018 00000-0 98327-5 0 00449
2 20442 98.5480 126.1906 0011435 232.1076 127.9074 14.30220747367655
FO-20
1 20480U 90013C 97037.98379144 .00000029 00000-0 14533-3 0 09505
2 20480 99.0258 24.1579 0540334 312.4262 43.2311 12.83236892328007
AO-21
1 21087U 91006A 97037.83237924 .00000093 00000-0 82657-4 0 07934
2 21087 82.9399 148.0529 0034493 273.7920 85.9259 13.74577299302245
UO-22
1 21575U 91050B 97038.11367504 .00000014 00000-0 18883-4 0 07534
2 21575 98.3180 103.1391 0007323 290.7967 69.2437 14.37055727291806
KO-23
1 22077U 92052B 97038.13521052 -.00000037 00000-0 10000-3 0 06433
2 22077 66.0771 57.5392 0014518 243.6142 116.3382 12.86300584211026
KO-25
1 22828U 93061F 97038.17642883 .00000040 00000-0 33331-4 0 05219
2 22828 98.5534 115.5019 0009543 248.6944 111.3218 14.28167529143659
IO-26
1 22826U 93061D 97038.11100371 -.00000004 00000-0 15723-4 0 05487
2 22826 98.5553 115.3650 0008657 269.1261 90.8928 14.27825848175526
AO-27
1 22825U 93061C 97038.41293300 -.00000020 00000-0 95059-5 0 5359
2 22825 98.5605 115.4498 0007966 268.4551 91.5707 14.27716570175557
FO-29
1 24278U 96046B 97038.69462671 -.00000019 00000-0 15505-4 0 561
2 24278 98.5608 97.4880 0351619 161.6017 199.8217 13.52629164 23612
MO-30
1 24305U 96052B 97038.14893126 .00000204 00000-0 20364-3 0 01027
2 24305 82.9345 90.6953 0029315 205.0015 154.9706 13.73088118021210
Mir
1 16609U 86017A 97038.77902512 .00000376 00000-0 10794-4 0 299
2 16609 51.6525 16.5231 0012012 49.5191 310.6905 15.60476282626819

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
February 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

438. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-0802971645070001@s11-pm04-ontro-t.telis.org>
Source record: 20042

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

439. What are the Mir Freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: mcury@embratel.net.br
Message-ID: <5dkvgu$fi8@rjo02.embratel.net.br>
Source record: 20043

What are the Mir frequencies ?
Please answer to mcury@embratel.net.br.
Thanks a lot !
73 de PY1TTO, Marcelo

Marcelo Cury [Rio de Janeiro - Brasil]
E-Mail: mcury@embratel.net.br
Phone : 55 (021) 961-0857
Fax : 55 (021) 220-1854
Ham Packet Radio: PY1TTO@PY1CYL.RJ.BRA.SA
Local Time is GMT-3.

440. Re: What are the Mir Freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: AC6V <#AC6V@ix.netcom.com>
Message-ID: <32FE0FF3.77EC@ix.netcom.com>
Source record: 20044

Marcelo Cury - PY1TTO wrote:
>
> What are the Mir frequencies ?
> Please answer to mcury@embratel.net.br.
> Thanks a lot !
> 73 de PY1TTO, Marcelo

GM Marcelo -- I am told the following URL has the correct frequencies.
http://165.248.121.94/MIR.html

Also some more MIR info at URL:

http://pw2.netcom.com/~ac6v/pagew.html#SX

Good Luck
Rod in San Diego

--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V (WAZ 10M SSB #118)

441. Re: TAPR TrakBox

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: Tomas Orzaez <tom@redestb.es>
Message-ID: <5dl87tjpb1@diana.ibernet.es>
Source record: 20045

```
Version 3.30i just accept nasa format.
```

442. 736 for sale ..

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: Tomas Orzaez <tom@redestb.es>
Message-ID: <5dl8fmjpb2@diana.ibernet.es>
Source record: 20046

A perfect functional Yaesu ft-736 for sale ..

Interestet people leave a mail on tom@redestb.es

443. Unofficial Mir FAQ (was Re: Mir (please don't digipeat))

Newsgroup: rec.radio.amateur.space
Date: 1997-02-09 00:00:00 UTC
From: Will Marchant <kc6rol@amsat.org>
Message-ID: <32FE41A3.2D5@amsat.org>
Source record: 20047

A copy of the Unofficial Mir FAQ is available at
http://www.phoenix.net/~mbordel/jscarc/mir/mirfaq.html along with a lot
of other Mir information.
--
Will Marchant, KC6ROL
mailto:kc6rol@amsat.org
http://www.citizen.infi.net/~wmarchan

444. Working Mir 440 repeater

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc170a$adb28180$5e427fce@default>
Source record: 20048

Howdy from Helena, Montana (KA7YAO) Bill with the following question: Do I adjust my xmit (uplink) on this repeater to stay on the downlink 437.950 or do I leave my xmit (uplink) on 435.750 and adjust my downlink. Tonight I heard folks up 10 then 5 etc as bird approached then passed down 5 then 10 and it appears they were leaving xmit freq set and adjusting downlink to hear the other station. I tried making a contact by going up 10 and also shifting my xmit up 10 to match and I know thats wrong so no contacts were made of course. I have my IC2350 setup as 437.950 - 2200 offset and CTCSS of 141.3 so xmit on 435.750. I am new at this so any help would be appreciated. Bill

445. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc1714$94db0e20$2ec56cce@default>
Source record: 20049
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Joe,

I tried it using a Hamtronics transmitting and receiving converter. The transverter output from the 735 is very low (10 mW, I think) - too low for most transverters. The separate RX antenna input to the 735 is a real blessing for transverters, however.

I found the sensitivity a little on the poor side on 10 meters. However, a good preamp on the transverter fixed that (and that is the right way to do it, too). Overall, the 735 is a very good rig to use on the back end of a transverter, but you may have to boost the transmit signal. I used the main antenna output (instead of the transverter output) and an attenuator. I did manage to blast 100 into the transverter a few times, of course :-)

73 de VE7MDL ....Erik.

Joe Romanosky <saywhat@erols.com> wrote in article
<32FC2F1F.A7D@erols.com>...
> Anyone have any experience/info on using a Icom 735
> with a transverter? The 735 manual is skimpy on info
> on the transverter jack on the rear panel. any hints
> or kinks are appreciated....
>
> I would like to homebrew a transverter(s) for 144 and 220.
>
> 73 de K3KN
>

446. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb10.172650.18576@ke4zv.atl.ga.us>
Source record: 20050
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <01bc1714$94db0e20$2ec56cce@default> "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> writes:
>Joe,
>
>I tried it using a Hamtronics transmitting and receiving converter. The
>transverter output from the 735 is very low (10 mW, I think) - too low for
>most transverters. The separate RX antenna input to the 735 is a real
>blessing for transverters, however.

The output at the transverter jack is much lower than 10 mW. 10 mW is
what most available transverters want to see, but the 735 puts out less
than a milliwatt. The reason for this is that the transverter output is
tapped off the pre-pre-driver stage instead of the pre-driver stage so
the transverter port can be used transceive.

As long as you're going to use the separate Rx input anyway, you can fix
that. The cable going from the pre-driver on the main board to the driver
on the PA board is the right level to drive most transverters. Just unplug
this cable from the main board, and plug the transverter jack cable in its
place. Now you'll have about 10 mW at the transverter jack on the back, but
you can't *transceive* on this port anymore. (That's Ok, you're using the
separate Rx port to receive.)

If you add another jack to the back, you can route the cable going to
the PA to it. Then to restore the radio to normal operation, all you
need to do is put a jumper on the outside on the back between this new
jack and the transverter out jack. Simple. This way you can never over-
drive a transverter, and you'll have the right level for most modern
transceiver designs.

I don't know what Icom was thinking when they set the radio up this way.
Perhaps they had plans, which never materialized, to offer transverters
for it which required the lower drive level. Anyway, after this mod,
it is a wonderful radio to use with transverters.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

447. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5dntn3$rjh@lace.colorado.edu>
Source record: 20051
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <1997Feb10.172650.18576@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:

[An excellent mod for making the IC-735 good for transverters.]

Gary, or anyone else, is there an equally excellent way to modify the
IC-726 (which is IC-725 + 6 meters) for use with transverters?

Has anyone done this?

Bruce
N6URH

448. Custom 4CX1000 Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: Dale Powell <powell@polarnet.com>
Message-ID: <32FFCE3E.2245@polarnet.com>
Source record: 20052
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna, rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.misc

For sale: Custom built 4CX1000 amplifier. Consists of separate RF deck, control panel, and PS. RF deck uses motor driven vacuum variable cap and roller inductor, with potentiometer feedback for LED indicators on control panel. Will cover 10-160 meters, has input pad to prevent overdriving, 15 watts in will produce approx 1500 out at 3000 VDC. Control panel has large meters for plate voltage and current, bias voltage and grid current. Power supply components included but not built. Blower included and mounts remote of RF deck. Could mount entire system in rack, or use RF deck remote of operating position.

Prefer trade for legal limit desktop amplifier or ??? Make cash offer.

449. FS:HP100LX

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: "Lawrence M. Koga" <crshi@aloha.net>
Message-ID: <33003D67.17D3@aloha.net>
Source record: 20053

HP100LX 1Meg RAM, works great

$ 250+shipping COD OBO

What's Wrong?

No manual, or cables

The battery cover falls off. The plastic fingers that hold the battery cover have broken.

Lawrence

450. FS FT-726R 6M, 2M, 432, Sat unit

Newsgroup: rec.radio.amateur.space
Date: 1997-02-10 00:00:00 UTC
From: aa6q@pacbell.net
Message-ID: <32FFE923.186A@pacbell.net>
Source record: 20054

For sale a very clean FT726R with 6, 2, 70cm, sat unit, hand mike and manuals for $1025.00 plus shipping US.
Call (714) 9930435 eves or e-mail aa6q@pacbell.net

451. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <330031C8.354F@rcru.rl.ac.uk>
Source record: 20055
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gary Coffman wrote:

snip |

Great idea Gary, but it defaces the rig. No help when bowwowing Joe's rig on field day. An easy fix is to make up a small buffer amplifier using a single transistor, e.g. BF981 or a modamp, operating in a linear mode (most important) to boost the low power to about 20mW. Then add a filter on the output to ensure a clean drive.

A level setting pot is a good idea as well so you can adjust the power input to the transverter, and while you are at it, a relay and two sockets to switch the receive line and the signal to the transverter pin on the acc1 connector.

Now you can leave the rig wired for HF and have the transverter connected. Change bands at the flick of a switch and protect the transverter from 100W of HF.

73 Mike

452. HELP: 435 MHz CP patch antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: Tim Zibrat <timmy_z@nauticom.net>
Message-ID: <01bc17b5$221ee220$667eabcc@ppp0436>
Source record: 20056
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.swap

Has anyone heard of a 435 MHz circular polarized patch antenna? Are patch antenna CP? I'm looking for a manufacturer, plans, used, or any information for the design of a CP patch antenna.

My design needs are circular polarized and VERY SMALL!! Am I overlooking any designs?

Please email me with any information.
Thanks & 73,

tz

--
****
* timmy_z@nauticom.net * *
* K3TZ * ...green hocker in a *
* TRA# 3348 level 1 * grayhound locker, *
* NAR# 64753 level 1 * smokin' in the pygmy *
* AMSAT# 22105 * twilight...FZ *
* * *
****
* http://www.nauticom.net/users/timmy_z/index.html *
****

453. ADULTS ONLY- Check this out! (pkKEpT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: Paul287679120@%$#*&!+=.com
Message-ID: <33008773.0@news.cias.net>
Source record: 20057

Are you into HOT CHAT? We've got the world's largest voice-personal dating system, as well as the hottest, sexiest "1 on 1", "2 on 1", and "PARTY-LINE" chat you'll find anywhere, all in one place! And you don't have to call a 900 number to get in on this hot phone fun!

You can choose from 5 hot programs that are sure to fulfill your every desire!

You can press 1 from the main menu to choose from our sexy "1 ON 1" PLEASURE MENU, then:
*to talk to a BEAUTIFUL SEXY GIRL, press 1.
*for a 1 on 1 session with an experienced DOMINANT MISTRESS, press 2.
*for steamy talk with a LUSCIOUS TRANSVESTITE, press 3.
*for an erotic 1 on 1 chat with an EXOTIC TRANSSEXUAL, press 4.

*for some man to man action with a HOT GUY, press 5.
You'll be billed just $3.99 per minute for your selection.

Or you can press 2 from the main menu to DOUBLE YOUR PLEASURE, then:
*to speak to 2 HOT SEXY GIRLS, press 1.
*to get it on with a swinging WILD COUPLE, press 2.
You'll be billed just $4.99 per minute for your selection.

Or you can press 3 from the main menu to join the GROUP ORGY LINE!
*You can party with the nations nastiest swingers for only $2.50 per minute.

Or you can press 4 from the main menu, then:
*Press 1 to join the FANTASY NETWORK. This is the world's only phone service that allows you to connect with people who share your personal fantasies. This state-of-the-art voice mail system lets you listen to messages from beautiful girls, sexy transvestites and she-males, gay and bisexual males, and dominant women. Leave them a hot and sexy message, then call back to see what erotic message they have left for you. You'll be billed just $3.50 per minute.
*Or press 2 to listen to a hot selection of recorded fantasies steamy enough to make you explode! Choose from beautiful, sexy women's fantasies or domination stories. You'll be billed just $2.49 per minute.

Or you can press 5 from the main menu for the HOT AND NASTY DATELINE, where you can listen, and respond, to voice personal ads from hot horny girls in your neighborhood, including their real names and home telephone numbers! You can also leave your own personal message for people to get in touch with you. Make new friends on the world's busiest voice personal lines! Meet singles or couples, gay or straight; you'll be billed only $2.99 per minute.

***JUST CALL 1-800-756-3906 to use your Mastercard, Visa, or American Express card. The charge is just $2.49-$4.99 per minute, plus a 50 cent connection fee. 18+ only.

***OR CALL 1-900-745-4398. The charge is just $2.49-$4.99 per minute. Must be 18 years of age or older.

Call now!!! YOU WON'T REGRET IT!

(pkKEpT)

454. For Sale: Tektronix 7603,7704A Oscilloscope Mainframes

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: white@datasync.com
Message-ID: <3309c529.38582136@news.datasync.com>
Source record: 20058

For Sale: Tektronix 7603,7704A Oscilloscope Mainframes
650.00 each or trade for 7000series plugins.

Contact: Ed Rafferty , Rafferty Communication Systems (601)875-3414

455. Re: Working Mir 440 repeater

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb11.190230.23488@ke4zv.atl.ga.us>
Source record: 20059

In article <01bc170a$adb28180$5e427fce@default> "William F. Erhardt" <erhardt@mt.net> writes:
>Howdy from Helena, Montana (KA7YAO) Bill with the following question: Do I
>adjust my xmit (uplink) on this repeater to stay on the downlink 437.950
>or do I leave my xmit (uplink) on 435.750 and adjust my downlink. Tonight I
>heard folks up 10 then 5 etc as bird approached then passed down 5 then 10
>and it appears they were leaving xmit freq set and adjusting downlink to
>hear the other station. I tried making a contact by going up 10 and also
>shifting my xmit up 10 to match and I know thats wrong so no contacts were
>made of course. I have my IC2350 setup as 437.950 - 2200 offset and CTCSS
>of 141.3 so xmit on 435.750. I am new at this so any help would be
>appreciated. Bill
>

This is a regular repeater, not a linear transponder, so you need to
move *both* transmit and receive frequencies to compensate for doppler.
(I understand the repeater has AFC in its receiver, so it can compensate
for uplink doppler to some degree, but why make it work harder than it
has to? Try to stay in the center of the range.)

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

456. AZ/EL rotors.. Which one is bset?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5dqjqt$i53$1@lscruz.scf.lmms.lmco.com>
Source record: 20060

I am thinking about buying an AZ/EL rotor. I beleive that there is more
than one model. Which one is liked the best?

thanks, Allen WB6RWU

457. ARLK012 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk012.1997@arrl.org>
Source record: 20061
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK012
ARLK012 Keplerian data

ZCZC SK12
QST de W1AW
Keplerian Bulletin 12 ARLK012
From ARRL Headquarters
Newington, CT February 11, 1997
To all radio amateurs

SB KEP ARL ARLK012
ARLK012 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-82
1 24719U 97004A 97042.62500000 .00000220 00000-0 70506-6 0 21
2 24719 28.4695 119.5234 0071650 47.9671 330.5659 15.12158552 36
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97042.11469175 .00000020 00000-0 55200-5 0 03208
2 18129 82.9273 331.9267 0010364 206.7677 153.2941 13.72374159482948
UO-11
1 14781U 84021B 97042.06774018 .00000048 00000-0 15961-4 0 09674
2 14781 97.8200 28.4435 0012793 48.6917 311.5390 14.69522473692734
RS-12/13
1 21089U 91007A 97041.95399695 .00000048 00000-0 35527-4 0 09609
2 21089 82.9196 12.2599 0028344 291.3116 68.4997 13.74077343301825
UO-14
1 20437U 90005B 97042.21840492 .00000021 00000-0 24870-4 0 2465
2 20437 98.5251 126.5711 0010373 217.1696 142.8768 14.29948774368218
RS-15
1 23439U 94085A 97042.21684780 -.00000039 00000-0 10000-3 0 1972
2 23439 64.8129 356.5381 0152954 156.1395 204.6713 11.27526209 87733
AO-16
1 20439U 90005D 97042.16745014 -.00000005 00000-0 14777-4 0 00472
2 20439 98.5448 129.1890 0010528 220.0313 140.0098 14.29997716368223
```

```
DO-17
1 20440U 90005E 97042.16594593 -.00000006 00000-0 14504-4 0 00556
2 20440 98.5481 129.9632 0010736 216.8154 143.2293 14.30140518368258
WO-18
1 20441U 90005F 97042.16097829 -.00000008 00000-0 13669-4 0 00538
2 20441 98.5475 129.8703 0011411 217.9821 142.0560 14.30108678368259
LO-19
1 20442U 90005G 97042.20827207 .00000051 00000-0 36309-4 0 459
2 20442 98.5481 130.5204 0011554 218.7863 141.2492 14.30221761368282
FO-20
1 20480U 90013C 97041.95993770 -.00000046 00000-0 -23926-4 0 09478
2 20480 99.0260 27.3782 0540181 303.4070 51.6460 12.83236316328513
AO-21
1 21087U 91006A 97042.19982256 .00000093 00000-0 82657-4 0 08003
2 21087 82.9403 144.8225 0034009 261.3582 98.3703 13.74577501302842
UO-22
1 21575U 91050B 97042.15204058 .00000035 00000-0 26031-4 0 07512
2 21575 98.3181 107.0435 0007108 277.4774 82.5603 14.37056452292381
KO-23
1 22077U 92052B 97042.10046602 -.00000037 00000-0 10000-3 0 6405
2 22077 66.0771 49.2358 0014402 241.9465 118.0088 12.86300802211538
KO-25
1 22828U 93061F 97042.16983744 .00000037 00000-0 32263-4 0 05171
2 22828 98.5533 119.4143 0009598 234.9930 125.0355 14.28167822144226
IO-26
1 22826U 93061D 97042.17544117 -.00000000 00000-0 17418-4 0 05498
2 22826 98.5550 119.3451 0008485 255.7519 104.2720 14.27826197176105
AO-27
1 22825U 93061C 97042.05719073 .00000022 00000-0 26511-4 0 05531
2 22825 98.5599 119.0184 0007633 254.3741 105.6607 14.27717026176078
FO-29
1 24278U 96046B 97042.17131317 -.00000047 00000-0 -13528-4 0 00799
2 24278 98.5595 100.4956 0351982 152.5998 209.4204 13.52628872024087
MO-30
1 24305U 96052B 97042.15677096 .00000204 00000-0 20364-3 0 714
2 24305 82.9317 87.7287 0029177 194.2110 165.8209 13.73088933 21761
Mir
1 16609U 86017A 97042.17319545 .00003997 00000-0 53752-4 0 424
2 16609 51.6530 359.4439 0011736 63.5837 296.6423 15.60478609627352

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
February 15, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

458. DXER.COM Update

Newsgroup: rec.radio.amateur.space
Date: 1997-02-11 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <33205e40.8395890@news.primenet.com>
Source record: 20062

Check out "http://www.dxer.com"
for the latest updates to these
indexes:

DX CLUBS
HAM RADIO CLUBS
LOGGING PROGRAMS
MANUFACTURERS
MORSE CODE (NEW)
SATELLITES
VHF/UHF SCANNING (NEW)

Coming soon:
PRODUCT REVIEW PAGE
MONTHLY DRAWING (Sponsored by NCG/COMET Antennas

Stop by and get your new Comet Catalog

459. NORAD Two-Line Orbital Element Set: Space Shuttle (97042.00000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5dr91j$1hk@blackbird.afit.af.mil>
Source record: 20063

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

HST
1 20580U 90037B 97042.00000000 .00000336 00000-0 17932-4 0 9220
2 20580 28.4684 123.3322 0006442 151.2890 182.5782 14.91167424174258
STS 82
1 24719U 97004A 97042.79341435 .00000488 00000-0 25781-4 0 34
2 24719 28.4683 118.4011 0071540 49.7595 167.4178 15.12206247 79
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

460. NORAD Two-Line Orbital Element Sets (TLE944)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5dr98l$1i2@blackbird.afit.af.mil>
Source record: 20064

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #944 -
Alouette 1
1 00424U 62049A 97040.50174814 .00000048 00000-0 45206-4 0 2661
2 00424 80.4662 49.5870 0023924 140.9746 219.3133 13.67887272714782
ATS 1
1 02608U 66110A 97033.16243435 -.00000129 00000-0 10000-3 0 11
2 02608 14.5557 350.3488 0006815 102.9576 257.1603 1.00288114 27172
ATS 3
1 03029U 67111A 97040.31994586 -.00000125 00000-0 10000-3 0 6175
2 03029 14.9093 357.2347 0012083 273.1247 239.0370 1.00273070107140
Starlette
1 07646U 75010A 97042.06921798 -.00000175 00000-0 -26532-4 0 336
2 07646 49.8313 286.0449 0205869 299.3686 58.6790 13.82191670112006
LAGEOS
1 08820U 76039A 97041.71904134 .00000009 00000-0 00000+0 0 2635
2 08820 109.8388 107.7503 0043746 76.6865 283.8813 6.38664599229060
ETS-2
1 09852U 77014A 97041.25667710 -.00000216 00000-0 10000-3 0 993
2 09852 13.5133 30.2233 0005080 151.6922 208.3873 1.00024455 20020
GOES 2
1 10061U 77048A 97040.44768898 .00000050 00000-0 10000-3 0 8008
2 10061 12.6773 34.4071 0011310 134.1042 317.6919 1.00295149 16820
IUE
1 10637U 78012A 97041.57067293 .00000033 00000-0 10000-3 0 3629
2 10637 35.8483 79.7535 1346533 64.1270 41.7367 1.00073482 22323
GOES 3
1 10953U 78062A 97042.27620481 -.00000119 00000-0 10000-3 0 7784
2 10953 11.6860 37.3563 0002353 230.3983 227.4142 1.00264467 21454

```
SeaSat 1
1 10967U 78064A 97039.51472716 -.00000062 00000-0 24132-4 0 5518
2 10967 107.9960 303.7603 0002239 273.2491 86.8392 14.38149493975422
Nimbus 7
1 11080U 78098A 97042.11694973 -.00000034 00000-0 61418-5 0 6488
2 11080 98.9118 258.3349 0009742 45.1249 315.0700 13.83686386924215
GOES 5
1 12472U 81049A 97041.11823034 .00000052 00000-0 10000-3 0 9824
2 12472 8.5748 47.7869 0004037 80.8455 279.3123 1.00311014 15481
Cosmos 1383
1 13301U 82066A 97040.21411950 .00000032 00000-0 20879-4 0 5646
2 13301 82.9313 320.0037 0027025 310.0517 49.8266 13.68080307729788
LandSat 4
1 13367U 82072A 97038.69125817 -.00000009 00000-0 77024-5 0 430
2 13367 98.0442 88.0351 0007639 119.7876 240.4083 14.57198158774837
DMSP B5D2-1
1 13736U 82118A 97042.17441343 .00000014 00000-0 23949-4 0 1773
2 13736 98.6196 232.6976 0009589 54.0123 306.1944 14.25818765735124
IRAS
1 13777U 83004A 97041.54588730 -.00000267 00000-0 -15422-3 0 5755
2 13777 98.9684 228.0171 0012279 156.2017 203.9707 13.99268034386702
Cosmos 1447
1 13916U 83021A 97041.43020446 -.00000025 00000-0 -42579-4 0 6568
2 13916 82.9435 14.8181 0036855 205.9476 153.9839 13.74350052696465
TDRS 1
1 13969U 83026B 97038.26366082 -.00000306 00000-0 00000+0 0 7084
2 13969 9.3167 41.4018 0002628 279.1349 222.3077 1.00260790 23741
GOES 6
1 14050U 83041A 97041.35260058 -.00000042 00000-0 10000-3 0 6174
2 14050 7.4192 51.4194 0000573 110.7546 349.5201 1.00220928108588
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97040.20684517 .00000030 00000-0 16996-4 0 5891
2 14780 98.3037 103.6243 0001688 298.8885 61.2144 14.57066222688478
UO-11
1 14781U 84021B 97039.88884664 .00000063 00000-0 18545-4 0 9497
2 14781 97.8197 26.3559 0012808 55.4624 304.7791 14.69522208692411
Cosmos 1574
1 15055U 84062A 97041.58533893 .00000054 00000-0 41831-4 0 8563
2 15055 82.9539 70.1291 0029032 39.7333 320.5942 13.73644794633711
Cosmos 1602
1 15331U 84105A 97035.55048406 .00000161 00000-0 16066-4 0 5376
2 15331 82.5306 255.3156 0018575 261.6170 98.2940 14.84836088667455
ERBS
1 15354U 84108B 97035.49618334 -.00000255 00000-0 -16965-5 0 2541
2 15354 56.9962 169.8274 0002135 130.2753 229.8466 14.95013992671583
NOAA 9
1 15427U 84123A 97042.19984304 .00000048 00000-0 48941-4 0 338
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2 15427 98.9163 112.9022 0015353 359.8846 0.2321 14.13836292627400
Mir
1 16609U 86017A 97042.17319545 .00003997 00000-0 53752-4 0 424
2 16609 51.6530 359.4439 0011736 63.5837 296.6423 15.60478609627352
SPOT 1
1 16613U 86019A 97042.08539153 -.00000044 00000-0 00000+0 0 334
2 16613 98.8042 115.3394 0000275 347.8728 12.1681 14.19989611254211
Cosmos 1766
1 16881U 86055A 97038.21053965 .00000190 00000-0 20086-4 0 4520
2 16881 82.5188 310.4620 0017777 284.6998 75.2247 14.83810274568698
EGP
1 16908U 86061A 97039.21388695 -.00000083 00000-0 10000-3 0 1522
2 16908 50.0136 351.3570 0011642 253.3257 106.6300 12.44415692145796
NOAA 10
1 16969U 86073A 97042.21237204 .00000065 00000-0 46020-4 0 9636
2 16969 98.5353 38.5809 0013662 20.1160 340.0555 14.25019781540646
MOS-1
1 17527U 87018A 97042.21267763 -.00000043 00000-0 00000+0 0 5142
2 17527 98.9070 104.6156 0020509 25.8835 334.3350 14.00424589508446
GOES 7
1 17561U 87022A 97041.27254745 -.00000182 00000-0 10000-3 0 2759
2 17561 3.5335 67.8294 0003978 312.9832 123.6584 1.00270725 19690
Kvant-1
1 17845U 87030A 97042.10914933 -.00009806 00000-0 -11028-3 0 8961
2 17845 51.6536 359.7679 0011752 64.2145 295.9659 15.60462146561458
DMSP B5D2-3
1 18123U 87053A 97042.16220959 -.00000036 00000-0 37149-5 0 8015
2 18123 98.7659 234.4891 0013697 295.1869 64.7884 14.15465555498300
RS-10/11
1 18129U 87054A 97040.87526459 .00000029 00000-0 15301-4 0 3147
2 18129 82.9271 332.8423 0010340 210.6396 149.4154 13.72374217482775
Meteor 2-16
1 18312U 87068A 97039.20447784 .00000015 00000-0 16985-6 0 5423
2 18312 82.5563 164.8792 0011501 283.6354 76.3525 13.84090841478827
Meteor 2-17
1 18820U 88005A 97041.55580524 .00000034 00000-0 17346-4 0 1753
2 18820 82.5405 217.4676 0016969 341.8315 18.2236 13.84769128456516
DMSP B5D2-4
1 18822U 88006A 97042.07874526 .00000049 00000-0 39713-4 0 4595
2 18822 98.3795 228.7242 0006875 32.0065 328.1531 14.23216602468551
Glonass 34
1 19163U 88043A 97040.50301798 .00000008 00000-0 10000-3 0 1552
2 19163 65.3571 77.8439 0009986 144.1042 216.0367 2.13102367 67299
Glonass 36
1 19165U 88043C 97 37.27541679 -.00000109 00000-0 10000-3 0 5623
2 19165 65.3302 77.9297 0006075 311.0453 48.9388 2.13100518 67845
METEOSAT 3
1 19215U 88051A 97036.67233277 -.00000069 00000-0 10000-3 0 3020
2 19215 3.7279 66.4735 0006022 132.0364 228.1712 0.96947158 19448
OKEAN 1
```

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1 19274U 88056A 97041.10423146 .00000154 00000-0 16081-4 0 1534
2 19274 82.5117 48.8864 0021951 61.8764 298.4599 14.82573784464624
Meteor 3-2
1 19336U 88064A 97040.95387014 .00000051 00000-0 10000-3 0 5496
2 19336 82.5431 358.1719 0017825 5.3725 354.7581 13.16980754410772
Glonass 39
1 19503U 88085C 97041.06030753 -.00000034 00000-0 10000-3 0 4461
2 19503 65.4877 316.6869 0002837 97.9079 262.1619 2.13101746 65415
NOAA 11
1 19531U 88089A 97042.20031842 .00000009 00000-0 30139-4 0 8521
2 19531 99.1677 72.3155 0011102 293.0292 66.9708 14.13120704432205
TDRS 3
1 19548U 88091B 97034.71312596 -.00000194 00000-0 10000-3 0 2688
2 19548 2.9472 70.5384 0005550 221.1338 184.2067 1.00270378 17852
Glonass 40
1 19749U 89001A 97041.09754928 .00000001 00000-0 10000-3 0 6591
2 19749 65.3048 77.3284 0006926 256.8197 103.1666 2.13101531 62929
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2 19750 65.3183 77.4642 0008380 235.2996 124.6962 2.13101740 62901
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2 19802 55.4401 101.1480 0015292 197.1025 162.9171 2.00562842 58492
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Meteor 2-18
1 19851U 89018A 97038.24023268 .00000065 00000-0 44695-4 0 5409
2 19851 82.5206 93.6726 0015479 40.2893 319.9410 13.84426089401359
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2 19883 0.3616 86.8826 0003697 216.7492 2.9320 1.00268300201471
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1 20061U 89044A 97040.80943625 -.00000003 00000-0 10000-3 0 3511
2 20061 54.0412 276.5817 0161291 223.7522 135.0070 2.00562981 56220
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2 20103 82.9603 292.4333 0038895 106.5473 253.9978 13.73873978381495
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Meteor 3-3
1 20305U 89086A 97041.82488686 .00000044 00000-0 10000-3 0 7521
2 20305 82.5434 319.5838 0008393 80.4335 279.7712 13.04419534349310
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2 20322 98.9330 57.7043 0009766 91.3330 268.8953 14.03458250370223
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2 20510 82.5216 4.9316 0017178 261.3014 98.6233 14.78665532374808
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2 20620 65.0829 316.0945 0010114 39.7033 320.4045 2.13102479 52220
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Meteor 2-20
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Meteor 3-5
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2 21655 82.5535 151.6342 0012476 296.1293 63.8546 13.16850847264134
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Glonass 59
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NOAA 13
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Meteor 2-21
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UFO F2
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SPOT 3
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2 22920 28.4655 2.9482 0003792 147.3569 212.7294 15.07163758175483
Meteor 3-6
1 22969U 94003A 97042.19473211 .00000051 00000-0 10000-3 0 3213
2 22969 82.5590 91.8776 0015877 5.4835 354.6453 13.16741545146503
TUBSAT-B
1 22970U 94003B 97038.69561208 .00000051 00000-0 10000-3 0 3107
2 22970 82.5604 94.2244 0017256 10.4734 349.6744 13.16828822146056
GPS BIIA-24
1 23027U 94016A 97042.08064280 -.00000078 00000-0 10000-3 0 4898
2 23027 55.0340 340.1748 0067981 209.2483 150.3989 2.00571304 21492
Glonass 62
1 23043U 94021A 97039.11214948 -.00000026 00000-0 00000+0 0 4652
2 23043 64.5563 315.6525 0004674 201.4580 158.5652 2.13103150 22036
Glonass 63
1 23044U 94021B 97040.87160429 -.00000034 00000-0 00000+0 0 4381
2 23044 64.5428 315.5882 0029190 206.0038 153.8932 2.13103014 22073
Glonass 64
1 23045U 94021C 97039.17255600 -.00000026 00000-0 00000+0 0 4346
2 23045 64.5385 315.6479 0011659 27.1219 332.9833 2.13102446 22037
GOES 8
1 23051U 94022A 97042.20860264 -.00000274 00000-0 10000-3 0 6421
2 23051 0.2457 268.2990 0003094 4.8244 228.7313 1.00268996 17763
MSTI 2
1 23101U 94028A 97042.07856607 .00007786 00000-0 11103-3 0 4061
2 23101 97.0708 239.0891 0011049 147.4194 212.7746 15.56503750156421
STRV-1A
1 23125U 94034B 97041.37358417 .00000864 00000-0 28265-3 0 4025
2 23125 6.9663 134.4677 7242849 264.5932 16.8237 2.33023957 21671
STRV-1B
1 23126U 94034C 97041.36553472 .00001649 00000-0 46761-3 0 3496
2 23126 6.9960 134.2871 7242423 264.9451 16.6882 2.33189957 21716
Nadezhda 4
1 23179U 94041A 97042.03811079 .00000044 00000-0 29992-4 0 2560
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2 23179 82.9445 59.5786 0035929 174.3447 185.8123 13.75690165129636
Glonass 65
1 23203U 94050A 97041.65611965 .00000052 00000-0 00000+0 0 3976
2 23203 64.7665 196.1150 0007573 136.4164 223.6111 2.13102146 19484
Glonass 66
1 23204U 94050B 97040.95103872 .00000047 00000-0 00000+0 0 4180
2 23204 64.7529 196.1664 0014583 354.2412 5.7085 2.13102379 19464
Glonass 67
1 23205U 94050C 97041.30253416 .00000049 00000-0 00000+0 0 4004
2 23205 64.7650 196.1442 0001048 7.5119 352.4559 2.13102545 19472
DMSP B5D2-7
1 23233U 94057A 97042.18130479 .00000123 00000-0 89508-4 0 1131
2 23233 98.7968 103.0787 0011834 220.7333 139.2955 14.12777006126575
OKEAN 1-7
1 23317U 94066A 97040.89352006 .00000177 00000-0 23338-4 0 2197
2 23317 82.5428 200.3343 0027342 29.5266 330.7489 14.74075057125552
ELEKTRO (GOMS)
1 23327U 94069A 97038.40486111 -.00000118 00000-0 00000+0 0 2439
2 23327 0.5063 97.3734 0001633 317.5096 304.8263 1.00272129 8356
RESURS 1-3
1 23342U 94074A 97041.06678839 .00000040 00000-0 14581-4 0 6765
2 23342 97.9339 98.0411 0001158 70.7262 289.4087 14.69898554121751
Glonass 68
1 23396U 94076A 97039.26992800 .00000019 00000-0 00000+0 0 3750
2 23396 65.1892 76.2702 0029304 194.8078 165.1837 2.13102601 17279
Glonass 69
1 23397U 94076B 97041.32351407 -.00000002 00000-0 00000+0 0 3701
2 23397 65.1762 76.2041 0013857 311.8513 48.0970 2.13101743 17311
Glonass 70
1 23398U 94076C 97039.33029170 .00000019 00000-0 00000+0 0 3829
2 23398 65.1658 76.2442 0004993 278.7273 81.2939 2.13101836 17289
LUCH (Altair-2)
1 23426U 94082A 97040.22541902 -.00000294 00000-0 00000+0 0 4805
2 23426 0.9514 262.0123 0002105 64.6996 349.1314 1.00273927 7870
RS-15
1 23439U 94085A 97042.21684780 -.00000039 00000-0 10000-3 0 1972
2 23439 64.8129 356.5381 0152954 156.1395 204.6713 11.27526209 87733
NOAA 14
1 23455U 94089A 97042.15005314 .00000018 00000-0 34834-4 0 9355
2 23455 98.9751 353.2559 0008887 293.4884 66.5355 14.11645122109165
Glonass 71
1 23511U 95009A 97040.22587399 -.00000030 00000-0 00000+0 0 2963
2 23511 64.5692 315.8922 0005701 231.2120 128.7817 2.13103869 15025
Glonass 72
1 23512U 95009B 97040.34707440 -.00000031 00000-0 00000+0 0 3016
2 23512 64.5585 315.8865 0007198 324.6931 35.3064 2.13101399 15025
Glonass 73
1 23513U 95009C 97039.69925679 -.00000028 00000-0 00000+0 0 3251
2 23513 64.5661 315.9294 0012189 206.6231 153.3580 2.13103061 15017
GMS 5
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1 23522U 95011B 97037.44988046 -.00000300 00000-0 10000-3 0 2057
2 23522 0.5245 29.3201 0000698 119.6228 289.2445 1.00262054 6809
DMSP B5D2-8
1 23533U 95015A 97042.18069273 .00000068 00000-0 60405-4 0 8648
2 23533 98.8455 47.6198 0008025 95.1785 265.0303 14.12774952 97379
OSC 1
1 23545U 95017A 97041.22429908 -.00000099 00000-0 -11041-4 0 1991
2 23545 69.9746 337.7394 0016162 217.2194 142.7818 14.45465885 98053
OSC 2
1 23546U 95017B 97040.21993482 .00000327 00000-0 10963-3 0 2335
2 23546 69.9764 340.2855 0015584 212.9421 147.0739 14.45489899 97912
Microlab 1
1 23547U 95017C 97040.22033557 .00000120 00000-0 51033-4 0 1711
2 23547 69.9782 339.9489 0015239 214.7519 145.2618 14.45651552 97920
OFEQ 3
1 23549U 95018A 97042.20204358 .00019102 00000-0 43697-3 0 4509
2 23549 143.3605 251.0749 0203183 359.2738 0.7736 15.21766913102691
GFZ-1
1 23558U 86017JE 97041.26451710 .00003987 00000-0 47431-4 0 2074
2 23558 51.6502 350.9719 0006562 47.8629 312.2923 15.63798658627244
ERS-2
1 23560U 95021A 97039.82740223 -.00000031 00000-0 46224-5 0 3317
2 23560 98.5453 116.4695 0001134 95.2720 264.8592 14.32250168 94447
Spektr
1 23579U 95024A 97042.10914933 -.00009806 00000-0 -11028-3 0 5703
2 23579 51.6536 359.7679 0011752 64.2145 295.9659 15.60462146 98779
GOES 9
1 23581U 95025A 97041.50379014 .00000067 00000-0 10000-3 0 3160
2 23581 0.0860 96.9536 0002102 228.3606 221.3326 1.00265995 6311
Helios 1A
1 23605U 95033A 97039.78837495 .00000034 00000-0 15480-4 0 4405
2 23605 98.1436 338.3521 0001343 64.6126 295.5230 14.63811922 85174
UPM SAT 1
1 23606U 95033B 97041.85779563 .00000129 00000-0 31484-4 0 2515
2 23606 98.1243 342.2387 0007649 142.5982 217.5756 14.67348499 85711
CERISE
1 23607U 95033C 97040.88439035 .00000027 00000-0 13556-4 0 1533
2 23607 98.1248 341.0492 0006262 144.0097 216.1499 14.66997132 85582
TDRS 7
1 23613U 95035B 97041.45528148 .00000081 00000-0 00000+0 0 3032
2 23613 1.1719 81.7074 0001906 242.4419 169.5612 1.00282792 5775
Glonass 74
1 23620U 95037A 97040.89066505 .00000047 00000-0 00000+0 0 2450
2 23620 64.8188 196.0195 0018617 163.2582 196.7673 2.13102729 12077
Glonass 75
1 23621U 95037B 97041.53791948 .00000051 00000-0 00000+0 0 2544
2 23621 64.8283 196.0011 0018036 174.3341 185.6546 2.13102048 12083
Glonass 76
1 23622U 95037C 97041.12661404 .00000048 00000-0 00000+0 0 2606
2 23622 64.8222 196.0167 0036789 163.3482 196.7392 2.13102485 12074
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Prognoz-M2
1 23632U 95039A 97038.02700830 .00000509 00000-0 00000+0 0 1118
2 23632 70.1290 248.6390 7623033 327.5390 327.5080 0.26341200 1466
SICH-1
1 23657U 95046A 97041.89274527 .00000142 00000-0 18312-4 0 1451
2 23657 82.5331 340.8360 0028612 358.2632 1.8472 14.73528593 77989
RADARSAT
1 23710U 95059A 97042.08007019 .00000142 00000-0 72025-4 0 2370
2 23710 98.5792 51.3589 0001027 65.1060 295.0228 14.29974288 66389
Glonass 79
1 23734U 95068A 97040.30622391 .00000044 00000-0 00000+0 0 2409
2 23734 64.8228 195.9641 0017224 327.4195 32.4389 2.13102090 9021
Glonass 78
1 23735U 95068B 97040.96262142 .00000047 00000-0 00000+0 0 2252
2 23735 64.8173 195.9257 0006427 201.7862 158.1518 2.13125045 9038
Glonass 77
1 23736U 95068C 97039.60212754 .00000043 00000-0 00000+0 0 2094
2 23736 64.8090 195.9839 0007258 186.5972 173.3572 2.13101764 9006
XTE
1 23757U 95074A 97039.88760825 .00000500 00000-0 12804-4 0 1201
2 23757 22.9793 240.4148 0013154 12.1662 347.9138 14.97768704 60995
Polar
1 23802U 96013A 97038.98588189 .00000105 00000-0 00000+0 0 1051
2 23802 86.3555 23.4959 6528629 274.5559 19.0162 1.36263364 4777
1996010E
1 23824U 96010E 97038.76375364 .00191444 00000-0 25683-1 0 1702
2 23824 47.4146 184.2698 6921241 90.9957 342.0405 2.76073350 8086
GPS BIIA-25
1 23833U 96019A 97040.22186394 -.00000071 00000-0 00000+0 0 1427
2 23833 54.6374 338.3512 0029381 143.8412 216.3668 2.00565187 6430
Priroda
1 23848U 96023A 97042.10914933 -.00009806 00000-0 -11028-3 0 2585
2 23848 51.6536 359.7679 0011752 64.2145 295.9659 15.60462146 45860
MSX
1 23851U 96024A 97041.50698040 -.00000047 00000-0 00000+0 0 1907
2 23851 99.4064 32.0428 0006734 217.2298 142.8389 13.97421854 40781
SAX
1 23857U 96027A 97042.20324065 .00001125 00000-0 35951-4 0 529
2 23857 3.9544 169.8266 0014232 218.0441 141.8750 14.91724639 42897
MSTI 3
1 23868U 96031A 97035.60702414 -.00000013 00000-0 14496-5 0 1136
2 23868 97.1134 228.0377 0011250 48.7069 311.5137 15.46661222 40736
TOMS-EP
1 23940U 96037A 97041.25113506 .00002194 00000-0 99199-4 0 849
2 23940 97.4280 309.7656 0011522 228.3661 131.6593 15.21943119 33836
GPS BIIA-26
1 23953U 96041A 97036.14977935 -.00000006 00000-0 00000+0 0 1147
2 23953 55.0699 98.8998 0021172 331.4544 28.4957 2.00558745 4146
ADEOS
1 24277U 96046A 97041.25851383 -.00000044 00000-0 00000+0 0 1410
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2 24277 98.6077 120.7677 0001783 125.2582 234.8766 14.27640699 25253
FO-29
1 24278U 96046B 97038.69462671 -.00000019 00000-0 15505-4 0 561
2 24278 98.5608 97.4880 0351619 161.6017 199.8217 13.52629164 23612
Soyuz TM-24
1 24280U 96047A 97042.10914933 -.00009806 00000-0 -11028-3 0 1626
2 24280 51.6536 359.7679 0011752 64.2145 295.9659 15.60462146 27760
FAST
1 24285U 96049A 97042.17404340 .00002291 00000-0 23041-3 0 611
2 24285 82.9876 97.6333 2207078 215.4083 127.8619 10.81789755 18793
1996049B
1 24286U 96049B 97041.65657664 .00002466 00000-0 24494-3 0 722
2 24286 83.0040 97.9827 2206259 216.0131 127.0379 10.82189478 18737
Microsat
1 24291U 96050A 97041.49888347 .00063320 67277-5 42985-3 0 1328
2 24291 62.7822 195.7061 0586392 131.4153 233.8882 14.72161471 24214
MO-30
1 24305U 96052B 97042.15677096 .00000204 00000-0 20364-3 0 714
2 24305 82.9317 87.7287 0029177 194.2110 165.8209 13.73088933 21761
GPS BIIA-27
1 24320U 96056A 97036.01156232 .00000027 00000-0 00000+0 0 609
2 24320 54.6867 278.9970 0047124 95.1407 265.7433 2.00571202 2804
SAC-B/HETE
1 24645U 96061A 97040.79660511 .00000298 00000-0 21883-4 0 444
2 24645 37.9761 263.5208 0049320 353.7100 6.3020 15.14856686 14735
Progress M-33
1 24663U 96066A 97041.91769187 .00008416 00000-0 10690-3 0 840
2 24663 51.6521 0.7356 0013260 65.4886 294.7488 15.60268298 12971
GE 2
1 24713U 97002A 97042.21328669 -.00000241 00000-0 00000+0 0 251
2 24713 0.0820 277.2881 0001458 95.5098 122.8441 1.00271140 130
NAHUEL 1A
1 24714U 97002B 97041.88863184 -.00000282 00000-0 00000+0 0 301
2 24714 0.0997 260.1718 0001986 140.6606 347.9068 1.00277108 134
1997002C
1 24715U 97002C 97040.82264097 .00005445 00000-0 13486-2 0 145
2 24715 7.4389 269.0359 7299804 191.6545 130.5069 2.26126081 222
1997002D
1 24716U 97002D 97040.72653145 .00057197 00000-0 63101-2 0 174
2 24716 6.9877 273.3112 7287650 187.2019 148.5454 2.29363407 222
Soyuz TM-25
1 24717U 97003A 97042.14241867 .00001403 11291-4 10000-4 0 54
2 24717 51.6527 359.9961 0044254 113.5351 247.0698 15.97049680 93
1997003B
1 24718U 97003B 97042.19715259 .02444265 12063-4 64966-3 0 91
2 24718 51.6210 359.6177 0029326 76.2476 284.1807 16.26248163 101
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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461. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb12.180132.27615@ke4zv.atl.ga.us>
Source record: 20065
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <330031C8.354F@rcru.rl.ac.uk> Mike Willis <"mjw "@rcru.rl.ac.uk> writes:
>Gary Coffman wrote:
>
>snip |
>
>Great idea Gary, but it defaces the rig. No help when bowwowing Joe's
>rig on field day. An easy fix is to make up a small buffer amplifier
>using a single transistor, e.g. BF981 or a modamp, operating in a linear
>mode (most important) to boost the low power to about 20mW. Then add a
>filter on the output to ensure a clean drive.
>
>A level setting pot is a good idea as well so you can adjust the power
>input to the transverter, and while you are at it, a relay and two
>sockets to switch the receive line and the signal to the transverter
>pin on the acc1 connector.
>
>Now you can leave the rig wired for HF and have the transverter
>connected. Change bands at the flick of a switch and protect the
>transverter from 100W of HF.
>
>73 Mike

Well, you can certainly do that, Mike. But 1) I don't consider adding
a jack to the back panel "defacing" the rig, and 2) if I'm borrowing
the rig it only takes a couple of minutes to remove the cover and move
the transverter cable over to the pre-driver output jack, and another
couple minutes to put it back when I'm done. No *permanent* changes are
required. This is the quickest, easiest, and cheapest way to allow the
IC735 to work with 10mW input transverters.

I'd use an external box only if it were imperative that neither radio
nor transverter be touched internally. In that case, your idea is an
excellent one. I'd likely use a MAR-4 as the gain element. Note that
you *could* tuck one of these *inside* the 735 or *inside* the transverter
as alternatives. That wouldn't "deface" either piece of equipment, and
eliminates another external box and another level of TR sequencing.

If you're using transverters with a transceive IF port, the best place
to put the extra amp is inside the transverter on the Tx side *after*
the transverter's internal TR. If you're using a transverter with a
split IF, many are this way, then putting the amp in the radio to bring
it up to "standard" transverter levels might make more sense. Especially
if you want to mast mount the transverter, then having the hotter signal
at the other end of the coax becomes very attractive.

There's nothing *wrong* with your approach, it is just that I'm reluctant to build yet another box when I don't have to. That's just more stuff you have to lug along, and another set of cables to add to the tangle, and possibly cause problems, and another level of TR switching to sequence.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

462. NORAD Two-Line Orbital Element Set: Space Shuttle (97042.00000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5dtift$55u@blackbird.afit.af.mil>
Source record: 20066

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system. As a service to the satellite user community,
the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation
and software are also available via anonymous ftp from archive.afit.af.mil
(129.92.1.66) in the directory pub/space.

****

HST
1 20580U 90037B 97042.00000000 .00000336 00000-0 17932-4 0 9220
2 20580 28.4684 123.3322 0006442 151.2890 182.5782 14.91167424174258
STS 82
1 24719U 97004A 97042.91666667 .00000220 00000-0 70692-6 0 32
2 24719 28.4709 117.5814 0071157 51.0553 118.4171 15.12157869 88
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

463. R0MIR on SAFEX

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc193f$61a57a40$22bc92ce@bjarts.uslink.net>
Source record: 20067

I just worked Val. R0MIR on the MIR 70cm repeater, SAFEX. He come on during the middle of the pass over North America and worked three US stations. From what R0MIR was talking about, it sounds like he'll be headed home soon. It was fun to her him on the SAFEX side and a big pile started after his first contact. The uplink frequency was 435.765 and the downlink was 437.942 Mhz. as this was near the end of the pass for me I had a big doppler shift to compensate for on both the up and downlink frequencies. I hope other get a chance to work Val, as he sure wanted to do some talking to fellow amateurs on the ground. 73 and Good hunting.
BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

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B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

464. Which 10m Pre-amp????

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <33025782.2DD@amsat.org>
Source record: 20068

I'm seeking advice on Pre-amps for 10m Satellite Operations. Currently, I'm using a Gap Challenger for my 10m downlink antenna on Mode-A. (RS-10 & RS-15) I like to find a good low noise Pre-amp to improve things a bit.

Any suggestions?

Mark Fossum - N0NSV
n0nsv@amsat.org

465. FS: Kenwood All Mode 2-Meter TR-751-A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <330267AA.2B7E@terraworld.net>
Source record: 20069
Cross-posted to: rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.space,rec.ham.radio,rec.radio.scanner,alt.ham.radio,rec.ham.radio.swap,

Kenwood TR-751-A 2-Meter All Mode, Excellent base or mobile rig. Has never been mobile. Includes new and unused mobile brackett still in original plastic. This rig looks like the day it was made!!

25w output (adjustable to 45w)

Original Box and Manual, Non Smoker
$500.00 first come, first serve.
Mike Cobb, KB0QMF 316-421-6139

466. FS: Kenwood All Mode 2-Meter TR-751-A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <330267F9.2664@terraworld.net>
Source record: 20070
Cross-posted to: rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.space,rec.ham.radio,rec.radio.scanner,

Kenwood TR-751-A 2-Meter All Mode, Excellent base or mobile rig. Has never been mobile. Includes new and unused mobile brackett still in original plastic. This rig looks like the day it was made!!

25w output (adjustable to 45w)

Original Box and Manual, Non Smoker
$500.00 first come, first serve.
Mike Cobb, KB0QMF 316-421-6139

467. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-12 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5du5dt$hb9@lehi.kuentos.guam.net>
Source record: 20071
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

Mike <mco@terraworld.net> wrote:

>Kenwood TR-751-A All Mode Tranciever. Excellent base or mobile rig. This
>radio has never been mobile, and comes from my non-smoking shack! Looks
>like brand new!

Glad to hear your shack isn't smoking. I guess we can all stopy worrying
about your house burning down. If the radio has 'never been mobile',
how do you know it is an 'excellent mobile rig' ?

>Currently set at 25 w. output, capable of 40w.

>Original Box and Manual. Mobile bracket is still in original plastic.
>I just bought a Kenwood 711-All mode, and must sacrifice.
>$500.00 Firm, Shipping included. Money Order Only.

Original PLASTIC. Now that is original. Will the plastic make it work
better in the car ?

>Mike Cobb, KB0QMF ph.# 316-421-6139 or e-mail reply.

It's 3 am here, and I can't get to 7-11 to get a money order.
Would it be OK if I just mailed you $500 in cash ?

73, Jim KH2D phone 011 671 477-0518 or email reply.

468. Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <330255FA.454@ping.be>
Source record: 19822
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

```
The official Kenwood TH-79E/A modifications can be found on my homepage.
Those are JPG files that you can download and vieuw with a picture
viewer.

Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz

Good luck,

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium
```

469. Re: Which 10m Pre-amp????

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc196e$13ce10a0$72c56cce@default>
Source record: 19823

Mark,

I use the Hamtronics unit that cost about $29. It is *not* a GAsFET, but
you probably won't notice the slightly higher noise on 10 meters. Both
RS-12 and RS-15 give very good signals here with just a sloping dipole.

73 de VE7MDL ....Erik.

Mark Fossum <n0nsv@amsat.org> wrote in article <33025782.2DD@amsat.org>...
> I'm seeking advice on Pre-amps for 10m Satellite Operations. Currently,
> I'm using a Gap Challenger for my 10m downlink antenna on Mode-A. (RS-10
> & RS-15) I like to find a good low noise Pre-amp to improve things a
> bit.
>
> Any suggestions?
>
> Mark Fossum - N0NSV
> n0nsv@amsat.org
>
>

470. Which antenna for MIR?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc196d$b9b667c0$72c56cce@default>
Source record: 19824

Hello,

I have tried to use the MIR UHF repeater several times with next to no luck. I hear it fine, although with some deep fades, but it does not seem to hear me very well. I use 35 watts and an Icom 821H. The antenna is a 6-element yagi, horizontal polarization, pointing 45 degrees up from horizontal.

What kind of antennas do people use on the repeater?

73 de VE7MDL ....Erik.

471. Sedsat & Cesar1

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: Jordi Soriano Goma <jsoriano@voltor.upc.es>
Message-ID: <33031A1F.1DF3@voltor.upc.es>
Source record: 19825

Anyone know when will be launched Sedsat and Cesar1 satellites?

472. Any Eastern Tenn. people here ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: "KF4OBL , Susan Driggers" <Insight@cris.com>
Message-ID: <Pine.SUN.3.95.970213125306.7155A-100000@mariner.cris.com>
Source record: 19826

I am new to tracking and attempting to contact sattelites, so I was wondering if anyone on here was from my local QTH. Namely Alcoa TN . If so then I would appreciate a response since I am stuck on finding out such things as the horizon elevation, etc. Any help would be appreciated. Thanks

Susan
KF4OBL

473. FS:Kenwood TS830/Mc-60Mic

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: James Robinton <robinton@avherc.sanders.lockheed.com>
Message-ID: <33036051.FF6D5DF@avherc.sanders.lockheed.com>
Source record: 19827
Cross-posted to:
rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.space,rec.ham.radio,rec.radio.scanner,alt.ham.radio,rec.ham.radio.swap

**********FOR SALE**********

Kenwood TS-830 (Excelent Condition) One Owner.

!!!!!!Features!!!!!!

* Bands 1.5, 3.5, 7.0, 10.0, 14.0, 18.0, 21.0, 24.5,
28.9, 28.5, 29.0, 29.5 in 500 khz segments.

* Digital Frequency Readout * Kenwood MC-60 Desk Microphone
* Noise Blanker * Speech Proecesser
* VOX * AGC
* Rit / Xit * Notch Filter
* If Shift * Varible Bandpass Tuning
* Tone Contorl * CW/USB/LSB
* Manual * Runs on 110 volts.

This rig is considered one of the good old work horses.
Lets see if anyone bites at $600.

Contact: N1CRZ@KB4N.NH.USA.NA or for a quicker response...
robinton@avherc.sanders.lockheed.com
(603) 894-6619

474. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <3303E491.3601@mailhost.cyberramp.net>
Source record: 19828

http://www.cyberramp.net/~johnf

475. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <3303E42B.6429@mailhost.cyberramp.net>
Source record: 19829

http://www.cyberramp.net/~johnf

476. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <3303E449.7CE@mailhost.cyberramp.net>
Source record: 19830

http://www.cyberramp.net/~johnf

477. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: Steve Phipps <sphipps@joplin.com>
Message-ID: <33036C3E.4098@joplin.com>
Source record: 19831
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

> >Kenwood TR-751-A All Mode Tranciever. Excellent base or mobile rig. This
> >radio has never been mobile, and comes from my non-smoking shack! Looks
> >like brand new!
>
> Glad to hear your shack isn't smoking. I guess we can all stopy worrying
> about your house burning down. If the radio has 'never been mobile',
> how do you know it is an 'excellent mobile rig' ?

Come on... Give the guy a break!

SP

478. Re: FS:Kenwood TS830/Mc-60Mic

Newsgroup: rec.radio.amateur.space
Date: 1997-02-13 00:00:00 UTC
From: Henry <hrsil@flinet.com>
Message-ID: <33037034.1DAF@flinet.com>
Source record: 19832
Cross-posted to:
rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.space,rec.ham.radio,rec.radio.scanner,alt.ham.radio,rec.ham.radio.swap

James Robinton wrote:
>
> **********FOR SALE**********
>
> Kenwood TS-830 (Excelent Condition) One Owner.
>
> !!!!!!Features!!!!!!
>
> * Bands 1.5, 3.5, 7.0, 10.0, 14.0, 18.0, 21.0, 24.5,
> 28.9, 28.5, 29.0, 29.5 in 500 khz segments.
>
> * Digital Frequency Readout * Kenwood MC-60 Desk Microphone
> * Noise Blanker * Speech Proecesser
> * VOX * AGC
> * Rit / Xit * Notch Filter
> * If Shift * Varible Bandpass Tuning
> * Tone Contorl * CW/USB/LSB
> * Manual * Runs on 110 volts.
>
> This rig is considered one of the good old work horses.
> Lets see if anyone bites at $600.
>
> Contact: N1CRZ@KB4N.NH.USA.NA or for a quicker response...
> robinton@avherc.sanders.lockheed.com
> (603) 894-6619
In regards to your 830 would you b interested in a trade for a dx2-66
multimedia computer?
let me know if you want to haggle, ;)
Henry

479. GIF, JPEG scanning service. FREE OFFER! A picture is worth a thousand words! (onmEpM)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: scanning@XXX1324noreply.com
Message-ID: <eo7wTHhG8GA.219@uptgmsnb01>
Source record: 19833

Why don't you print or save this info in case you need it in the future?

Hello Friends,
It's time to take full advantage of the online medium by having your photographs scanned today! Once your pictures are scanned into one of three formats (GIF, JPEG, or BMP) you can do many exciting things with them.

-You'll easily be able to attach them to emails and send them to people your chatting with online. No more having to try and explain what you look like!

-You can also use your photos in all kinds of fun projects: build web pages; design your own greeting cards; make personalized stationary,desktops, and screen savers- the list is endless!

- Scan pictures of yourself, your pet, your vacation, or whatever you choose!

Cyber Services will scan ANY photograph, drawing, magazine clipping, or other artwork to an image file, and email or US mail it (on disk) back to you within 24 hours of its receipt. (You must be able to receive file attachments to get your file(s) via email. Check with your ISP if your not sure.) PRIVACY & CONFIDENTIALITY ARE ASSURED. You'll also receive helpful technical tips on everything from renaming your file to saving time when sending it to people via email.

We scan all our images in 16.7 million colors for best quality. For just $1 extra we can enlarge or crop your photo, blur out a body part, or ad text (such as your name or email address).

Best of all, as a FREE GIFT to you (limited time only), IF YOU CHOOSE TO, we'll reserve you a FREE PAGE (or pages) in our "Internet Date-Site" (Now under construction!!!). This web site contains pages classified by local area and sexual preference. There's also a erotic image gallery (must be legal age to enter), and a "special interests" section. That's right, you can have your own page on the internet for just $4! (Note: You're responsible for answering your dog's email!) Your free page(s) will include any or all of the following: Your scanned photo(s) (You pick which ones- You can have some, none or all of your photos posted on your page), your email address with an icon visitors can click to send you mail, and a brief profile about you. We'll remove or modify your page, at your request, at anytime! When the "Date-Site" opens for business, you'll receive an email notifying you of the address of your personal web page. You can give the address to people and they can view it from any internet
connection! There are millions and millions of people on the internet.It's

time you start meeting them! (This service won't be free for long so act now!)

If you have any questions regarding our services, please call us at (541)744-5718.

Ordering Information:

Price: $4 for first scan, $3 for each additional scan
Extras: $1 each to add personalized information. (name/email)
$1 each to have image modified (enlarged, body part blurred, etc..)
$2 to have image files mailed to you on a floppy disk (IBM or MAC).
$1 credit card processing fee (Visa/Mastercard users only)

If you would like your photographs returned to you please include a self addressed stamped envelope. Otherwise they will be destroyed.

Order Form (PRINT OUT or COPY CLEARLY):

Name (optional):

Email Address or Screen name (PRINT CLEARLY! You must be able to receive file attachments. Otherwise include $2 for shipment on floppy disk.):

Address (optional unless having shipped on disk):

Phone number (optional):

File type (GIF, JPEG, or BMP. GIF recommended):

Extras (Exact personalized info you want printed on scan):

Disk Format (if having mailed on a floppy): IBM or MAC

Payment method (Cash, Check, Money Order, or Visa/Mastercard):
Please make checks payable to Cyber Services.

Credit Card # (credit card orders only):

Expiration date:
Don't forget to include the $1 processing fee if your paying with your credit card.

Do you want the FREE GIFT? Yes or No (circle one)
-Web Page(s) in our "Internet Date-Site" (under construction). You can have a page for yourself, a page for your car, and a page for your cat! Be sure to indicate where you want your page (F4M, M4F, F4F, F4M, or Couples) and which of the following info you want on your page (print clearly): State and Town, email address, year or birth, physical description, quote/message (under 30 words please). Please indicate which photos you want on your page (if any) if you don't want them all to be displayed. If your want your nude/erotic photos displayed in our erotic image gallery YOU MUST include a signed statement that your are over 18 years of age or older and give us

consent to display your nude/erotic photo, and be sure to tell us if your want it displayed with your info or anonymously.

Mail the above information and photos with payment to:

Cyber Services
2852 Willamette St. #131
Department 1
Eugene, OR 97405

Orders sent overnight will be given first priority.

Erotic/Nude photo's will be accepted providing everyone in them is of legal age.

Questions? Call (541)744-5718

Please help our small business grow by sharing this info with someone you think could use it.

Thank You!

(onmEpM)

480. Re: Which 10m Pre-amp????

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5e1qvh$1rcq@sol.caps.maine.edu>
Source record: 19834

In article <33025782.2DD@amsat.org>, n0nsv@amsat.org wrote:
>I'm seeking advice on Pre-amps for 10m Satellite Operations. Currently,
>I'm using a Gap Challenger for my 10m downlink antenna on Mode-A. (RS-10
>& RS-15) I like to find a good low noise Pre-amp to improve things a
>bit.
>
>Any suggestions?

I use a Mirage in shack model preamp for RS-15 and extreme eastern passes of RS-10 when I am trying to work the UK. Real nice, GAsFET (proper spelling?) and rugged..(steel case). Has a nice remote jack that I have connected to the footswitch. Key the transmitter, the preamp shuts off..etc.. I would say that it does bring in A lot of noise as well, but that is a coax and a house full of RF! Without it, England is impossible for me....

Jason N1RWY FN54NP
baack@maine.edu

481. Opinions on AZ-El rotor models?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5e1vbdala1@lscruz.scf.lmms.lmco.com>
Source record: 19835

What is the best AZ-EL rotor? Any opinions?

Allen WB6RWU

482. Need Packet Radio info in Houston

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: cmainz@aol.com
Message-ID: <19970214160701.LAA18030@ladder01.news.aol.com>
Source record: 19836

I am a Ham operator working as a maritime mobile. I'm looking for information on Packet Radio (ie benefits, costs etc). I am currently staying in NW Houston and would like to make a local contact. I will be leaving on an extended sea trip later this year. Thanks,

483. who did i work on mir uhf ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: Steve <kd6fyk@wco.com>
Message-ID: <3304E941.643F@wco.com>
Source record: 19837

friday,0500z you were in minn. i was mobile in cm88

thanks steve

484. For Sale - FT726R

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <3304F28D.150E@ibag.com>
Source record: 19838

I have a Yaesu FT726R, mint, currently in use, for sale. Just bought a 736 replacement. 726 has the 144/430/440 modules, plus the sat duplex module. If you want to hear it, e-mail for sked on AO10 or other sat. Asking $800.

Rick T. rickw7rt@ibag.com or rickw7rt@aztec.asu.edu

485. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <3305272A.379A@cyberramp.net>
Source record: 19839

http://www.cyberramp.net/~rnewland

486. Re: Need Packet Radio info in Houston

Newsgroup: rec.radio.amateur.space
Date: 1997-02-14 00:00:00 UTC
From: AC6V <#AC6V@ix.netcom.com>
Message-ID: <33051736.6E55@ix.netcom.com>
Source record: 19840

CMAINZ wrote:
>
> I am a Ham operator working as a maritime mobile. I'm looking for
> information on Packet Radio (ie benefits, costs etc). I am currently
> staying in NW Houston and would like to make a local contact. I will be
> leaving on an extended sea trip later this year. Thanks,

--
Hi Houston -- there is a great packet tutorial by Larry Kenney, WB9LOZ
at URL:

http://itg-pc1.acns.nwu.edu/~odenbach/classes/c96/packetradio.txt
Also check the packet links at URL:
http://pw2.netcom.com/~ac6v/pagew.html#D

Hope this helps
73
Rod
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V (WAZ 10M SSB #118)

487. Re: who did i work on mir uhf ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: wyatt6gun@aol.com
Message-ID: <19970215033900.WAA20632@ladder01.news.aol.com>
Source record: 19841

Q5 S9 Next station..........

Wyatt

488. Decoder for UO-22

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: Dana Irvin <irvind@seds.lpl.arizona.edu>
Message-ID: <33057678.22DB@seds.lpl.arizona.edu>
Source record: 19842

Does anyone know of a program (w/ or w/o source code) for Linux that can
decode uo-22 data? If so, please e-mail me and tell me where I can get
my hands on it. Thanks

--

| Dana Irvin
| UA-SEDS
| 520.695.0676
| E-mail: irvind@seds.org
| URL: www.seds.org/~irvind
|
| "There is no off position
| on the genius switch."
| - David Letterman
----

489. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5e41nr$13f$1@news.via.nl>
Source record: 19843
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

William Vynck <RACO@ping.be> wrote:

>The official Kenwood TH-79E/A modifications can be found on my homepage.
>Those are JPG files that you can download and vieuw with a picture
>viewer.

>Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz

Be aware that these file contain obvious errors. Look at table 2: the E and E3 units seem to be electronically identical, yet their frequency coverages differ.
Mmmm.... Wonder what else is wrong!

490. Mir news

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: Adriaan <pe1khp@pi.net>
Message-ID: <33066170.5B29@pi.net>
Source record: 19844

MIRNEWS.344 10 FEBRUARY 1997

Launch Soyuz-TM25: This ship with on board the reliefcrew for the 23d Main Expedition (M.E.) to MIR and the German astronaut Reinhold Ewald, who will in cooperation with the Russians execute the MIR-97 program, has been launched from Baykonur on 10.02.1997 at 14hrs 09mins 30secs UTC. The callsign of the crew is Sirius (so Sirius-1, 2 and 3). The commander is Tsibliyev, now making his 2d flight in space and the board-engineer is Lazutkin who did not fly thusfar.

Progress-M33: There must always be a free docking port for the new ship. Before the flight of the Soyuz-TM24 the Russians undocked the Pr-M as soon as they were sure that the systems of the new ship were functioning normally, so at abt 1 day after launch. Some orbits after the undocking the freighter entered the earth's atmosphere and burnt up. To begin with the Pr-M32 the Russians changed this routine and the Pr-M32 flew autonomously until 18.08.96, redocked to the complex and left MIR and burnt up in the atmosphere on 20.11.1996. The Progress-M33 separated from MIR's aft (Kvant-1 +X axis) on 6.02.1997 at 12hrs 13mins 56secs and will make an autonomous flight until the beginning of March '97.

Soyuz-TM24: This ship had been docked at the forward dockingport (transitionsection - P.Kh.O. -X axis). This port has been chosen for the docking of the S-TM25. In the future the Russians refrain from the use of the approach system Kurs in Soyuz-TM and Progress-M ships. This decision has been taken due to problems about the delivery of that systeem between RKK Energiya and the factory NPO Kharton in Kharkov, Ukraine.
On 7.02.1997 at 16hrs 28mins 01secs the S-TM24 separated from MIR and manned by Korzun, Kaleri and Linenger made an autonomous flight concluded by the docking of that ship at the aft (Kvant-1 +X axis) dockingport that day at 16hrs 51mins 27secs.
Undoubtedly this has been quite an experience for Jerry Linenger who came by Atlantis and will return with the shuttle.

Dockings of S-TM ships will be executed manually by the commander and those of unmanned Pr-M freighters will be done by the crew on board MIR by the use of the Remote Control system TORU.

ETA (expected time of arrival) of Soyuz-TM25 at MIR:

S-TM25 has to dock to the MIR's forward (P.Kh.O. -X axis) docking port on 12.02.1997 at abt. 1550UTC. This is 3 minutes

after the first pass for both objects over Western Europe. During this pass (1541-1547UTC) we can expect communications about the approach on 121.750 mc FM-N and the 143.625 mc.

Chris v.d. Berg, NL-9165 A-UK3202
---

491. ARLK013 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk013.1997@arrl.org>
Source record: 19845
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK013
ARLK013 Keplerian data

ZCZC SK13
QST de W1AW
Keplerian Bulletin 13 ARLK013
From ARRL Headquarters
Newington, CT February 15, 1997
To all radio amateurs

SB KEP ARL ARLK013
ARLK013 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-82
1 24719U 97004A 97045.52083333 .00000159 00000-0 45782-6 0 140
2 24719 28.4702 100.6874 0005320 181.5767 9.9532 14.91267925 463
HST
1 20580U 90037B 97044.21359034 .00000516 00000-0 35704-4 0 9248
2 20580 28.4689 109.0959 0006249 173.0551 187.0079 14.91170054174590
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97045.32262042 .00000033 00000-0 19889-4 0 3170
2 18129 82.9265 329.5547 0010559 197.0853 162.9948 13.72374301483389
UO-11
1 14781U 84021B 97043.97426990 .00000098 00000-0 24303-4 0 9505
2 14781 97.8202 30.2707 0012637 43.8790 316.3421 14.69523312693015
RS-12/13
1 21089U 91007A 97045.44921681 .00000006 00000-0 -90486-5 0 9569
2 21089 82.9200 9.6679 0028040 281.2392 78.5613 13.74076800302305
UO-14
1 20437U 90005B 97043.19802118 .00000061 00000-0 40389-4 0 02519
2 20437 98.5249 127.5303 0010314 214.7152 145.3357 14.29949319368351
RS-15
1 23439U 94085A 97042.92639876 -.00000039 00000-0 10000-3 0 02023
2 23439 64.8125 355.3905 0152887 155.9902 204.8233 11.27526163087811
```

```
AO-16
1 20439U 90005D 97042.79718184 .00000010 00000-0 20539-4 0 00501
2 20439 98.5447 129.8068 0010529 218.0281 142.0160 14.29997933368311
DO-17
1 20440U 90005E 97043.07546874 -.00000043 00000-0 10932-6 0 00606
2 20440 98.5477 130.8554 0010751 213.9582 146.0893 14.30140216368383
WO-18
1 20441U 90005F 97045.23942938 -.00000001 00000-0 16425-4 0 490
2 20441 98.5476 132.8938 0011509 208.7983 151.2559 14.30108983368696
LO-19
1 20442U 90005G 97043.18770193 .00000053 00000-0 37052-4 0 00490
2 20442 98.5481 131.4825 0011561 215.6951 144.3459 14.30221958368424
FO-20
1 20480U 90013C 97045.23442903 -.00000047 00000-0 -23881-4 0 9426
2 20480 99.0269 30.0327 0540113 295.9974 58.6443 12.83236271328935
AO-21
1 21087U 91006A 97043.36447460 .00000093 00000-0 82657-4 0 7870
2 21087 82.9400 143.9593 0033956 257.9066 101.8284 13.74577588303003
UO-22
1 21575U 91050B 97043.19644540 .00000034 00000-0 25673-4 0 07588
2 21575 98.3184 108.0538 0007102 274.3992 85.6379 14.37056577292530
KO-23
1 22077U 92052B 97043.11121759 -.00000037 00000-0 10000-3 0 06459
2 22077 66.0771 47.1194 0014385 241.7284 118.2279 12.86300837211666
KO-25
1 22828U 93061F 97045.25246832 .00000025 00000-0 27403-4 0 5137
2 22828 98.5526 122.4326 0009601 225.0689 134.9712 14.28168134144663
IO-26
1 22826U 93061D 97043.71712453 .00000001 00000-0 17817-4 0 5346
2 22826 98.5547 120.8543 0008437 250.7348 109.2926 14.27826327176324
AO-27
1 22825U 93061C 97043.17849972 .00000048 00000-0 37190-4 0 05394
2 22825 98.5598 120.1168 0007663 251.3364 108.6996 14.27717474176232
FO-29
1 24278U 96046B 97043.20691971 -.00000039 00000-0 -58944-5 0 570
2 24278 98.5596 101.3925 0351949 149.9190 212.2690 13.52628908 24228
Mir
1 16609U 86017A 97046.07964846 .00002206 00000-0 32504-4 0 544
2 16609 51.6524 339.7911 0011880 75.2060 285.0258 15.60480679627964

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
February 18, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

492. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <33060A26.19E1@ping.be>
Source record: 19846
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

Ask Kenwood for it, those are official papers from Kenwood
You know better ? Work for Kenwood.

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

493. Sound Blaster = easy WEFAX FAX SSTV RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-02-15 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc1b89$25fdf0c0$0101a8c0@gcauchi.keyworld.net>
Source record: 19847
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Hello... Brian here!

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to receive WEFAX, FAX, SSTV and RTTY.

You can also transmit monochrome FAX and SSTV, with the current version of my FTV software.

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside this software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
Baudot (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

Registration promotes the further development of this software and entitles the user to future upgrades paying only for delivery expenses, if any.

Finally, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

494. What is NORAD 24706?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: bd703@scn.org
Message-ID: <E5o9nt.FK7@scn.org>
Source record: 19848

Although this object probably isn't amateur related, is there someone
who can tell me what NORAD # 24706 is?

It is also refered to as 1996-073C.

A friend of mine noticed the keps for it but we can't find out what satellite
it is.

Thanks in advance

Kerwin
--
****
* They know who you are...
bd703@scn.org * They know where you live...
* And there's no doubt about it!

495. Wanted: Dual Band HT or Mobile

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: Aaron Jarvis <kb9moj@si-net.com>
Message-ID: <01bc1bcb$29c94aa0$2920c4d0@kb9moj>
Source record: 19849

I would like a dual band ht or mobile. It must be in fair condition (
everything working properly) . The radio must have crossband repeat and
simultanious recieve. I will probably trade other Amatuer Equitment I have
but will maybe provide some cash.
Thanks if intrested please e-mail me
kb9moj@si-net.com

KB9MOJ

496. Re: Opinions on AZ-El rotor models?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: bob2594245@aol.com
Message-ID: <19970216152800.KAA15878@ladder01.news.aol.com>
Source record: 19850

yaesu G-5400b but its expensive. 73, bob

497. INMARSAT Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: patricio@deltanet.com
Message-ID: <5e7pro$t8l$2@news05.deltanet.com>
Source record: 19851
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Where are the INMARDAT Satellites located? What are the frequencies in use?
Is the signal strong?

498. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: Bob Nielsen <nielsen@primenet.com>
Message-ID: <330764B1.4510C6FD@primenet.com>
Source record: 19852
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

Look carefully at Table 2: E receives 144-146 and 430-440, while E3
receives 67-180 and 400-512 MHz.

It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
models, which should make Newt Gingrich happy.

Page 16 appears to be missing from the JPG images.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
AX.25: w6swe@wb7tls.az.usa.noam
http://www.primenet.com/~nielsen

499. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <33079110.3BAB@ping.be>
Source record: 19853
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bob Nielsen wrote:
> Look carefully at Table 2: E receives 144-146 and 430-440, while E3
> receives 67-180 and 400-512 MHz.
>
> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
> models, which should make Newt Gingrich happy.
>
> Page 16 appears to be missing from the JPG images.
>
> Bob
>
> --
> Bob Nielsen Internet: nielsen@primenet.com
> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> AX.25: w6swe@wb7tls.az.usa.noam
> http://www.primenet.com/~nielsen

I checked my pages and indeed we don't have page 16
What i don't understand is that all pages i have are just like i
received from Kenwood and they are one part.
No way they could "forget" page 16, i think it's a mistake in numbering
the pages sins page 15 and 17 are one.

I ask them for it and let you know.

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

500. Kenwood TH-79A Remote Function ???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: "Mark S. Conway" <mconway@mail.nantucket.net>
Message-ID: <3307C19A.4273@mail.nantucket.net>
Source record: 19854
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

I would like to use my 79A as the remote to my 733A.

I followed all the directions in the Appnotes. I power on while holding
PTT and MR and nothing happens.

Any suggestions would be great.

Thanks, Mark, N1XYY

501. Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3307C9B9.35C8@geocities.com>
Source record: 19855
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Anyone wishing to register opposition for the ARRL/AMSAT submission should send a brief e-mail message to wrc97@fcc.gov. The Subject line should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible allocation proposal," will be included in the public record and will help to drive home the point that there is broad-based approval to well conceived 2 metere sharing proposals. It ought to be clear to the FCC the public good is poorly served by allowing hams exclusive use of these valuable
frequencies.

Please note! The proposals the League opposes are not FCC proposals, nor are
they endorsed by any other branch of the government. They are industry proposals. The League's objective is to falsely demonstrate there is broad citizen opposition to the industry proposals.

Additional arguments or evidence also is welcome. Important! Comments should
reach the FCC no later than March 4, 1997!

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

502. r0mir qsl info

Newsgroup: rec.radio.amateur.space
Date: 1997-02-16 00:00:00 UTC
From: Dave Norton <g7ocy@khn.foobar.co.uk>
Message-ID: <RfEzzJA6ovBzEwPq@foobar.co.uk>
Source record: 19856

Hi
my friend Matt G7OBR has just worked Valery on R0MIR fm simplex and he
would like to get a qsl card.
Anyone know the info ?

Thanks in advance

Dave
Dave Norton - G7OCY
g7ocy@khn.foobar.co.uk

503. Re: Sedsat & Cesar1

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Chris Lewicki <chrisl@gamma1.lpl.arizona.edu>
Message-ID: <5e8ogf$d6q@news.ccit.arizona.edu>
Source record: 19857

Jordi Soriano Goma <jsoriano@voltor.upc.es> wrote:
: Anyone know when will be launched Sedsat and Cesar1 satellites?

SEDSAT is currently scheduled for launch in the summer of 1998 - July I think.

--

Christopher A. Lewicki KC7NYV 520.621.4662 Maintainer of SEDS.LPL.Arizona.EDU
Chair, Students for the Exploration and Development of Space (SEDS-USA)
"Watch the stars, and from them learn." - Albert Einstein

504. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3307daae.4955035@news.cyberhighway.net>
Source record: 19858
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

<Burt supports the theft of the 144, 222, and 440 bands by industry>

>Additional arguments or evidence also is welcome. Important! Comments
>should
>reach the FCC no later than March 4, 1997!

>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

Yeah, there's a picture of you and Slick Willie on there. So how much
are you getting paid to lobby against the best interests of the hobby,
Burt? You're being a bit transparent, wouldn't you say?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

505. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: hduff@ica.net
Message-ID: <3308565f.0@lightning.ica.net>
Source record: 19859
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

Mike <mco@terraworld.net> wrote:

>Kenwood TR-751-A All Mode Tranciever. Excellent base or mobile rig. This
>radio has never been mobile, and comes from my non-smoking shack! Looks
>like brand new!

>Currently set at 25 w. output, capable of 40w.

>Original Box and Manual. Mobile bracket is still in original plastic.
>I just bought a Kenwood 711-All mode, and must sacrifice.
>$500.00 Firm, Shipping included. Money Order Only.

>Mike Cobb, KB0QMF ph.# 316-421-6139 or e-mail reply.

$500 FIRM ???

Hardly a sacrifice !

506. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5e9pvonbn1@tilde.csc.ti.com>
Source record: 19860
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3307C9B9.35C8@geocities.com>, burtfisher@geocities.com says...

>......It ought to be clear to the FCC
>the public good is poorly served by allowing hams exclusive use of
these
>valuable
>frequencies......
>
>
.....The League's objective is to falsely demonstrate there is
>broad citizen opposition to the industry proposals......
>~~~~~~`
> Burt, would you explain why Hams shouldn't continue exclusive
use of these "valuable" frequencies and how Hams will benefit from
giving them up. It is not "clear" to me. Are you familiar with
the freq plan for P3D?

> I am not a fan of the ARRL, but I don't see any reason why they
would "falsely" demonstrate our opposition to losing "valuable"
frequencies. Please explain your reasons for thinking we should
write the FCC and complain about the ARRL opinion.

Ken Durham K5MBV AMSAT member mbv@ti.com and mbv@flash.net

507. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc1cec$689b5080$b8a1dece@dale>
Source record: 19861
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt,

I followed your instructions, but I replaced "oppose" with "support".

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Burt Fisher <burtfisher@geocities.com> wrote in article
<3307C9B9.35C8@geocities.com>...
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will

508. Mir overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: history67@aol.com
Message-ID: <19970217171701.MAA22391@ladder01.news.aol.com>
Source record: 19862

Can someone tell me where there might be a good link that predicts Mir overpasses? I had one, but lost it when harddrive failed.

Thanks
N1WSC
Sean
History67@aol.com

509. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: barney@google.com
Message-ID: <5ea6e0$ljg@news1.mnsinc.com>
Source record: 19863
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

WHY do you ONLY want to give away 2 meters, Burtie?

Why not get all the hams to write the FCC and recommend that they give away ALL of our spectrum?

I am sure the readers of this newsgroup are already dashing off letters by the DOZEN to the FCC in response to your great message, since we all follow you like the pied piper!

Burt Fisher <burtfisher@geocities.com> whistled a happy tune like:

|>Anyone wishing to register opposition for the ARRL/AMSAT submission
|>should send a brief e-mail message to wrc97@fcc.gov. The Subject line
|>should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
|>effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
|>allocation proposal," will be included in the public record and will
|>help to drive home the point that there is broad-based approval to well
|>conceived 2 metere sharing proposals. It ought to be clear to the FCC
|>the public good is poorly served by allowing hams exclusive use of these
|>valuable
|>frequencies.

|>Please note! The proposals the League opposes are not FCC proposals, nor
|>are
|>they endorsed by any other branch of the government. They are industry
|>proposals. The League's objective is to falsely demonstrate there is
|>broad citizen opposition to the industry proposals.

|>Additional arguments or evidence also is welcome. Important! Comments
|>should
|>reach the FCC no later than March 4, 1997!
|>#===============#===#
>	Burt Fisher	Teacher of idiocy, broadcasting and electronics
>	Amateur call	South Dennis, Ma. (Cape Cod)
>	K1OIK	http://www.geocities.com/WallStreet/5169
>#===============#===#
>	Visit my WWW site, it stinks like no other k1oik@bozonet.com
>#===#

510. re: DISH ROTATOR

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: philip hanlon <hanlo57@aol.com>
Message-ID: <01bc1d0a$a52e88a0$d2947dc2@default>
Source record: 19864

I am looking for information on EZ/AZ rotators,as I need same for steering
a 90cm
dish between Meteosat and Goes.It does not need to be computer controlled.
Any information would be appreciated.
--
Phil - Hanlo57@aol.com U.K. area

511. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: "John M. Yellenic" <yellenic@epix.net>
Message-ID: <3308B0DE.5B96@epix.net>
Source record: 19865
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will
> help to drive home the point that there is broad-based approval to well
> conceived 2 metere sharing proposals. It ought to be clear to the FCC
> the public good is poorly served by allowing hams exclusive use of these
> valuable
> frequencies.
>
---SNIP---

> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

I'm a professional educator of electronics and computer service technology. I've only had my ham ticket for about a month now, but I'm learning a lot about this fascinating field. In fact, it was a few of my students that got my interest up in ham radio, and I've done what I can to promote it to my other students. I view it as a national resource... and also realize that it is fast becoming an endangered resource!

Reading these newsgroups has helped me have a better understanding of not only the technical aspects of the field, but the kind of people that are involved in it. The vast majority of the participants in these groups are extremely helpful, and willing to do anything they can to promote amateur radio... proud followers of The Amateur Code by W9EEA!

I've also learned that there are a small number of participants that prefer to use the newsgroups for their own pleasure... attempting to degrade the service and those participating in it. No doubt these types have other interesting diversions when their computers and rigs are down, such poking sticks into hornet nests to observe the reaction. I've been around long enough to know that this type of person will continue to provoke a response until they are ignored long enough. Even

the hornets learn this lesson!

Perhaps the formation of a new newsgroup, such as rec.radio.amateur.whiners-cryers is in order, so that these types can have their own little playground and stop spamming the groups that are helpful!

Also... please don't think anyone identifying himself as a "teacher" speaks for everyone in that profession. Hopefully you too have been around long enough to realize that there will always be a few dog-eared cards in the deck. Fortunately, they are easy enough to identify.

Obviously, I'm opening a path for flames by posting my opinion here... and from the childish battles I've read on these newsgroups, I certainly expect a few. I'll just ignore them. Then the flamethrowers will find another nest to poke.

My two cents...

John - N3YPR

512. AZ/EL rotor..Which one is best???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5ead01kmo1@lscruz.scf.lmms.lmco.com>
Source record: 19866

Boy these articles don't stay here very long, do they?
Which AZ/EL rotors do satellite users consider to be the best?

73, Allen WB6RWU

513. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308E04E.63AB@geocities.com>
Source record: 19867
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Ken Durham wrote:
`

> > Burt, would you explain why Hams shouldn't continue exclusive
> use of these "valuable" frequencies and how Hams will benefit from
> giving them up. It is not "clear" to me. Are you familiar with
> the freq plan for P3D?

Hams use 2 meters for exactly what that serves the public in a
MEANINGFUL
way?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

514. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308DF7C.3F5E@geocities.com>
Source record: 19868
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Barney wrote:
>
> WHY do you ONLY want to give away 2 meters, Burtie?

Actually you are correct. Hams need nothing except to SERVE THEMSELVES.

> Why not get all the hams to write the FCC and recommend that they give
> away ALL of our spectrum?

Great!

> I am sure the readers of this newsgroup are already dashing off letters
> by the DOZEN to the FCC in response to your great message, since we all
> follow you like the pied piper!

Actually you all follow each other like the Pied Piper. Listen to a
contest.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

515. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308E218.57CD@geocities.com>
Source record: 19869
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

John M. Yellenic wrote:

> I'm a professional educator of electronics and computer service
> technology.

So am I.
Look at my WWW page and see my students and their work. The boy that is pictured there got his ham license for ONE reason only, to get extra credit points I give if you get a ham license. He refused free equipment and wants to give his call back.

I've only had my ham ticket for about a month now, but I'm
> learning a lot about this fascinating field.

What is so interesting?

I view it as a national
> resource... and also realize that it is fast becoming an endangered
> resource!

It is a vast wasteland.

> The vast majority of the participants in these
> groups are extremely helpful, and willing to do anything they can to
> promote amateur radio... proud followers of The Amateur Code by W9EEA!

Most of them are clones, will help rarely and most sit on their butts.

> I've been around long enough to know that this type of person will
> continue to provoke a response until they are ignored long enough. Even
> the hornets learn this lesson!

Hams can not ignore.

> Also... please don't think anyone identifying himself as a "teacher"
> speaks for everyone in that profession.

No you do not. If you find ham radio interesting you will love watching water freeze.

, I certainly
> expect a few. I'll just ignore them. Then the flamethrowers will find
> another nest to poke.

If you ignore them, why is there a post about what you will ignore?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

516. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308ead7.710311641@news.erinet.com>
Source record: 19870
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 14:26:23 -0500, "John M. Yellenic"
<yellenic@epix.net> wrote:

>Burt Fisher wrote:
>>
>> Anyone wishing to register opposition for the ARRL/AMSAT submission
>> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
>> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
>> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
>> allocation proposal," will be included in the public record and will
>> help to drive home the point that there is broad-based approval to well
>> conceived 2 metere sharing proposals. It ought to be clear to the FCC
>> the public good is poorly served by allowing hams exclusive use of these
>> valuable
>> frequencies.
>>
>---SNIP---
>
>> #===============#===#
>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> #===============#===#
>> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
>> #===#
>
>I'm a professional educator of electronics and computer service
>technology. I've only had my ham ticket for about a month now, but I'm
>learning a lot about this fascinating field. In fact, it was a few of
>my students that got my interest up in ham radio, and I've done what I
>can to promote it to my other students. I view it as a national
>resource... and also realize that it is fast becoming an endangered
>resource!

THUS we see the difference between a teacher and a Burt!

517. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F03D.7E92@mindspring.com>
Source record: 19871
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> Hams use 2 meters for exactly what that serves the public in a
> MEANINGFUL
> way?

Come on, Burt....
Let me see ---- public service events (bike races, marathons, sporting events, Special Olympics, APRS at the real Olympics in Atlanta, etc), search and rescue communications (whether on foot, in vehicles, or in the air), coordination of communications for emergency management agencies (from city/municipal to FEMA), and what about hurricanes, tornadoes, wildfires.....

Is that enough or do you need me to waste more bandwidth trying to convince you of something the rest of us acknowledge.

Doug, KM4HY
--
****
* *
* The Law is the common man's best protection. *
* "http://www.mindspring.com/~km4hy/km4hy.htm" *
* *
****

518. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F0EC.57A0@mindspring.com>
Source record: 19922
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt,

I'll be checking the callsign database with bated breath waiting for your call to come open after you resign it......can't imagine why you would want to continue to be identified with such a bunch of losers like us!!

Doug, KM4HY

519. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F206.5667@mindspring.com>
Source record: 19923
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> John M. Yellenic wrote:
>
> > I'm a professional educator of electronics and computer service
> > technology.
>
> So am I.
> Look at my WWW page and see my students and their work. The boy that is
> pictured there got his ham license for ONE reason only, to get extra
> credit points I give if you get a ham license. He refused free equipment
> and wants to give his call back.
>
> I've only had my ham ticket for about a month now, but I'm
> > learning a lot about this fascinating field.
>
> What is so interesting?
>
> I view it as a national
> > resource... and also realize that it is fast becoming an endangered
> > resource!
>
> It is a vast wasteland.
>
> > The vast majority of the participants in these
> > groups are extremely helpful, and willing to do anything they can to
> > promote amateur radio... proud followers of The Amateur Code by W9EEA!
>
> Most of them are clones, will help rarely and most sit on their butts.
>
>
> > I've been around long enough to know that this type of person will
> > continue to provoke a response until they are ignored long enough. Even
> > the hornets learn this lesson!
>
> Hams can not ignore.
>
>
> > Also... please don't think anyone identifying himself as a "teacher"
> > speaks for everyone in that profession.
>
> No you do not. If you find ham radio interesting you will love watching

> water freeze.
>
> , I certainly
> > expect a few. I'll just ignore them. Then the flamethrowers will find
> > another nest to poke.
>
> If you ignore them, why is there a post about what you will ignore?
>
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

STILL WAITING FOR YOUR CALL TO COME OPEN, BURT!!

Doug, KM4HY
--
****
* *
* The Law is the common man's best protection. *
* "http://www.mindspring.com/~km4hy/km4hy.htm" *
* *
****

520. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308eb1d.710381544@news.erinet.com>
Source record: 19924
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 17:56:24 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>John M. Yellenic wrote:
>
>> I'm a professional educator of electronics and computer service
>> technology.
>
>So am I.
>Look at my WWW page and see my students and their work. The boy that is
>pictured there got his ham license for ONE reason only, to get extra
>credit points I give if you get a ham license. He refused free equipment
>and wants to give his call back.

Doesn't say very much about your example, does it Burt? Are you
telling us that you are such a poor teacher and such a poor example,
that you can not guide your students to the more interesting,
productive areas of ham? Please don't say there are none, you and the
rest of us know that that is an outright lie. Of course, if you truly
believe there are NO redeeming features in amature radio, then that
would prove that you are not a good teacher, or at the very least,
lack the knowledge and drive to be a "good" teacher. All that said,
I'm not stating that you are not a good teacher, like I said, it could
simply be that you are spouting bilge and nonsense for some strange
reason known only to yourself.

>It is a vast wasteland.

If your above example shows your ability to motivate our youth, could
it be possible that the same could be said of your classroom?

>Hams can not ignore.

Why should hams ignore? I, personally feel, that is one of the
problems in ham radio. We ignore TOO much. You yourself have
mentioned this. Please make up your mind on how you feel it should
be.

>No you do not. If you find ham radio interesting you will love watching
>water freeze.

You have NO room to talk, Burt. YOU are guilty of being exactly what
you accuse others of being. You are still the UTH (remember that
one), you just use internet instead of ham. I find this interaction
interesting, but it is definitely more boring than talking to someone

live, on air. If this is you idea of interesting, then maybe you'd find watching water thaw fascinating. A "typical ham" (your definition) is still a "typical ham" whether it be via radio or internet>

521. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308ed9a.711018639@news.erinet.com>
Source record: 19925
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 17:45:16 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>Actually you all follow each other like the Pied Piper. Listen to a
>contest.

Interesting point Burt. So what percentage of hams do you think
contest? And try to give an accurate estimate, NOT a made up figure.
I ask because I see the word "all" up there again, as I do in many of
your posts.

522. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <3308F5F6.4380@terraworld.net>
Source record: 19926
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

Hugh Duff wrote:
>
> Mike <mco@terraworld.net> wrote:
>
> >Kenwood TR-751-A All Mode Tranciever. Excellent base or mobile rig. This
> >radio has never been mobile, and comes from my non-smoking shack! Looks
> >like brand new!
>
> >Currently set at 25 w. output, capable of 40w.
>
> >Original Box and Manual. Mobile bracket is still in original plastic.
> >I just bought a Kenwood 711-All mode, and must sacrifice.
> >$500.00 Firm, Shipping included. Money Order Only.
>
> >Mike Cobb, KB0QMF ph.# 316-421-6139 or e-mail reply.
>
> $500 FIRM ???
>
> Hardly a sacrifice !

I've had fun with the thread that's come since posting this rig, but I'm starting to get a little tired of Nutless Idiots such as yourself, littering up the newsgroups and destroying other people's ads. It's okay though, because I have a growing list of boneheads I'm going to be watching very closely for. I'm actually quite anxious to see YOUR next attempt to sell an item. I assure you that there will be more attention drawn to the outlandish prices instead of the equipment you've posted.

Have a fine evening,

Mike

523. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <3308F3B6.7248@terraworld.net>
Source record: 19927
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

Hugh Duff wrote:
>
> Mike <mco@terraworld.net> wrote:
>
> >Kenwood TR-751-A All Mode Tranciever. Excellent base or mobile rig. This
> >radio has never been mobile, and comes from my non-smoking shack! Looks
> >like brand new!
>
> >Currently set at 25 w. output, capable of 40w.
>
> >Original Box and Manual. Mobile bracket is still in original plastic.
> >I just bought a Kenwood 711-All mode, and must sacrifice.
> >$500.00 Firm, Shipping included. Money Order Only.
>
> >Mike Cobb, KB0QMF ph.# 316-421-6139 or e-mail reply.
>
> $500 FIRM ???
>
> Hardly a sacrifice !

Hehe.... okay... ASKING $500....

Make an offer or keep yer flap shut!

524. Re: Mir overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Mike <mco@terraworld.net>
Message-ID: <33090403.5E17@terraworld.net>
Source record: 19928

History67 wrote:
>
> Can someone tell me where there might be a good link that predicts Mir
> overpasses? I had one, but lost it when harddrive failed.
>
> Thanks
> N1WSC
> Sean
> History67@aol.com

Hi Sean,

The best tracking progam I've found for MIR and many other Satellites is called Logsat for Windows. It can be downloaded via the AMSAT website at:

http://www.amsat.org

Good luck,

Mike

525. Oppose OR Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <33088A69.600E@erols.com>
Source record: 19929
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Re what was previously posted regarding the ARRL/AMSAT position
on this issue. I would recommend that individuals do their own
research
prior to sending the suggested response. The poster points out that:

"Please note! The proposals the League opposes are not FCC proposals,
nor are they endorsed by any other branch of the government. They are
industry proposals. The League's objective is to falsely demonstrate
there is broad citizen opposition to the industry proposals."

I would ask myself - when did industry ever propose to GIVE any new
frequencies to the Amateur community? As far as "broad citizen
opposition to the industry proposal", the Amateur Community will
generally have to be its own best advocate. We know the value of
the 2 Meter band during times of stress and emergency, the general
public is sometimes quick to forget the acts of service.

The poster also states that your "simple statement" will:

".....be included in the public record and will help to drive
home the point that there is broad-based approval to well conceived
2 Meter sharing proposals."

He appears to be asking you the amateur community to use the same
"simple statement" to support the view favored by industry. Somehow
the logic escapes me - when has the Amateur not lost out in the end
to every "well conceived sharing proposal"?

The poster then wraps up with the following:

"It ought to be clear to the FCC the public good is poorly served
by allowing hams exclusive use of these valuable frequencies."

Pay close attention to that phrase "valuable frequencies"! Obviously
they are of financial value to someone or industry would never have
come up with this proposal. This is $$$$$ speaking - NOT service to
the community, not public relations, and certainly not the voice of
a broad based citizenry.

Anyone wishing to register SUPPORT for the ARRL/AMSAT submission
should send a brief e-mail message to wrc97@fcc.gov. The Subject line
should say "Reference No. ISP-96-005 IWG-2A." A simple statement to
this
effect:

"I fully support the ARRL/AMSAT opposition to the NVNG MSS flexible allocation proposal." This might be followed by a BRIEF example of a situation wherein the Amateur Service and the Two Meter band was of value to the community in times of stress/emergency.

As noted by the posting, your view -- supporting OR dissenting -- will be included in the public record and will help to demonstrate that there is support for your side of the question. Please do your own research, and don't get caught up in the rush towards "broad-based approval" of either side!

You know the value of the Two Meter Band and you know there are other groups who would like to market a few more Garage Door Openers or some other commercial (read $$$$$ making) devices. Once the frequencies
are gone, there may not be any others to share.

Comments must arrive at the FCC prior to 04 MAR 97

Please note, I apologize for the length of this posting. I was concerned
that the language in the original note ("oppose" the "opposition") might
be construed in the wrong way and do a dis-service to the Amateur Service.

73 Dave K7HMP
==========
SKYWARN Observer

(One small example of Two Meter service to the community! The trained observer on the ground, in radio contact with the NWS, is the primary source of ACTUAL tornado spottings/warnings! The fancy radar will only
tell you the right places to look.)
==========

526. Re: FS:2Meter All Mode TR-751-A Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Casey McCullough <askey@erols.com>
Message-ID: <3308DFBE.7ACF@erols.com>
Source record: 19930
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.swap,alt.radio.scanner

Mike,

As you can see from your replies, most hams like to drink.

Regards....hic

527. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <3309c583.501806@news.monad.net>
Source record: 19931
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>snip<

> The League's objective is to falsely demonstrate there is
>broad citizen opposition to the industry proposals.
>

Wrong here. If the League alerts its members to a threat to the amateur band allocations, and the membership (and Amateur community at large) agrees, it is by no means a "false" demonstration. It demonstrates that there is, in fact, STRONG, BROAD opposition to the sharing of these band segments with other sevices, as NO method of sharing has been proposed that would not severely interefere with existing services here, especially to the amateur satellite service. I encourage all those amateurs (who have not already done so) to file their comments OPPOSING the sharing of these band segments with other services.

Thanks.
-Bruce Beford, KA1ORB

528. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33081732.46F2@mailhost.cyberramp.net>
Source record: 19932

http://www.cyberramp.net/~eddie

529. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: Woody <rafman@kerrlake.com>
Message-ID: <3308FC8A.787B@kerrlake.com>
Source record: 19933
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bruce Beford wrote:
>
> On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
> <burtfisher@geocities.com> wrote:
>
> >snip<
>
> > The League's objective is to falsely demonstrate there is
> >broad citizen opposition to the industry proposals.
> >
>
> Wrong here. If the League alerts its members to a threat to the
> amateur band allocations, and the membership (and Amateur community at
> large) agrees, it is by no means a "false" demonstration. It
> demonstrates that there is, in fact, STRONG, BROAD opposition to the
> sharing of these band segments with other sevices, as NO method of
> sharing has been proposed that would not severely interefere with
> existing services here, especially to the amateur satellite service. I
> encourage all those amateurs (who have not already done so) to file
> their comments OPPOSING the sharing of these band segments with other
> services.
>
> Thanks.
> -Bruce Beford, KA1ORB

The "false" comes into the picture when the league acts "concerned".
Fact is we have lost, and will loose spectrum, since the idiots in
Newington have promoted this as a "hobby" and dropped the "service". Add
incentive licensing, contests and NTS and you have a good case to get
rid of the whole lot of 500,000! ARRL did not get concerned about
220-222, now the whole band plus 2m and 440? The ARRL stacks the deck,
no doubt, but it (ham radio) is over. I am 34 and have been in radio 24
years. I said 15 years ago, hams were becoming "bookmarks" for
commercial interest. I was right. I work in the communications business
and read industry periodicals. Just wait till you find out we will also
be loosing space on 40/75 meters! This is coming real soon.
Burt, I do not know how you could put "which president do you trust
more?"
on your page. This piece of crap, in lieu of a leader, sells everything
to highest bidder. That is why you support the idea of "sharing" and
"getting along" since Clinton has made it so. For those who read this:
RCR a commercial trade newspaper has reported the Clinton regime plans
to make $50 BILLION off of additional spectrum auctions the next 2

years. They also admit that wireless company officials went to "coffees" at the white house. Now you ask why does Burt support all this? Because by Clinton selling our spectrum, he will get more federal money to use at work along with a raise for nothing! Computers, the internet in every classroom, more education spending..get it? More utopian spending at Burt's place of work.

I do agree 90% of hams are boring and unskilled, but to get to the point, sharing the 2m band will lead to exclusive allocation and then what do you do? I will become an outlaw: guns, scanners, ham radios, cigarettes, etc.

I will see you on 144.410 no matter who "owns" it!
Chris

--
=-=-=-

530. HAM RADIO STUFF

Newsgroup: rec.radio.amateur.space
Date: 1997-02-17 00:00:00 UTC
From: TURK <johnf@mailhost.cyberramp.net>
Message-ID: <330889B8.3DF4@mailhost.cyberramp.net>
Source record: 19934

Visit this site for ham related files, projects, ham graphics, web graphics, computer info, scanner info, and more!
http://www.cyberramp.net/~johnf

531. FS: PK-96 TNC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: rubenc@iglou.com
Message-ID: <33090633.540@iglou.com>
Source record: 19935
Cross-posted to: rec.radio.swap,rec.radio.amateur.space

I have for sale an AEA PK-96 1200 & 9600 baud TNC.
Mint condx, 3 months old. Used it for satellite work on
UO22/KO23/25.

Cost over 200.00, sell for 150.00 + ship.

Charlie
KB8BWE
rubenc@iglou.com
kb8bwe@amsat.org

532. Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: history67@aol.com
Message-ID: <19970218014401.UAA20763@ladder01.news.aol.com>
Source record: 19936

Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and 437.925 as it passed overhead. (I used an online prediction calculator). This was my first attempt to listen to Mir, and I heard nothing on 70cm and only two tone bursts in a very regular pattern. I was listening on my Yaesu 530 hooked into a dual band ringo. I should have heard something, right? What am I not doing?

please tell me what I need to do [Not that :-( ] to listen in and maybe qso with them.

73 de N1WSC
Sean

History67@aol.com

533. Calif. Space & Ham Radio News

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Brian Webb <102670.1206@CompuServe.COM>
Message-ID: <5eb6lk$a6p$3@mhadf.production.compuserve.com>
Source record: 19937
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

ASTRONOMY/SPACE ALERT FOR SOUTHERN CALIFORNIA
Brian Webb, KD6NRP
Thousand Oaks, CA
E-Mail: 102670.1206@compuserve.com
Web Page: http://ourworld.compuserve.com/homepages/rawhide_home_page

1997 FEB 15 (Saturday) 06:50 PST

Hale-Bopp Becoming An Impressive Sight

At 05:00 PST this morning I went outside to take a look at comet Hale-Bopp. My observing location isn't the best; I'm only about 20 km from the outskirts of the San Fernando Valley and the light pollution is so bad that I can barely see the brightest patches of the Milky Way.

In spite of this, I immediately spotted the comet with the naked eye. It was about 15 degrees above the east-northeast horizon and looked like a fuzzy star.

It was almost as bright as the stars in the Big Dipper. I estimate the comet's brightness to be about magnitude +2.6.

Through my 10X50 binoculars I saw a small, bright nucleus. The tail was about 4/10ths of a degree long. Both the nucleus and tail were white with no detectable color.

Owens Lake Astronomy Expedition in Two Weeks

Two weeks from today I plan to take a trip to the eastern side of Owens Lake to assess the light pollution there. This site was chosen because it's twice as far from Los Angeles and Bakersfield than Mount Pinos and should be much darker.

My current employment situation may prevent me from driving to my preferred Hale-Bopp observing sites of central Nevada or Escalante, Utah. Thus, a closer alternative is needed and east Owens Lake may fit the bill.

I'm looking for others who may want to drive up to the site with me or meet me there. I'd be leaving the Thousand Oaks area at about 08:00 and arrive in the vicinity of the site at about 13:30. After a few hours of photographing satellites and deep sky observing, I'd pack up and head for home (I might consider getting a hotel room and staying until Sunday morning).

The roundezvous point will be the intersection of state routes 136 and 190 on the east side of the lake bed. Plan on being there at 15:30.

If you're interested in joining me, contact me at my e-mail address.

Next Vandenberg Launch in Six Weeks

The next scheduled launch from Vandenberg AFB is a refurbished Titan II (not a Titan IV, a Titan II) carrying a DMSP weather satellite. The launch time is unknown. Details regarding this event will be posted on my web page as they become available.

Minuteman III Launch Fiasco

Two weeks ago, several of us stayed up late for two consecutive nights to watch a Minuteman III launch from Vandenberg AFB. On the first night, we didn't see anything at the scheduled 00:01 PST launch time. A fellow ham radio operator made a telephone call and found out that there was a problem and the attempt had been scrubbed.

The next night was a repeat of the first. The 00:01 launch time came and went with nothing happening. The same fellow made a phone call and learned that there was the same problem as the night before (a malfunctioning radar in Hawaii) and the Minuteman III probably wasn't going to be launched.

At 00:15, my friend Bob (KE6YLD) and I left our observing site and drove home. I took a shower, removed my contact lenses, and settled into bed. At 00:42 I saw a bright glow through the bedroom window. The Air Force did launch the missile .... but they were 41 minutes late and we had no easy way to learn of the delay. Needless to say, I was not happy the next day.

To prevent this sort of thing from happening again, I leased a cellular telephone. If I go to Vandenberg AFB to cover a launch in person, I can call desinated ham radio operators in Ventura, Los Angeles, and Santa Barbara counties. They in turn can pass the countdown status over various 2-meter ham radio repeaters.

If I decide to watch a launch from Ventura County, I'll be able to call a news media liason at the base for the countdown status. I'll then call the designated hams who will pass the news along as described above.

By the way, I'm looking for ham operators to volunteer to help me with this. Before you volunteer, be advised that 60% of the launches occur at midnight or 01:00. Many go at even worse times like 03:30. Also, you'll need to be able to easily get into at least one high-coverage 2-meter repeater (i.e. Broadcast Peak in Santa Barbara, Sulphur Mountain, Mount Disappointment, Palos Verdes, or Catalina Island).

---

534. Re: Mir overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc1d5c$5422e120$80c56cce@default>
Source record: 19938

Sean,

I like 'STSPLUS' which runs in Windows. You can pick it up at
'www.grove.com/~tkelso'. It requires a '486 or better plus, of course, the
latest keplerian elements.

73 de VE7MDL ....Erik.

History67 <history67@aol.com> wrote in article
<19970217171701.MAA22391@ladder01.news.aol.com>...
> Can someone tell me where there might be a good link that predicts Mir
> overpasses? I had one, but lost it when harddrive failed.
>
> Thanks
> N1WSC
> Sean
> History67@aol.com
>
>

535. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.238.0009A1C3@hugo.rz.fh-ulm.de>
Source record: 19939

>Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and
>437.925 as it passed overhead. (I used an online prediction
>calculator). This was my first attempt to listen to Mir, and I heard
>nothing on 70cm and only two tone bursts in a very regular pattern. I was
>listening on my Yaesu 530 hooked into a dual band ringo. I should have
>heard something, right? What am I not doing?

Try 437.950 as well. Sometimes the Repeater is switched on and qso- Mode is off
Dont forget the doppler shift of +/- 10 kHz.

vy73, Roman (DL2SFE)

536. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc1d5b$d817d040$80c56cce@default>
Source record: 19940

Sean,

MIR seems to be in the SAFEX repeater mode lately. The downlink frequency is 437.950. Due to the low orbit, you will find that the doppler shift is rather large, so you may have to tune up 10 KHz on the approach and down that much when it moves away from you.

The two-tone busts you heard on 145.8 was perhaps packet? That's what I heard on that frequency the last few nights except tonight. In fact, I did not heard MIR at all tonight.

73 de VE7MDL ....Erik.

History67 <history67@aol.com> wrote in article
<19970218014401.UAA20763@ladder01.news.aol.com>...
> Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and
> 437.925 as it passed overhead. (I used an online prediction
> calculator). This was my first attempt to listen to Mir, and I heard
> nothing on 70cm and only two tone bursts in a very regular pattern. I
was
> listening on my Yaesu 530 hooked into a dual band ringo. I should have
> heard something, right? What am I not doing?
>
> please tell me what I need to do [Not that :-( ] to listen in and
> maybe qso with them.
>
> 73 de N1WSC
> Sean
>
> History67@aol.com
>

537. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5ebtbi$e2i$1@news.via.nl>
Source record: 19941
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bob Nielsen <nielsen@primenet.com> wrote:

>Look carefully at Table 2: E receives 144-146 and 430-440, while E3
>receives 67-180 and 400-512 MHz.
Which is *exactly* my point: the receive ranges differ, yet the diode-matrix (D302-D308, labeled 'Destination diode' in table 2) is exactly the same. These diodes tell the unit how to behave. Now if the E and E3 units have the same diodes, how can they behave differently?

Note that I feel the documents contain a wealth of information,
I was just hoping to keep anybody from opening up his/her handheld and moving diodes, only to find out there is an error in this table 2. The TH79 is to precious for that.

> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
> models, which should make Newt Gingrich happy.
Still, I see TH79A's advertised WITH 800 MHz in various newsgroups. As I understand it the older units can receive 800, but the newer ones can not. I somewhere read in an article that you can see this from the serial number:
===If your serial number is 603XXX or higher, that is all you will get. The
===TH-79A that I have posted is 602XXX
I cannot find the original article though- you'll have to search the net for it.
There may be a NOSPAM. in front of my E-mail address.
It is there to fool machines, not people.

538. Re: What is NORAD 24706?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: anutley@acslink.net.au
Message-ID: <330a7037.12520062@nntp.peg.apc.org>
Source record: 19942

On Sun, 16 Feb 1997 01:33:29 GMT, bd703@scn.org (SCN User) wrote:

>
>Although this object probably isn't amateur related, is there someone
>who can tell me what NORAD # 24706 is?
>
>It is also refered to as 1996-073C.
>
>A friend of mine noticed the keps for it but we can't find out what satellite
>it is.
>
>Thanks in advance
>
>Kerwin
>--
>***
> * They know who you are...
> bd703@scn.org * They know where you live...
> * And there's no doubt about it!

Hello Kerwin,

I can't tell you, from my present information, exactly what the 96073C object is, but I can say it was launched by a SOYUZ-U vehicle on Dec 24, 1996 at 1350UTC. The name of the primary object was/is 'Bion No. 11' and the launch took place from Plesetsk pad LC43. The primary object was a 'Life sciences' experiment with International Designation 96073A. I may be wrong, but I think this was a capsule containing two monkeys that was later retrieved after re-entry.

The 'C' designation would normally refer to an upper stage or other part of the launch vehicle, or perhaps to debris of the launch.

Cheerio, Alan.

Alan (NUTLEY)
Spring Hill Observatory
DALVEEN Qld 4374.
Elev. 910m
E151d57m30s S28d29m00s
E397850m N6848880m, AMG Zone 56

539. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3309cc5b.79297254@news.erols.com>
Source record: 19943

On 18 Feb 1997 01:44:14 GMT, history67@aol.com (History67) wrote:

>Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and
>437.925 as it passed overhead. (I used an online prediction
>calculator). This was my first attempt to listen to Mir, and I heard
>nothing on 70cm and only two tone bursts in a very regular pattern. I was
>listening on my Yaesu 530 hooked into a dual band ringo. I should have
>heard something, right? What am I not doing?
>
>please tell me what I need to do [Not that :-( ] to listen in and
>maybe qso with them.
>
>73 de N1WSC
>Sean
>
>History67@aol.com

Sean: I monitored several MIR passes on 17 Feb from WASH DC area. I
listened on 2 meters. They were a ctive on both packet and FM voice.
I heard strong FM voice sigs at 2016Z. I was using an old Yaesu
memorizer and a little verticle dipole. Good luck! Bill N2CQR

540. ICOM IC-970H ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Hakan Kayal <Hakan.Kayal@dlr.de>
Message-ID: <33098B76.8DF@dlr.de>
Source record: 19944

A friend of mine told me about a trancsceiver, ICOM IC-970H, which can also be used for the S-Band. I have not found such a transceiver at the homepage of ICOM.

Does anybody know something about it?

Hakan

541. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Bob Sull <wa8imo@kellnet.com>
Message-ID: <3309CED6.416D@kellnet.com>
Source record: 19945
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

This has nothing to do with DX, thats what!

73,
Bob
--
<> Bob Sull WA8IMO <>
"73, CUL, es keep the FUN in Ham radio."
>Life Member-ARRL QCWA< >Member-NODXA NCDXF<
>DXCC WAS RCC < >8P9BC<
>QSL Mgr for 8P6JG<
>WA8IMO@W8IZ.#NEOH.OH.USA<
>WA8IMO@KELLNET.COM<

542. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AC09.7B7C@geocities.com>
Source record: 19946
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:
>
> Interesting point Burt. So what percentage of hams do you think
> contest? And try to give an accurate estimate, NOT a made up figure.
> I ask because I see the word "all" up there again, as I do in many of
> your posts.

I would say 30% of all hams are active and 10% of those are involved in contests. Those 10% walk all over the rest in their piggish ways of hogging the band.

You are right, I should not use the word "all" as you suggested.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

543. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AC5B.6EF4@geocities.com>
Source record: 19947
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:
>
> Burt,
>
> I'll be checking the callsign database with bated breath waiting for
> your call to come open after you resign it......can't imagine why you
> would want to continue to be identified with such a bunch of losers like
> us!!

I rarely admit I am a ham to anyone in the normal world (as in REAL
world).

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

544. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AD20.3605@geocities.com>
Source record: 19948
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:
>
> Come on, Burt....
> Let me see ---- public service events (bike races, marathons, sporting
> events, Special Olympics, APRS at the real Olympics in Atlanta, etc),
> search and rescue communications (whether on foot, in vehicles, or in
> the air), coordination of communications for emergency management
> agencies (from city/municipal to FEMA), and what about hurricanes,
> tornadoes, wildfires.....

And what percentage of hams take part in the above?
And of those that do, ham communication uses 400000 words when 10 will
do. Hams are horribly inefficent voice communicators.

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

545. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: AL7OQ <mfeldmn@ibm.net>
Message-ID: <3309AEBF.7E6B@ibm.net>
Source record: 19949
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Hams use 2 meters for exactly what that serves the public in a MEANINGFUL way?
>
>
Ask FEMA (Federal Emergency Management Agency), who has opposed the
Little LEOS proposal on the ground that hams provide invaluable
emergency communications services on 2 meters.

Burt: be honest! Why are you supporting this industry band grab?

Martin
AL7OQ

546. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AFA4.470D@geocities.com>
Source record: 19950
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> Doesn't say very much about your example, does it Burt? Are you
> telling us that you are such a poor teacher and such a poor example,
> that you can not guide your students to the more interesting,
> productive areas of ham?

Is that what it thinks it tells you. When I demonstrate ham radio I make no editorial comment. I offer extre credit for it. If I leave the radio on the comment I get is, "you do not talk to those losers do you." Ham radio speaks for itself. Not even Jesus Christ could convince our youth to get on the air with the current crop of old white fat farts.

If you want to talk direct to the student that has no use for ham radio his address is on my WWW site. See him, he is the #1 student in the school with a perfect SAT verbal score. And he knows the score on ham radio.

> Of course, if you truly
> believe there are NO redeeming features in amature radio, then that
> would prove that you are not a good teacher, or at the very least,
> lack the knowledge and drive to be a "good" teacher.

What is "amature radio?"

> >It is a vast wasteland.
>
> If your above example shows your ability to motivate our youth, could
> it be possible that the same could be said of your classroom?

I welcome the public to my classroom, see for your self.

> You have NO room to talk, Burt. YOU are guilty of being exactly what
> you accuse others of being. You are still the UTH (remember that
> one), you just use internet instead of ham.

UTH?

I find this interaction
> interesting, but it is definitely more boring than talking to someone
> live, on air.

Nothing is more boring than that. But I will be glad to meet you OR ANYONE on the air, if you have the guts.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

547. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AFE0.495D@geocities.com>
Source record: 19951
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:

> STILL WAITING FOR YOUR CALL TO COME OPEN, BURT!!
>
> Doug, KM4HY

If I can get W1AW you can have it.

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

548. AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <199702181540.RAA28852@mail0.spidernet.net>
Source record: 19952

Can someone tell my if AO-27 is still operational?I dont get anything out of it.
73 de Aris-5B4JE

549. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.970218114007.24734B-100000@light.lightlink.com>
Source record: 19953
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> I rarely admit I am a ham to anyone in the normal world (as in REAL
> world).

The R-series of callsigns was assigned to Russia. What business do you have in Russia, Burt?

550. Free Mac/Ham Software on WWW

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-1802971346330001@wd1v.mv.com>
Source record: 19954
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

A trip to my home page reveals there are many good files and programs for amateur radio operators that want to use Mac computers.

<http://www.mv.com/ipusers/wd1v/>

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Roster - a virtual "Who's Who" HyperCard stack with more than 780 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and their passions and put a design on your Mac Radio future when you see what neat things are being done!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get with just a click. Many of the programs listed on right there for FTPing.

* Ham Radio.FAQ - compiled on a Mac with a lot of links to great Mac FTP sites for radio, electronic engineering, and similar data.

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

551. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Bob Nielsen <nielsen@primenet.com>
Message-ID: <330A030A.7C7F0355@primenet.com>
Source record: 19955
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> Bob Nielsen <nielsen@primenet.com> wrote:
>
> >Look carefully at Table 2: E receives 144-146 and 430-440, while E3
> >receives 67-180 and 400-512 MHz.
> Which is *exactly* my point: the receive ranges differ, yet the diode-matrix
> (D302-D308, labeled 'Destination diode' in table 2) is exactly the same.
> These diodes tell the unit how to behave. Now if the E and E3 units have the
> same diodes, how can they behave differently?
>
> Note that I feel the documents contain a wealth of information,
> I was just hoping to keep anybody from opening up his/her handheld and moving
> diodes, only to find out there is an error in this table 2. The TH79 is to
> precious for that.
>

Ah, yes, and if you look at the figure on page 6, the "E" has a jumper
at W301, while the "E3" does not, And in Table 4, the TX-RX Unit number
for the "E" is X57-4402-71, while the "E3" us X57-4402-73. Do the X57
indicators imply the configuration of jumpers and/or diodes, or
different firmware? Things may be more comples than just moving diodes
and cutting wires. It's confusing (probably on purpose).

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
AX.25: w6swe@wb7tls.az.usa.noam
http://www.primenet.com/~nielsen

552. Re: Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Steve <kd6fyk@wco.com>
Message-ID: <3309627E.253A@wco.com>
Source record: 19956

History67 wrote:
>
> Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and
> 437.925 as it passed overhead. (I used an online prediction
> calculator). This was my first attempt to listen to Mir, and I heard
> nothing on 70cm and only two tone bursts in a very regular pattern. I was
> listening on my Yaesu 530 hooked into a dual band ringo. I should have
> heard something, right? What am I not doing?
>
> please tell me what I need to do [Not that :-( ] to listen in and
> maybe qso with them.
>
> 73 de N1WSC
> Sean
>
> History67@aol.com

437.950 !

553. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: akent@bga.com
Message-ID: <5ed9gl$1838@news3.realtime.net>
Source record: 19957
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Thank you William for the post-

These are indeed correct.
The newer US versions of the radio have a different processor that
will not allow the extended coverage. No doubt a request-demand from
our wonderful government.

Kent

William Vynck <RACO@ping.be> wrote:

>Bob Nielsen wrote:
>> Look carefully at Table 2: E receives 144-146 and 430-440, while E3
>> receives 67-180 and 400-512 MHz.
>>
>> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
>> models, which should make Newt Gingrich happy.
>>
>> Page 16 appears to be missing from the JPG images.
>>
>> Bob
>>
>> --
>> Bob Nielsen Internet: nielsen@primenet.com
>> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
>> AX.25: w6swe@wb7tls.az.usa.noam
>> http://www.primenet.com/~nielsen

>I checked my pages and indeed we don't have page 16
>What i don't understand is that all pages i have are just like i
>received from Kenwood and they are one part.
>No way they could "forget" page 16, i think it's a mistake in numbering
>the pages sins page 15 and 17 are one.

>I ask them for it and let you know.

>William

>--
>Visit my Homepage http://www.ping.be/RACO
>E-mail RACO@ping.be and/or William.Vynck@ping.be
>Fidonet 2:291/1800.15
>Radio Amateur ONL4021
>QSL via bureau UBA Belgium

554. ARLK014 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk014.1997@arrl.org>
Source record: 19958
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK014
ARLK014 Keplerian data

ZCZC SK14
QST de W1AW
Keplerian Bulletin 14 ARLK014
From ARRL Headquarters
Newington, CT February 18, 1997
To all radio amateurs

SB KEP ARL ARLK014
ARLK014 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-82
1 24719U 97004A 97049.53125000 .00000152 00000-0 41719-6 0 298
2 24719 28.4690 74.9780 0015052 42.9487 91.6794 14.86372574 1055
HST
1 20580U 90037B 97049.33333333 .00000154 00000-0 43987-6 0 9275
2 20580 28.4706 76.2402 0007719 44.3999 108.3154 14.88331645175353
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97049.25962371 .00000038 00000-0 25576-4 0 3207
2 18129 82.9271 326.6466 0010821 185.5038 174.6022 13.72374513483921
UO-11
1 14781U 84021B 97048.94486177 .00000134 00000-0 30382-4 0 09561
2 14781 97.8205 35.0323 0012699 28.1506 332.0384 14.69525245693744
RS-12/13
1 21089U 91007A 97049.52697137 .00000090 00000-0 79549-4 0 9577
2 21089 82.9201 6.6429 0027718 268.6090 91.1894 13.74077974302867
UO-14
1 20437U 90005B 97049.14569784 -.00000041 00000-0 80716-6 0 02664
2 20437 98.5254 133.3555 0010553 194.9047 165.1828 14.29948873369200
RS-15
1 23439U 94085A 97048.95758356 -.00000039 00000-0 10000-3 0 02151
2 23439 64.8194 345.6397 0152426 154.7753 206.0664 11.27525799088495
```

```
AO-16
1 20439U 90005D 97049.16447210 .00000031 00000-0 28780-4 0 00642
2 20439 98.5447 136.0577 0010951 195.3890 164.6966 14.29998594369227
DO-17
1 20440U 90005E 97046.29377975 -.00000043 00000-0 15485-6 0 00470
2 20440 98.5478 134.0162 0010765 204.4498 155.6176 14.30140200368845
WO-18
1 20441U 90005F 97049.15745966 -.00000035 00000-0 30862-5 0 00722
2 20441 98.5477 136.7418 0011592 196.2176 163.8639 14.30108860369255
LO-19
1 20442U 90005G 97048.78444551 .00000015 00000-0 22694-4 0 00592
2 20442 98.5478 136.9794 0011773 197.0182 163.0614 14.30222315369227
FO-20
1 20480U 90013C 97049.21063148 -.00000223 00000-0 -42063-3 0 9448
2 20480 99.0231 33.2548 0538994 286.8249 67.4433 12.83233156329445
AO-21
1 21087U 91006A 97049.18773812 .00000093 00000-0 82657-4 0 08128
2 21087 82.9447 139.6585 0033844 239.4176 120.3640 13.74577382303802
UO-22
1 21575U 91050B 97049.18436593 .00000033 00000-0 25430-4 0 07681
2 21575 98.3177 113.8403 0006772 251.7398 108.3048 14.37057419293395
KO-23
1 22077U 92052B 97049.02022799 -.00000037 00000-0 10000-3 0 06572
2 22077 66.0767 34.7464 0014211 239.7261 120.2334 12.86300849212426
KO-25
1 22828U 93061F 97045.25246832 .00000025 00000-0 27403-4 0 5137
2 22828 98.5526 122.4326 0009601 225.0689 134.9712 14.28168134144663
IO-26
1 22826U 93061D 97049.18309154 -.00000016 00000-0 10823-4 0 05395
2 22826 98.5557 126.2097 0008358 232.7653 127.2767 14.27826605177109
AO-27
1 22825U 93061C 97049.13545695 -.00000032 00000-0 46339-5 0 05469
2 22825 98.5578 125.9443 0007567 230.9492 129.1014 14.27717615177087
FO-29
1 24278U 96046B 97049.19862280 -.00000071 00000-0 -39245-4 0 00687
2 24278 98.5591 106.5784 0352150 134.4220 228.6317 13.52628487025030
MO-30
1 24305U 96052B 97049.15227441 .00000204 00000-0 20364-3 0 738
2 24305 82.9285 82.5506 0029093 174.5899 185.5563 13.73090228 22723
Mir
1 16609U 86017A 97049.40969703 .00003643 00000-0 49498-4 0 592
2 16609 51.6549 323.0338 0012105 87.8300 272.3973 15.60512531628481

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
February 22, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

555. New Ham Radio FAQ on WWW, Email, or Disk

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-1802971340230001@wd1v.mv.com>
Source record: 19959
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

556. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Phil Heaton <ke4krt@radio.org>
Message-ID: <330A47DF.2C42@radio.org>
Source record: 19960
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
>
> Is that what it thinks it tells you. When I demonstrate ham radio I make
> no editorial comment. I offer extre credit for it. If I leave the radio
> on the comment I get is, "you do not talk to those losers do you."
> Ham radio speaks for itself. Not even Jesus Christ could convince our
> youth to get on the air with the current crop of old white fat farts.
>

Didn't I tell you to throw that 2m rig away!

Phil
--

Phil Heaton, KE4KRT, ke4krt@radio.org

557. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330A69BB.4931@geocities.com>
Source record: 19961
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Siegfried Rambaum wrote:
>
> > I rarely admit I am a ham to anyone in the normal world (as in REAL
> > world).
>
> The R-series of callsigns was assigned to Russia. What business do you
> have in Russia, Burt?

Your point?

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

558. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <330A8CBF.73C5@cyberramp.net>
Source record: 19962

http://www.cyberramp.net/~rnewland

559. Re: ICOM IC-970H ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: apbiddle@worldnet.att.net
Message-ID: <3309ac25.1700297@netnews.worldnet.att.net>
Source record: 19963

Hakan,

The 970 is no longer made. It supported several different bands by module, but I think the highest was mode L. I could be wrong. You may be able to find one used. By all reports it was a good rig, but too expensive and specialized. Icom is now making the simpler and cheaper 821, which seems to be a good general satellite rig.

Alan
WA4SCA

560. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330A6B3E.6279@geocities.com>
Source record: 19964
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

AL7OQ wrote:

> Ask FEMA (Federal Emergency Management Agency), who has opposed the
> Little LEOS proposal on the ground that hams provide invaluable
> emergency communications services on 2 meters.
>
> Burt: be honest! Why are you supporting this industry band grab?

Because I am public service minded person.
--
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

561. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Jerry Newland <rnewland@cyberramp.net>
Message-ID: <330A9079.12EC@cyberramp.net>
Source record: 19965

Http://www.geocities.com/colosseum/7859

562. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-18 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <330A6976.6632@cornell.edu>
Source record: 19966
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

sean hall wrote:
>

> >#================#===#
> >| Burt Fisher | Teacher of video, broadcasting and electronics |
> >| Amateur call | South Dennis, Ma. (Cape Cod) |
> >| K1OIK | http://www.geocities.com/WallStreet/5169 |
> >#================#===#
> >|Visit my WWW site, it is like no other k1oik@ccsnet.com

> >#===#
> I still can't figure out how one can teach broadcasting.
>
> sean hall/W1SWH

Simple: He just refers them to the following newsgroup:
news://alt.radio.pirate
Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own repeater network from the ground up, he thinks these things should be left to the broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some time doing some technical things (he's an extra), but he must now be bored.

--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

563. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970219125437_515664.456256_GHQ38-6@CompuServe.COM>
Source record: 19872

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #59

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
arl-img-7.compuserve.com (8.6.10/5.950515)
id HAA01159; Wed, 19 Feb 1997 07:54:29 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA08557 for <ham-space-list@mailbox.ucsd.edu>; Wed, 19 Feb
1997 04:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id EAA19750
sendmail 8.8.5/UCSD8.3
Wed, 19 Feb 1997 04:31:14 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA19738
sendmail 8.8.5/UCSD8.3
Wed, 19 Feb 1997 04:31:11 -0800 (PST)
Message-Id: <199702191231.EAA19738@noc.ucsd.edu>
Date: Wed, 19 Feb 97 04:31:10 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #59
To: Ham-Space@ucsd.edu

Ham-Space Digest Wed, 19 Feb 97 Volume 97 : Issue 59

Today's Topics:
AO-27
ARLK014 Keplerian data
AZ/EL rotor..Which one is best???
Calif. Space & Ham Radio News
Ham Site (3 msgs)
ICOM IC-970H ? (2 msgs)
Mir

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 18 Feb 97 15:38:51 GMT
From: arisk@spidernet.COM.cy (Aristides Kaponides)
Subject: AO-27

Can someone tell my if AO-27 is still operational?I dont get anything out of it.
73 de Aris-5B4JE

Date: 18 Feb 1997 17:36:39 -0500
From: w1aw@arrl.org
Subject: ARLK014 Keplerian data

SB KEP @ ARL $ARLK014
ARLK014 Keplerian data

ZCZC SK14
QST de W1AW
Keplerian Bulletin 14 ARLK014

Date: 17 Feb 1997 19:53:37 GMT
From: Allen@mailhub.scf.lmsc.lockheed.com (Guest)
Subject: AZ/EL rotor..Which one is best???

Boy these articles don't stay here very long, do they?
Which AZ/EL rotors do satellite users consider to be the best?

73, Allen WB6RWU

Date: 18 Feb 1997 03:11:48 GMT
From: Brian Webb <102670.1206@CompuServe.COM>
Subject: Calif. Space & Ham Radio News

ASTRONOMY/SPACE ALERT FOR SOUTHERN CALIFORNIA
Brian Webb, KD6NRP
Thousand Oaks, CA
E-Mail: 102670.1206@compuserve.com
Web Page: http://ourworld.compuserve.com/homepages/rawhide_home_page

1997 FEB 15 (Saturday) 06:50 PST

Hale-Bopp Becoming An Impressive Sight

At 05:00 PST this morning I went outside to take a look at comet Hale-Bopp. My observing location isn't the best; I'm only about 20 km from the outskirts of the San Fernando Valley and the light pollution is so bad that I can barely see the brightest patches of the Milky Way.

In spite of this, I immediately spotted the comet with the naked eye. It was about 15 degrees above the east-northeast horizon and looked like a fuzzy star.

It was almost as bright as the stars in the Big Dipper. I estimate the comet's brightness to be about magnitude +2.6.

Through my 10X50 binoculars I saw a small, bright nucleus. The tail was about 4/10ths of a degree long. Both the nucleus and tail were white with no detectable color.

Owens Lake Astronomy Expedition in Two Weeks

Two weeks from today I plan to take a trip to the eastern side of Owens Lake to assess the light pollution there. This site was chosen because it's twice as far from Los Angeles and Bakersfield than Mount Pinos and should be much darker.

My current employment situation may prevent me from driving to my preferred Hale-Bopp observing sites of central Nevada or Escalante, Utah. Thus, a closer alternative is needed and east Owens Lake may fit the bill.

I'm looking for others who may want to drive up to the site with me or meet me there. I'd be leaving the Thousand Oaks area at about 08:00 and arrive in the vicinity of the site at about 13:30. After a few hours of photographing satellites and deep sky observing, I'd pack up and head for home (I might consider getting a hotel room and staying until Sunday morning).

The roundezvous point will be the intersection of state routes 136 and 190 on the east side of the lake bed. Plan on being there at 15:30.

If you're interested in joining me, contact me at my e-mail address.

Next Vandenberg Launch in Six Weeks

The next scheduled launch from Vandenberg AFB is a refurbished Titan II (not a Titan IV, a Titan II) carrying a DMSP weather satellite. The launch time is unknown. Details regarding this event will be posted on my web page as they become available.

Minuteman III Launch Fiasco

Two weeks ago, several of us stayed up late for two consecutive nights to watch a Minuteman III launch from Vandenberg AFB. On the first night, we didn't see anything at the scheduled 00:01 PST launch time. A fellow ham radio operator made a telephone call and found out that there was a problem and the attempt had been scrubbed.

The next night was a repeat of the first. The 00:01 launch time came and went with nothing happening. The same fellow made a phone call and learned that there was the same problem as the night before (a malfunctioning radar in Hawaii) and the Minuteman III probably wasn't going to be launched.

At 00:15, my friend Bob (KE6YLD) and I left our observing site and drove home. I took a shower, removed my contact lenses, and settled into bed. At 00:42 I saw a bright glow through the bedroom window. The Air Force did launch the missile .... but they were 41 minutes late and we had no easy way to learn of the delay. Needless to say, I was not happy the next day.

To prevent this sort of thing from happening again, I leased a cellular telephone. If I go to Vandenberg AFB to cover a launch in person, I can call desinated ham radio operators in Ventura, Los Angeles, and Santa Barbara counties. They in turn can pass the countdown status over various 2-meter ham radio repeaters.

If I decide to watch a launch from Ventura County, I'll be able to call a news media liason at the base for the countdown status. I'll then call the designated hams who will pass the news along as described above.

By the way, I'm looking for ham operators to volunteer to help me with this. Before you volunteer, be advised that 60% of the launches occur at midnight or 01:00. Many go at even worse times like 03:30. Also, you'll need to be able to easily get into at least one high-coverage 2-meter repeater (i.e. Broadcast Peak in Santa Barbara, Sulphur Mountain, Mount Disappointment, Palos Verdes, or Catalina Island).

Date: Tue, 18 Feb 1997 21:16:47 -0800
From: Robert Newland <rnewland@cyberramp.net>
Subject: HAM SITE

http://www.cyberramp.net/~rnewland

Date: Tue, 18 Feb 1997 21:32:41 -0800
From: Jerry Newland <rnewland@cyberramp.net>
Subject: HAM SITE

Http://www.geocities.com/colosseum/7859

Date: Mon, 17 Feb 1997 00:30:42 -0800
From: John Fleenor <johnf@mailhost.cyberramp.net>
Subject: Ham Site

http://www.cyberramp.net/~eddie

Date: Tue, 18 Feb 1997 11:59:02 +0100
From: Hakan Kayal <Hakan.Kayal@dlr.de>
Subject: ICOM IC-970H ?

A friend of mine told me about a trancsceiver, ICOM IC-970H, which
can also be used for the S-Band. I have not found such a transceiver
at the homepage of ICOM.

Does anybody know something about it?

Hakan

Date: Tue, 18 Feb 1997 22:06:18 GMT
From: apbiddle@worldnet.att.net (Alan Biddle)
Subject: ICOM IC-970H ?

Hakan,

The 970 is no longer made. It supported several different bands by
module, but I think the highest was mode L. I could be wrong. You
may be able to find one used. By all reports it was a good rig, but
too expensive and specialized. Icom is now making the simpler and
cheaper 821, which seems to be a good general satellite rig.

Alan
WA4SCA

Date: Tue, 18 Feb 1997 00:04:14 -0800
From: Steve <kd6fyk@wco.com>
Subject: Mir

History67 wrote:
>
> Tonight (Feb 17) I was listening to the Mir downlink on both 145.8 and
> 437.925 as it passed overhead. (I used an online prediction
> calculator). This was my first attempt to listen to Mir, and I heard
> nothing on 70cm and only two tone bursts in a very regular pattern. I was
> listening on my Yaesu 530 hooked into a dual band ringo. I should have
> heard something, right? What am I not doing?
>
> please tell me what I need to do [Not that :-( ] to listen in and
> maybe qso with them.

>
> 73 de N1WSC
> Sean
>
> History67@aol.com

437.950 !

Date: (null)
From: (null)

SB KEP ARL ARLK014
ARLK014 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-82
1 24719U 97004A 97049.53125000 .00000152 00000-0 41719-6 0 298
2 24719 28.4690 74.9780 0015052 42.9487 91.6794 14.86372574 1055
HST
1 20580U 90037B 97049.33333333 .00000154 00000-0 43987-6 0 9275
2 20580 28.4706 76.2402 0007719 44.3999 108.3154 14.88331645175353
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97049.25962371 .00000038 00000-0 25576-4 0 3207
2 18129 82.9271 326.6466 0010821 185.5038 174.6022 13.72374513483921
UO-11
1 14781U 84021B 97048.94486177 .00000134 00000-0 30382-4 0 09561
2 14781 97.8205 35.0323 0012699 28.1506 332.0384 14.69525245693744
RS-12/13
1 21089U 91007A 97049.52697137 .00000090 00000-0 79549-4 0 9577
2 21089 82.9201 6.6429 0027718 268.6090 91.1894 13.74077974302867
UO-14
1 20437U 90005B 97049.14569784 -.00000041 00000-0 80716-6 0 02664
2 20437 98.5254 133.3555 0010553 194.9047 165.1828 14.29948873369200
RS-15
1 23439U 94085A 97048.95758356 -.00000039 00000-0 10000-3 0 02151
2 23439 64.8194 345.6397 0152426 154.7753 206.0664 11.27525799088495
AO-16
1 20439U 90005D 97049.16447210 .00000031 00000-0 28780-4 0 00642
2 20439 98.5447 136.0577 0010951 195.3890 164.6966 14.29998594369227
DO-17

```
1 20440U 90005E 97046.29377975 -.00000043 00000-0 15485-6 0 00470
2 20440 98.5478 134.0162 0010765 204.4498 155.6176 14.30140200368845
WO-18
1 20441U 90005F 97049.15745966 -.00000035 00000-0 30862-5 0 00722
2 20441 98.5477 136.7418 0011592 196.2176 163.8639 14.30108860369255
LO-19
1 20442U 90005G 97048.78444551 .00000015 00000-0 22694-4 0 00592
2 20442 98.5478 136.9794 0011773 197.0182 163.0614 14.30222315369227
FO-20
1 20480U 90013C 97049.21063148 -.00000223 00000-0 -42063-3 0 9448
2 20480 99.0231 33.2548 0538994 286.8249 67.4433 12.83233156329445
AO-21
1 21087U 91006A 97049.18773812 .00000093 00000-0 82657-4 0 08128
2 21087 82.9447 139.6585 0033844 239.4176 120.3640 13.74577382303802
UO-22
1 21575U 91050B 97049.18436593 .00000033 00000-0 25430-4 0 07681
2 21575 98.3177 113.8403 0006772 251.7398 108.3048 14.37057419293395
KO-23
1 22077U 92052B 97049.02022799 -.00000037 00000-0 10000-3 0 06572
2 22077 66.0767 34.7464 0014211 239.7261 120.2334 12.86300849212426
KO-25
1 22828U 93061F 97045.25246832 .00000025 00000-0 27403-4 0 5137
2 22828 98.5526 122.4326 0009601 225.0689 134.9712 14.28168134144663
IO-26
1 22826U 93061D 97049.18309154 -.00000016 00000-0 10823-4 0 05395
2 22826 98.5557 126.2097 0008358 232.7653 127.2767 14.27826605177109
AO-27
1 22825U 93061C 97049.13545695 -.00000032 00000-0 46339-5 0 05469
2 22825 98.5578 125.9443 0007567 230.9492 129.1014 14.27717615177087
FO-29
1 24278U 96046B 97049.19862280 -.00000071 00000-0 -39245-4 0 00687
2 24278 98.5591 106.5784 0352150 134.4220 228.6317 13.52628487025030
MO-30
1 24305U 96052B 97049.15227441 .00000204 00000-0 20364-3 0 738
2 24305 82.9285 82.5506 0029093 174.5899 185.5563 13.73090228 22723
Mir
1 16609U 86017A 97049.40969703 .00003643 00000-0 49498-4 0 592
2 16609 51.6549 323.0338 0012105 87.8300 272.3973 15.60512531628481

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
February 22, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

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End of Ham-Space Digest V97 #59
******************************
```

564. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: shnews@laser.net
Message-ID: <330b49af.968294@news1.laser.net>
Source record: 19873
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 11:28:40 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>A man went to a guts store to get some guts for dinner. He sees a sign
>remarking on the quality of guts offered at this particular gut
>store. So he asks the butcher: "How much for Engineer guts?"
> "3 dollars an ounce."
> "How much for teacher guts?"
etc.
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#
I still can't figure out how one can teach broadcasting.

sean hall/W1SWH

565. The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B2A38.2ECD@geocities.com>
Source record: 19874
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

A man went to a guts store to get some guts for dinner. He sees a sign remarking on the quality of guts offered at this particular gut store. So he asks the butcher: "How much for Engineer guts?"
"3 dollars an ounce."
"How much for teacher guts?"
"4 dollars an ounce."
"How much for ham operator guts?"
"100 dollars an ounce."
"Why is ham operator guts so much more?"
"Do you know how many hams you need to kill to get one ounce of guts?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

566. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B29EB.5EB3@geocities.com>
Source record: 19875
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> >What is "amature radio?"
>
> OK, got me on that one. :> I have NO idea why I spelled it that way.
> If you kept any of my previous posts (YES, I realize you get way too
> many messages to do so), then you'd see that I usually (if not nearly
> always) spell it correctly.

Well you have the ability to laugh at your self and admit a minor error.
Are you sure you are a ham?

Ham radio defined:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

> I have seen you post that comment before. It makes absolutely NO
> sense! "If I have the guts"??? I am confused as to your meaning.

Hams are so gutless that none will meet me on the air to discuss my so
called outrageous views. It is not like I can hit them on the air.

> All kidding aside, my first impression is that you actually do have
> some serious problems. Do you so delusional as to believe that you
> could harm me by merely talking to me?

Maybe not you but most hams I could make look damn silly on the air, not
because I am smarter but I have the facts on my side.

I have the "guts" to talk to
> any human being in this world. Would your conversation be so inane
> that I would die of boredom?

Far less than a TYPICAL ham contact.

I had always imagined it would be an
> interesting conversation. Please explain this "guts" idea. I am
> willing to bet I am not the only one with this question.

You are the only one maybe with the guts to ask.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

567. IC725 FOR SALE!

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Gkenn <glenn@indigo.ie>
Message-ID: <330B909E.16C9@indigo.ie>
Source record: 19876

HF Radio & Accessories for Sale.

ICOM IC-725 ALL BAND HF TRANSCIEVER.
500 kHz - 30 MHz
AM, SSB, CW and FM
26 User Programmable Memories
3 Scan Types
Selectable Tuning Rate
Band stacking register capability
10 dB preamp
20 dB attenuator
100W output

ICOM AH3 HF AUTOMATIC ANTENNA TUNER
Wide tuning range
Automatic digital control tuning
Eight-frequency memory for fast tuning
Weatherproof design
Max 0.3W radiated power
Controlled directly by IC-725

DRAE 24 AMPERE POWER SUPPLY

All items are in mint condition and have the original instruction
manuals.

I am looking for ï¿½800 ono.

For more information email glenn@indigo.ie

568. Re: Mir overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: bpaul@qualcomm.com.spammers.die
Message-ID: <5efj4k$a2o$1@thefuture.qualcomm.com>
Source record: 19877

In article <33090403.5E17@terraworld.net>, Mike <mco@terraworld.net> wrote:
>History67 wrote:
>>
>> Can someone tell me where there might be a good link that predicts Mir
>> overpasses? I had one, but lost it when harddrive failed.
>>
>> Thanks
>> N1WSC
>> Sean
>> History67@aol.com
>
>Hi Sean,
>
>The best tracking progam I've found for MIR and many other Satellites is
>called Logsat for Windows. It can be downloaded via the AMSAT website
>at:
>
>http://www.amsat.org
>
>Good luck,
>
>Mike

I missed the original post, but as you said you are looking for a _link_, not
an application. Here's a link for you:

http://ssl.berkeley.edu/isi_www/satpasses.html

-BP

Bill Paul KF6BBL San Diego, CA bpaul@qualcomm.com
Disclaimer:
The above post is the opinion of Bill Paul, not Qualcomm Inc.
---

569. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: iw0rlb@edisons.IT
Message-ID: <20210675200190@edisons.it>
Source record: 19878

```
add ham-space
```

570. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <330BFA4C.2BF4@idecc.com>
Source record: 19879
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> A man went to a guts store to get some guts for dinner. He sees a sign
> remarking on the quality of guts offered at this particular gut
> store. So he asks the butcher: "How much for Engineer guts?"

Burt,

The part that takes guts is to promote this hobby of ours in a positive
way,
bitching and moaning about how bad things are takes NO GUTS AT ALL and
that's
all I've ever seen from your posts. Nothing positive, no creative ideas
just good
ole belly achin.

Do you have guts Burt?
--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

571. NORAD Two-Line Orbital Element Set: Space Shuttle (97049.33333333)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5eg12k$2sv@blackbird.afit.af.mil>
Source record: 19880

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

HST
1 20580U 90037B 97049.33333333 .00000154 00000-0 43987-6 0 9275
2 20580 28.4706 76.2402 0007719 44.3999 108.3154 14.88331645175353
STS 82
1 24719U 97004A 97049.85416667 .00000152 00000-0 41832-6 0 303
2 24719 28.4715 72.9152 0014761 45.7386 20.1638 14.86362925 1108
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

572. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330a48d9.2616961@news.ma.ultranet.com>
Source record: 19967
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 18:59:41 -0500, Doug Woodruff
<km4hy@mindspring.com> wrote:

>Burt,
>
>I'll be checking the callsign database with bated breath waiting for
>your call to come open after you resign it......can't imagine why you
>would want to continue to be identified with such a bunch of losers like
>us!!
>
>Doug, KM4HY

Perhaps it has to do with the same reasons there's hams over on the CB
newsgroups.

```
*****************************************************************
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
*****************************************************************
```

.

573. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bc1e12$9d864bc0$f1e691ce@larry.spacestar.net>
Source record: 19968
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote in article
<3308E218.57CD@geocities.com>...
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>
Before this thread get's any further out of hand, I have a couple of
questions:

First of all, this clown is just looking for attention and enjoy's pushing
everyones buttons. He is looking for a response from a large group of
people, and he got it! He's no better than a jammer on your local repeater;
the more you respond to his drivel, the more he enjoy's it. If he is just
ignored, he will eventually go away. Don't give him the satisfaction of a
response, he has shown that he doesn't really care about the issues, he
just like to push your buttons!
Second, he obviously was interested in Amateur Radio at one time, since he
is an Extra Class, and continues to use his call sign in his sig at the end
of every message. I really wonder what his daughter, KA1VBQ thinks about
Amateur Radio? Does he really hate Amateur Radio that much? I don't think
so...His web page has several references, links, etc to Amateur Radio. He
even has some quotes paying homage to CW. Let's see, photo's of him and his
daughter with their call signs prominently displayed, callsign search,
links to Ham Radio info, and obviously very proud to be an Amateur Radio
Operator! At least that's what it looks like from this end!
So Burt, what's the real story? Are you AND your daughter going to give up
your calls? Are you going to continue this rediculous thread? If you feel
such hatred towards the hobby, why don't you show it on your web page? I
look forward to your response and hope you can quit playing this silly game
of yours.
--
Glenn
N0VYK

interNET ==>> glenn@spacestar.net
packetNET ==>> n0vyk@n0vyk.ampr.org

Web Page ==>> http://www.spacestar.net/users/glenn/index.html

574. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330a7014.4294075@news.erinet.com>
Source record: 19969
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Tue, 18 Feb 1997 08:33:24 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>Howard Watson wrote:
>

>What is "amature radio?"

OK, got me on that one. :> I have NO idea why I spelled it that way.
If you kept any of my previous posts (YES, I realize you get way too
many messages to do so), then you'd see that I usually (if not nearly
always) spell it correctly.
>
>

>UTH?

I thought you would remember that one, Ultimate Typical Ham.

>Nothing is more boring than that. But I will be glad to meet you OR
>ANYONE on the air, if you have the guts.

I have seen you post that comment before. It makes absolutely NO
sense! "If I have the guts"??? I am confused as to your meaning.
All kidding aside, my first impression is that you actually do have
some serious problems. Do you so delusional as to believe that you
could harm me by merely talking to me? I have the "guts" to talk to
any human being in this world. Would your conversation be so inane
that I would die of boredom? I had always imagined it would be an
interesting conversation. Please explain this "guts" idea. I am
willing to bet I am not the only one with this question.

575. Re: ICOM IC-970H ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Hakan Kayal <Hakan.Kayal@dlr.de>
Message-ID: <330AF093.1783@dlr.de>
Source record: 19970

Alan Biddle wrote:
>
> Hakan,
>
> The 970 is no longer made. It supported several different bands by
> module, but I think the highest was mode L. I could be wrong. You
> may be able to find one used. By all reports it was a good rig, but
> too expensive and specialized. Icom is now making the simpler and
> cheaper 821, which seems to be a good general satellite rig.
>
> Alan
> WA4SCA

Thank you Alan,

may be some times later, when the s-band is used more frequently by
amateur satellites, similar transceivers will be produced again.

Hakan
DD5EF

576. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B2C03.31A@geocities.com>
Source record: 19971
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glenn Schultz wrote:

>
> First of all, this clown is just looking for attention and enjoy's pushing
> everyones buttons. He is looking for a response from a large group of
> people, and he got it!

And you are one of the ones who gave it to me.
What is it about spineless hams that they think they can tell others
what to do and not do it themselves? Are you German?

> Don't give him the satisfaction of a response

Like you did?

> I really wonder what his daughter, KA1VBQ thinks about
> Amateur Radio?

She says, "it's boring....I do not relate to them in anyway what so
ever."
quoted at 1133 EST. She is a straight A student.

>Does he really hate Amateur Radio that much? I don't think
> so...His web page has several references, links, etc to Amateur Radio.

Have you READ the references, they are hardly positive.

> He even has some quotes paying homage to CW. Let's see, photo's of him and his
> daughter with their call signs prominently displayed, callsign search,
> links to Ham Radio info, and obviously very proud to be an Amateur Radio
> Operator! At least that's what it looks like from this end!

I do pay homage to CW, it is the one mode where hams get to the point.
READ the K1OIK reference page.

> So Burt, what's the real story? Are you AND your daughter going to give up
> your calls?

She wants to give hers up.

Are you going to continue this rediculous thread? If you feel
> such hatred towards the hobby, why don't you show it on your web page?

Look at the WWW page man, it is all there.

#================#===#
| Burt Fisher | Teacher of video, broadcasting and electronics |

```
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=============================================================================#
```

577. WANTED! Sales Specialist for Two-way radio company

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: "Maha Communications, Inc." <sales@maha-comm.com>
Message-ID: <01bc1ed7$f6db4b60$257155ce@default>
Source record: 19881
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.swap

Dear Friends,

Maha Communications is a rapid growing company, and we are looking for
sales specialist!

1. Sales Specialist
Speak Fluent English
Some technical background of two-way/ham radio
Willing to take the challenge
Speak/Write Spanish (OPTIONAL)

Our company production lines include: Battery Pack, Speaker/microphone,
R.F. Amplifier, Antenna, and accessories. Please visit
http://www.maha-comm.com/ for detail information on our products.

We are located at Brea, Southern California, in Orange County. If you
are interested in this job, please send e-mail to sales@maha-comm.com

578. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b93a2.87306232@news.ma.ultranet.com>
Source record: 19882
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 03:20:18 GMT, hwatson@erinet.com (Howard Watson) wrote:

>On Tue, 18 Feb 1997 08:33:24 -0500, Burt Fisher
><burtfisher@geocities.com> wrote:
>
>>Howard Watson wrote:
>>
>
>>What is "amature radio?"
>
>OK, got me on that one. :> I have NO idea why I spelled it that way.
>If you kept any of my previous posts (YES, I realize you get way too
>many messages to do so), then you'd see that I usually (if not nearly
>always) spell it correctly.
>>
>>
>

SNIP

>>Nothing is more boring than that. But I will be glad to meet you OR
>>ANYONE on the air, if you have the guts.
>
>I have seen you post that comment before. It makes absolutely NO
>sense! "If I have the guts"??? I am confused as to your meaning.
>All kidding aside, my first impression is that you actually do have
>some serious problems. Do you so delusional as to believe that you
>could harm me by merely talking to me? I have the "guts" to talk to
>any human being in this world. Would your conversation be so inane
>that I would die of boredom? I had always imagined it would be an
>interesting conversation. Please explain this "guts" idea. I am
>willing to bet I am not the only one with this question.

Do you so delusional?!?

```
**************************************************************
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
**************************************************************
```

.

579. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b9433.87450783@news.ma.ultranet.com>
Source record: 19883
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 11:27:23 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

SNIP

>Ham radio defined:
>
>There's just so much more in the world to catch their
>eye than a bunch of farts who try to maintain their heirarchy in a
>pseudo
>secret society, refusing with a vengeance to pass the baton, for fear of
>the
>tiniest little detail of what's theirs being changed. Even if the change
>is
>necessary and beneficial to the hobby.
>
>
Hey Burt - how about a little credit where credit's due?
>

SNIP

Mark

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****
.

580. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b9502.87658076@news.ma.ultranet.com>
Source record: 19884
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On 19 Feb 1997 03:22:01 GMT, "Glenn Schultz" <glenn@spacestar.net>
wrote:

>Burt Fisher <burtfisher@geocities.com> wrote in article
><3308E218.57CD@geocities.com>...
>> #===============#===#
>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> #===============#===#
>> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
>> #===#
>>
>Before this thread get's any further out of hand, I have a couple of
>questions:
>
> First of all, this clown is just looking for attention and enjoy's pushing
>everyones buttons. He is looking for a response from a large group of
>people, and he got it! He's no better than a jammer on your local repeater;
>the more you respond to his drivel, the more he enjoy's it. If he is just
>ignored, he will eventually go away. Don't give him the satisfaction of a
>response, he has shown that he doesn't really care about the issues, he
>just like to push your buttons!

SNIP

Burt's been going like this for about 7 years I can account for.

Mark

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****
.

581. Interface FT990/PC

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Herve <hbreton@hol.fr>
Message-ID: <01bc1eea$8689f560$97a895c2@bretonni>
Source record: 19885

Recherche schema de l'interface qui autorise la liaison et la commande du
FT990 avec un PC
Merci de transmettre infos a
hbreton@hol.fr

582. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330be285.11041921@news.erinet.com>
Source record: 19886
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

>Do you so delusional?!?

<sigh> I KNEW somebody would catch that soon as I read it (after I sent it) <G> I simply have to STOP posting at 4:00 a.m. Should have read "Are you so delusional" :>

>**
>* onbelay@ma.ultranet.com *
>* *
>* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
>* Manchester, NH *
>**
>.

583. Re: Mir overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5egpop$4mu@newsread.onramp.net>
Source record: 19887

He wanted a WWW site to view not a tracking program.
I have seen a few that need a JAVA plugin to view.
I will see if I can find the link for you.

I use OrbitTrack on my MAC and NOVA when I run the MAC in
WIN 3.1 mode.

73

584. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5egut3oc1@news.via.nl>
Source record: 19888
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob Nielsen <nielsen@primenet.com> wrote:

>Ah, yes, and if you look at the figure on page 6, the "E" has a jumper
>at W301, while the "E3" does not,
Nicely spotted Bob!
As the green wire is in series with D308, cutting the wire equals removing
D308. That leaves us with an identical diode-matrix for the E2 and the E3,
which have different transmit ranges.....

In reality it was tested that the difference between E2 and E3 is in diode
D304: with D304 it is an E2, without it an E3 (which is equal to E9).

Sigh.... Am I suffering from dyslexia or what is going on here?....

There may be a NOSPAM. in front of my E-mail address.
It is there to fool machines, not people.

585. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C098B.CED@flash.net>
Source record: 19889
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Doug Woodruff wrote:
> >
> > Come on, Burt....
> > Let me see ---- public service events (bike races, marathons, sporting
> > events, Special Olympics, APRS at the real Olympics in Atlanta, etc),
> > search and rescue communications (whether on foot, in vehicles, or in
> > the air), coordination of communications for emergency management
> > agencies (from city/municipal to FEMA), and what about hurricanes,
> > tornadoes, wildfires.....
>
> And what percentage of hams take part in the above?
> And of those that do, ham communication uses 400000 words when 10 will
> do. Hams are horribly inefficent voice communicators.
>
>
> #===============#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=====================================================================#

Damn now thats a first, Hams talk to much......Geeeezzzz.hmmmmmmmmmm??
```

586. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C0B15.677B@flash.net>
Source record: 19890
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Doug Woodruff wrote:
> >
> > Burt,
> >
> > I'll be checking the callsign database with bated breath waiting for
> > your call to come open after you resign it......can't imagine why you
> > would want to continue to be identified with such a bunch of losers like
> > us!!
>
> I rarely admit I am a ham to anyone in the normal world (as in REAL
> world).
>
> #================#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=========================================================================#

Your a ham{pig meat} Burt, theres no doubt!!!!!!!!!
Brian
```

587. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C0A3B.E69@flash.net>
Source record: 19891
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Barney wrote:
> >
> > WHY do you ONLY want to give away 2 meters, Burtie?
>
> Actually you are correct. Hams need nothing except to SERVE THEMSELVES.
>
> > Why not get all the hams to write the FCC and recommend that they give
> > away ALL of our spectrum?
>
> Great!
>
> > I am sure the readers of this newsgroup are already dashing off letters
> > by the DOZEN to the FCC in response to your great message, since we all
> > follow you like the pied piper!
>
> Actually you all follow each other like the Pied Piper. Listen to a
> contest.
>
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

Its called a hobby Burt! Remember!!!!!!!!!
Brian

588. Re: ICOM IC-970H ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5egpb6$4mu@newsread.onramp.net>
Source record: 19892

There were 1296 Mhz and 2.4GHZ modules for the ICOM970.
The unit was the top of the line HAM Satellite rig.

I think you can get three down converters for the price of
one 2.4 Ghz module

73

Bob

589. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5BDE.58CC@geocities.com>
Source record: 19893
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Woody wrote:

> since the idiots in
> Newington have promoted this as a "hobby" and dropped the "service".

It is a hobby, exactly what service does ham radio perform?

Computers, the internet in every
> classroom, more education spending..get it? More utopian spending at
> Burt's place of work.

What a horrible thing to spend money on education.

> I do agree 90% of hams are boring and unskilled, but to get to the
> point, sharing the 2m band will lead to exclusive allocation and then
> what do you do? I will become an outlaw: guns, scanners, ham radios,
> cigarettes, etc.

Hams will never violate the law. If they had the courage to go more than
10 minutes without IDing most would pee in their pants.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

590. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C59B4.5040@geocities.com>
Source record: 19894
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG! wrote:

> Its called a hobby Burt! Remember!!!!!!!!!
> Brian

It is a hobby but the silly FCC calls it a service because that is what
it is SUPPOSED to be.

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

591. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A80.944@geocities.com>
Source record: 19895
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Mark Schneider wrote:

> Hey Burt - how about a little credit where credit's due?

Ham radio defined:
Mark Schneider, WI1W said:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

592. Ham radio defined CREDITED

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A2D.1404@geocities.com>
Source record: 19896
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

I used the following quote without giving credit to the author because most hams are afraid to speak out against the HOBBY. But I found a ham with GUTS!

Ham radio defined:
Mark Schneider, WI1W said:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

593. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A59.4F52@geocities.com>
Source record: 19897
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG! wrote:

>
> Your a ham{pig meat} Burt, theres no doubt!!!!!!!!!
> Brian

Class

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

594. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5C9E.64F9@geocities.com>
Source record: 19898
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

tim_hynde wrote:
>
> The part that takes guts is to promote this hobby of ours in a positive
> way,
> bitching and moaning about how bad things are takes NO GUTS AT ALL and
> that's
> all I've ever seen from your posts. Nothing positive, no creative ideas
> just good
> ole belly achin.
>
> Do you have guts Burt?

It takes guts to kiss ass?
Thatr is what hams are experts at.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

595. Re: AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5ehoaa$5l2@dfw-ixnews4.ix.netcom.com>
Source record: 19899

In <199702181540.RAA28852@mail0.spidernet.net> arisk@spidernet.COM.cy (Aristides Kaponides) writes:
>
>Can someone tell my if AO-27 is still operational?I dont get anything out of it.
>73 de Aris-5B4JE
>

Aris,

As I understand the bird is not on over Europe because of abuse from unlicensed operators. It functions regularly over North and Central America during daylight hours.

As a note to those wishing to use AO-27 over North America. This bird is in constant use during daylight hours. If you don't hear it PLEASE DON'T CALL CQ you will just be QRMing the bird. If you don't hear it the problem is yours the bird is active, count on it. Thanks

73 Jerry KK5YY
AO-27 QRP/Handheld

596. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5ehoulcjd1@decius.ultra.net>
Source record: 19900
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>AL7OQ wrote:

>> Ask FEMA (Federal Emergency Management Agency), who has opposed the
>> Little LEOS proposal on the ground that hams provide invaluable
>> emergency communications services on 2 meters.
>>
>> Burt: be honest! Why are you supporting this industry band grab?

>Because I am public service minded person.

I'm glad you said this Burt. The Boston Marathon will be running
on April 21st. We will need additional volunteers. I will be part
of a group using APRS software to keep track of emergency
vehicles. I believe this is a school holiday, so you should be free.

Since you are a teacher of electronics, you should be able to
throw together a tracker if you want to help even more. Simply
interface a GPS unit supplying an NMEA sentence to a TNC
of your choice. Transmit on 145.79 (you can use that 2M
equipment in your closet) . The Shareware is downloadable
from various web sites.

If you don't have, or can't build, a GPS unit, just keep the
serial interface of the TNC free and we can program it with
a laptop.

Maybe we can even put your moped to work!

Anyway, Thanks for volunteering!
73,

Steve

smd@ma.ultranet.com

597. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C6E46.3C9@geocities.com>
Source record: 19901
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve D'Amelio wrote:

> >Because I am public service minded person.
>
> I'm glad you said this Burt. The Boston Marathon will be running
> on April 21st. We will need additional volunteers. I will be part
> of a group using APRS software to keep track of emergency
> vehicles. I believe this is a school holiday, so you should be free.

I have heard races covered by ham radio. CBers do better.
Hams are horribly inefficent blabber mouths but I bet your group in
the Boston area actually does a lot of good.

> Maybe we can even put your moped to work!

Now that I would be interested in.

```
#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=============================================================================#
```

598. could u help?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: FP <patalong.roki@edina.xnc.com>
Message-ID: <330CF51F.5FD7@edina.xnc.com>
Source record: 19902

```
hi out there!
i=B4m writing a PHD-thesis about news-flow from public-realtion-sources =

through radio. part of it a comparison of the different radio-scenes in =

differnt countries. who could help me to information about the =

radio-scene in his or her country?
my questions:
>what is =84the radio=93 like in your country? music-dominated? how much in=
formation do you get, and about what? culture, politics, economy? =

foreign news? news and infos about foreign companies?
>is =84your=93 radio-scene predominantly commercial, state-controlled, publ=
ic?
>do you think, that radio-stations use public-relations-material a lot?
>do you think, they use ready made programs that come, for instance, from b=
ig compnies?
>do you think the people in your country would be interested in things like=
that: industry-public-relations, government-pr and so on?
it would be great to hear from you: let=B4s talk! my email-adress: =

frank.patalong@edina.xnc.com
thanks, frank
```

599. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb20.163529.9456@ke4zv.atl.ga.us>
Source record: 19903
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3309c583.501806@news.monad.net> bbeford@cyberportal.net (Bruce Beford) writes:
>On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
><burtfisher@geocities.com> wrote:
>>snip<
>> The League's objective is to falsely demonstrate there is
>>broad citizen opposition to the industry proposals.
>
>Wrong here. If the League alerts its members to a threat to the
>amateur band allocations, and the membership (and Amateur community at
>large) agrees, it is by no means a "false" demonstration. It
>demonstrates that there is, in fact, STRONG, BROAD opposition to the
>sharing of these band segments with other sevices, as NO method of
>sharing has been proposed that would not severely interefere with
>existing services here, especially to the amateur satellite service. I
>encourage all those amateurs (who have not already done so) to file
>their comments OPPOSING the sharing of these band segments with other
>services.

I don't agree with Burt's position, Bruce, but I haven't seen any engineering study which would indicate that the SS signals of the LEOs would adversely impact amateur operations. Frankly, I think their signals would have negligible impact on most amateur operations, including most amateur satellite operations. There might be some impact on traditional EME operations due to the slightly raised noise floor, but that's a very tiny part of amateur activity on these bands.

The real problem is the other way, with the relatively high power narrowband amateur operations causing interference to the LEO's terrestrial users. Due to the near-far effect, nearby amateur operators would overwhelm the SS coding gain and cause interference to the receivers of terrestrial users of the LEO services. That's where the danger to amateur radio lies in this proposal.

Once they have the camel's nose in the tent, and have established an economic interest in the spectrum with a large user base, the interference to their operations by amateurs would serve as an excuse for them to go back and request exclusive access to the spectrum, IE kick the amateurs out.

Of course if amateurs also adopted SS systems, and practiced proper power control (required by amateur regulations, but ignored in amateur practice), there would be negligible interference in either direction. But amateurs appear unlikely to do that voluntarily, so conflict would

be inevitable. And amateurs don't wield either the economic or political power to prevail in such a conflict.

We may win this time, and I've dutifully filed comments supporting amateur radio, but ultimately we can't continue to warehouse spectrum. The pressure to effectively utilize the spectrum will continue to mount, and unless *we* start using it effectively, others ultimately will.

This is deadly serious. The FCC has made it very plain that they will no longer condone warehousing of spectrum. They are in the process of forcing broadcast to give up the spectrum it has warehoused. Congress has mandated that warehoused military spectrum be released. And that leaves amateur radio as the only major warehouser of spectrum left untouched. That can't last long.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

600. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ei5nmkmi3@nadine.teleport.com>
Source record: 19904
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

I really hate to see this stuff spilling out of its normal bucket, rec.radio.amateur.misc. Please take a look at the list of newsgroups you're posting to before you click the "send" button and see that it's limited to the appropriate group. (I personally feel there *is* no appropriate group for this sort of childish tantrum, but most of us have abandoned rec.radio.amateur.misc to it, so please be satisfied with keeping it there.)

Thanks!

Roy Lewallen, W7EL

601. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5eied3$9o2$1@decius.ultra.net>
Source record: 19905
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>Steve D'Amelio wrote:

>> >Because I am public service minded person.
>>
>> I'm glad you said this Burt. The Boston Marathon will be running
>> on April 21st. We will need additional volunteers. I will be part
>> of a group using APRS software to keep track of emergency
>> vehicles. I believe this is a school holiday, so you should be free.

>I have heard races covered by ham radio. CBers do better.
>Hams are horribly inefficent blabber mouths but I bet your group in
>the Boston area actually does a lot of good.

Even Better Burt! Since APRS is digital (but you knew that) you need
not hear any of that horribly inefficent blabber. Just objects on a computer
screen.

BTW, As a former police dispatcher and PO (I even worked in Yarmouth,
hey, maybe I arrested you!) I understand your comments about communication.
But it's easy to critisize from the armchair, isn't it? I have been in radio
communication situations in which life depended upon good skills. Since
a lot of that experience was on the Cape, maybe it was a life of someone you
knew. I don't take this stuff lightly.

I still have a cottage in Dennisport BTW (off Old Wharf Rd.) I even have a
weather station there you could monitor if you were on APRS.

Steve

>
>> Maybe we can even put your moped to work!

>Now that I would be interested in.

>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

602. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330CDDA5.4EDB@geocities.com>
Source record: 19906
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve D'Amelio wrote:
>
> Even Better Burt! Since APRS is digital (but you knew that) you need
> not hear any of that horribly inefficent blabber. Just objects on a computer
> screen.

I know very little about APRS I must admit.

> BTW, As a former police dispatcher and PO (I even worked in Yarmouth,
> hey, maybe I arrested you!) I understand your comments about communication.
> But it's easy to critisize from the armchair, isn't it? I have been in radio
> communication situations in which life depended upon good skills. Since
> a lot of that experience was on the Cape, maybe it was a life of someone you
> knew. I don't take this stuff lightly.

I have yet to be arrested. You sound like a very competent person.
Yes it is easy for me to bitch but I have paid dues over the years.
Once we could not get hams to help out at a Beach Boys concert at Otis
so my daughter, who was 8 at the time (KA1VBQ) was paired with an adult
Red Cross worker and she did fine.

> I still have a cottage in Dennisport BTW (off Old Wharf Rd.) I even have a
> weather station there you could monitor if you were on APRS.

Call me when you are here. It would be a first for a ham that does not
agree with me to say so in person.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

603. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>
Source record: 19907
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997, Burt Fisher wrote:

>
> > I really wonder what his daughter, KA1VBQ thinks about
> > Amateur Radio?
>
> She says, "it's boring....I do not relate to them in anyway what so
> ever."
> quoted at 1133 EST. She is a straight A student.
>
Burt, Just what are you doing to make ham radio more interesting to the young folks. What are you doing to bring more young folks into the hobby and keep them there??

It is real easy to sit back and spout a lot of hogwash about how boring, and how stupid and all of the rest of the blah blah blah that I see comming from you.

Have you started to put together a high speed packet network, at a speed high enough to use the internet browsers on? If computers interest the kids, Add computers to the radio, only do it at a speed that will hold their interest. If you come to Dayton this year look me up. The Consolidated Electronics Booth as I work for them and get stuck there for the three days. I will introduce you to a friend of mine, in fact several. One started the 19k2 network around here on 440 several years ago. He and I along with hams around the country are trying to get 900 megs off the ground with spread spectrum. All to get more speed so that ham radio can compete with the internet. Another friend is a scout leader, Their class this time around has over 40 students, all looking for that ticket as he has made ham radio interesting to the scouts by arrainging field day out at the scout camp. He has set up a satellite station to work the birds with the boys right there.

Ponder those things Burt, You claim to be an educator, yet you cut, slice and condem rather than teach and enhance. I have kept my silence for a long time now and read what you have said. Perhaps I should continue to keep it, but I feel that someone has to point the truth out to you as you seem to be oblivious of it. There are many of us out here trying to put the ham back in ham radio and make it fun again, both for us and the young folks. Please quit lumping all hams in one heap and cutting us down. You are the one that gives ham radio a bad name to the non hams that read the news groups that you post your tirades to.

Fred ke8tq ke8tq@n8acv.#day.oh.usa.noam

Come to Dayton this year and stop at the TAPR booth to say hello......

604. Free to all Radio Amateurs

Newsgroup: rec.radio.amateur.space
Date: 1997-02-20 00:00:00 UTC
From: Al & Denise Waller <al@qsl.net>
Message-ID: <330CF710.83134AA@qsl.net>
Source record: 19908

Dear Fellow Amateur,

An Internet Web Server devoted entirely to Amateur Radio and associated hobbies.

If you would like a home page of your own or for your Radio Club it's absolutely FREE and will always be FREE.

This is my private computer system with the Server on a T1 hi-speed network. It's a hobbie for me
just as Ham Radio is and I'm glad to share my system with everyone.

This is what you'll get:

E-mail account that you can use locally or have forwarded to your regular account

Example: K3TKJ@qsl.net , NE3Y@qsl.net , YOURCALL@qsl.net

FTP privledges

Telnet privledge (after you convince me you need it)

Your own personal Web site....Try these working pages now.

http://www.qsl.net
http://www.qsl.net/k3tkj
http://www.qsl.net/kc8eds
http://www.qsl.net/ve7fym
http://www.qsl.net/n3wdl

Here are the rules:

1) NO COMMERCIAL USE!

2) I'm not going to write the page for you. Isn't it time you learned something new?

3) You have an Amateur License.

That's it.... If you want to try it signup at http://www.qsl.net

Need more info? E-mail: k3tkj@qsl.net

73,

Al Waller K3TKJ
Laurel, Delaware

605. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5ektla$oft@news1.mnsinc.com>
Source record: 19772
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

adell@planet.net (Steve - KF2TI (Landing, NJ)) whistled a happy tune like:

.and it will be something GREAT!!.
|>a hint...a special event station from a certain town on Cape Cod
|>celebrating the ham who everyone loves to dislike)

ROTFLVVL Steve !! I can't WAIT to see what this is all about!
Will they list this "Burtie's Special Event Station" in QST
as "Celebrating 5 years of obnoxiousness and Stupidity from Cape Cod?"

Maybe they could issue a special QSL. Any suggestions?

606. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5ejhurcan2@news.mhv.net>
Source record: 19773
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330BFA4C.2BF4@idecc.com>, tim_hynde@idecc.com wrote:
>Burt Fisher wrote:
>>
>> A man went to a guts store to get some guts for dinner. He sees a sign
>> remarking on the quality of guts offered at this particular gut
>> store. So he asks the butcher: "How much for Engineer guts?"
>
>Burt,
>
>The part that takes guts is to promote this hobby of ours in a positive
>way,
>bitching and moaning about how bad things are takes NO GUTS AT ALL and
>that's
>all I've ever seen from your posts. Nothing positive, no creative ideas
>just good
>ole belly achin.
>
>Do you have guts Burt?

Ignore Burt please. This crap has no place in this newsgroup. Save it for policy or the CB group.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

607. Re: Need information on Weather/Amatuer Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Tom Woolner <Tom@woolner.demon.co.uk>
Message-ID: <wgQ6CAAY2gDzEwo4@woolner.demon.co.uk>
Source record: 19774
Body handling: HTML body converted to readable text

In article <5ej7mv$pdn@cc-server9.massey.ac.nz>, Peter Dalliessi
writes
>Could anyone direct me to magazines/publications that provide detailed
>information on Amatuer and Polar Orbiting Weather Satellites, e.g.,
>NOAA , Fengyung, and METEOR satellites. In particular I would like to
>know precisely what is up there, what is planned for launching in the
>future, and a comprehensive list of satellite operating frequencies.
>
>Thank in anticipation.
>
>Peter Dalliessi, ZL4MS,
>FIMS,
>MAssey University,
>Palmerston North, New Zealand.
>

Hello Peter,

I recommend the British magazine Short Wave Magazine - I think you can get it in NZ. Among many other features it runs a monthly 2 or 3 page column on weather staellites written by Lawrence Harris, in a very accessible form.

I also strongly recommend subscribing to the automatic WXSat mailer list. Below are attached a couple of recent posts complete with visible header. If you study these you will see who to mail to subscribe. Here you will see amateurs and professionals exchanging information. This is an excellent forum.

You might also consider joining the Remote Imaging Group (RIG). For 10 Quid each year you get a solid journal every quarter containing first class articles on satellites, receiver and antenna construction, pictures and how to interpret them plus much more. Take a look at the RIG web-site, given below.

The following is forwarded by the wxsat mail list daemon.
Mail addressed to wxsat-mail-daemon@ssg will be discarded.
Replies: wxsat-l@ssg.com - subscription changes: wxsat-request@ssg.com
-->>>^^^<<<--

>Subject: Re: meteor 3-5
>Date: Thu, 20 Feb 1997 08:51:33 -0500 (EST)

>Hello Rude Jim,
> A Martelec receiver, specifically the MSR-50 model that I am using at the
>moment is advertised as a *virtual* weather satellite receiver. It has no

>control panel or crystals and is slightly larger than a pack of cigarettes.
>Tuning is accomplished with a computer program that comes with it. Tuning
>range is 136.5-141.5 MHz. It comes from the U.K. It appears to have been
>built in an explosion proof box...
>

The following is forwarded by the wxsat mail list daemon.
Mail addressed to wxsat-mail-daemon@ssg will be discarded.
Replies: wxsat-l@ssg.com - subscription changes: wxsat-request@ssg.com

>Subject: wxsat status report 171
>From: Peter Wakelin
>Date: Tue, 18 Feb 1997 16:47:28 +0000

>STATUS 171
>METSAT APT STATUS REPORT 18 February 1997
>As monitored in the UK

>NOAA 12 ON 137.50MHz
>NOAA 14 ON 137.62
>METEOR 2-21 OFF
>METEOR 3-5 ON 137.85
>OKEAN 4 (1-7) ON 137.40
>SICH 1 OFF Off until March

>Peter Wakelin, Remote Imaging Group. Europe's leading group for
>weather satellite enthusiasts with 2000 members in 41 countries.
>E-mail: peter@ascotrig.demon.co.uk Fax: +44 1344 26028 Tel: +44 1344
>23200
>http://www.rig.org.uk/index.html

Regards,
--
Tom Woolner The rain it raineth on the just
And also on the unjust fella:
But chiefly on the just, because
http://www.woolner.demon.co.uk The unjust steals the just's umbrella
(Bowen 1835-94)

608. Re: STS-82 freqs wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: "John M. Yellenic" <yellenic@epix.net>
Message-ID: <330E1CFF.54A3@epix.net>
Source record: 19775

Aristides Kaponides wrote:
>
> Can someone send me the freqs of the STS82 space shuttle if any??
> 73 de Aris-5B4JE

STS-82 landed this morning (21Feb97) at 8:32 UTC.

Visit the site at http://shuttle.nasa.gov/ for more info.

John - N3YPR

609. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <330e266f.884530@news.tfs.net>
Source record: 19776
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Could somebody please post Burt Fisher's home address and telephone number on these newsgroups he keeps crossposting to so we can call him (like maybe when I'm reading the news at 2:00 A.M.) and tell him what we think of his abusive drivel and/or mail him dead rodents and such?

I read somewhere about some guy being a public pain in the ass and being subscribed to like 300 "bill me later" subscriptions to everything from porn magazines to Forbes. Surely somebody out there has a similarly wonderful idea about how to deal with Butt Fisher. If he wants to make himself a public figure, then we can treat him as such, you know posting details about his formerly private life, what kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher that life as a private citizen is a little nicer than life as a public figure. I think a good argument can be made that his repeated controversial postings on USENET already make him a public figure. Thoughts?

Burt Fisher <burtfisher@geocities.com> wrote:

>Bob wrote:
>
>> Simple: He just refers them to the following newsgroup:
>> news://alt.radio.pirate
>> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
>> repeater network from the ground up, he thinks these things should be left to the
>> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some
>> time doing some technical things (he's an extra), but he must now be bored.
>
>Do not give me that much credit. I takes few brains to pass ANY ham
>license TODAY.
>I was in RACES.
>
>
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

610. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970221162227.28010B-100000@avatar.avatar.com>
Source record: 19777
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997, Steve - KF2TI wrote:

> In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>,
> peerenbf@dma.org says...
> > If you come to Dayton this year look me up. The
> > Consolidated Electronics Booth as I work for them and get stuck there for
> > the three days.
>
> Unfortunately or fortunately (depending on your point of view), the man
> who challenges others intestinal fortitude wouldn't have the guts to face
> the very group(s) of people he so easily insults. It's far easier to
> insult from a distance (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)
>
>

Some people could constantly mail bomb his account until his ISP cuts him off. Of course, he could switch to another ISP, and then the mail bombing might start again. However, I'm not recommending such a thing....

But..., its real easy to set up a cron jobs under unix to send it a huge 100k message every five minutes. If 50 people started doing that ... well, you get the pictures.

Kory
AC6RN

611. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: ka1tox@bmugbos.org
Message-ID: <ka1tox-ya02408000R2102972135270001@news.tiac.net>
Source record: 19778
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>I don't agree with Burt's position, Bruce, but I haven't seen any
>engineering study which would indicate that the SS signals of the
>LEOs would adversely impact amateur operations.

In case you missed the number of birds...
From Edupage:

TELEDESIC LOOKS AT SCALING BACK
Teledesic Corp., the high-profile, $9-billion satellite communications project backed by cellular magnate Craig McCaw and computer mogul Bill Gates, is exploring options to scale back its 840-satellite system, beginning initially with just 288 "birds." The satellites will occupy a low-Earth orbit, 400-700 miles above the Earth, circling in 12 orbital planes or "rings," with 24 satellites in each ring. A spokesman for Teledesic says the company "has not altered" its original plan, but may start off with a more modest arrangement. (Wall Street Journal 19 Feb 97)

612. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <330D719C.7C75@cornell.edu>
Source record: 19779
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

To all who have seen Burt Fisher's relentless attacks in various newsgroups:
Don't feel alone. He got a new Packard Bell for christmas and discovered that he could try to force his views on more people than if he just stuck to the classroom full of ninth graders he's trying to teach broadcasting. I wonder if he still needs help getting rid of that bus mouse he doesn't really have?

AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>

177 unique articles posted.
Number of articles posted to individual newsgroups (skewed by cross-postings):
69 rec.radio.amateur.misc
51 alt.support.divorce
35 rec.radio.amateur.digital.misc
4 ne.weather
2 comp.sys.ibm.pc.hardware.cd-rom
2 comp.sys.ibm.pc.misc
2 misc.invest.stocks
2 ne.forsale
1 alt.child-support
1 alt.support.diet
1 alt.test
1 comp.sys.ibm.pc.hardware.storage
1 misc.foresale.computers
1 rec.radio.amateur.boatanchors
1 rec.radio.amateur.dx
1 rec.radio.amateur.equipment
1 rec.radio.amateur.policy

>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | | 389 Old Bass River Rd |
> | Amateur call | South Dennis, Ma. 02660-2779 (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

This is true. You can't see a thing on his web site unless you let him execute Media Player on your machine. I've got a problem just allowing executables being sent to, and run on my machine to suit someone elses whim. With this guy's attitude, who knows what you'd end up with.
--

```
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----
```

613. Need information on Weather/Amatuer Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: P.Dalliessi@massey.ac.nz
Message-ID: <5ej7mv$pdn@cc-server9.massey.ac.nz>
Source record: 19909

Could anyone direct me to magazines/publications that provide detailed information on Amatuer and Polar Orbiting Weather Satellites, e.g., NOAA , Fengyung, and METEOR satellites. In particular I would like to know precisely what is up there, what is planned for launching in the future, and a comprehensive list of satellite operating frequencies.

Thank in anticipation.

Peter Dalliessi, ZL4MS,
FIMS,
MAssey University,
Palmerston North, New Zealand.

614. frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: jirving@taranaki.ac.nz
Message-ID: <330d54eb.1887662@news.taranaki.ac.nz>
Source record: 19910

Hi all,

I am very much a novice in this extremely interesting hobby.
Could someone please advise me if MIR has 70cm on board
and if so what frequencies I should watch for. I have just purchased
a 2m/70cm transceiver and are keen to try it out.

615. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d76e1d458fab9079897cf@news.planet.net>
Source record: 19911
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>, peerenbf@dma.org says...
> If you come to Dayton this year look me up. The
> Consolidated Electronics Booth as I work for them and get stuck there for
> the three days.

Unfortunately or fortunately (depending on your point of view), the man who challenges others intestinal fortitude wouldn't have the guts to face the very group(s) of people he so easily insults. It's far easier to insult from a distance (however, that will change towards the end of March..more on that as time progresses..and it will be something GREAT!!. a hint...a special event station from a certain town on Cape Cod celebrating the ham who everyone loves to dislike)

> Please quit lumping all hams in one heap and cutting us down. You
> are the one that gives ham radio a bad name to the non hams that read the
> news groups that you post your tirades to.
>
water off a ducks back

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

616. Learn to Make $$$FAST CASH$$$ With Honest Work

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: fucuco@hamlet.net
Message-ID: <330d8112.8019440@news.uoknor.edu>
Source record: 19912
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Dear Friend,
Five minutes and five dollars can change your life!!!THIS IS THE FAIREST, MOST HONEST WAY I KNOW TO SHARE THE WEALTH! Would you like to make thousands of dollars, quickly, legally, with NOCATCH? Then keep reading..... please take five minutes to read thisarticle; it will change your life, just like it did mine. It's true! You can make up to, or over, $50,000.00 in 4 - 6 weeks; maybe sooner! I SWEAR I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're interested, keep reading; if you're not, I apologize forwasting your time.

Here we go. A little while back, I was browsing through these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars in weeks, with only an initial investment of $5.00!! So, I thought, "Yeah, right, must be a scam", but, I was curious, like most of us are, and kept reading. Anyway, it said that you send $1.00 to each of the five names and addresses stated in the article. You then place your own name and address in the article at the bottom of the list at #5, and post the article in at least 200 newsgroups, (there are thousands). No catch, that was it! So after thinking it over, talking to a few people first, I tried it.I figured what have I got to lose except for 5 stamps, and $5.00, right? Well, guess what....within 7 days, I started getting money in the mail! I was shocked! I still figured it would end soon, and didn't give it another thought. But then money kept coming in , tripling in size and multipying by 10 - 20 times the amount that I got the first week! In my first week I made about 20 - 30 dollars. But, by the end of the second week, I had made a total of over $1000.00!!!! In the third week, I had over $10,000.00, and its still growing. This is my fourth week, and I've made about $42,000.00 TOTAL, and the money is still coming in.....Let me tell you how this works, and most importantly, WHY it works, also, make sure you print a copy of the article NOW, so you get the information off of it, and begin making money.The process is very simple, and it consists of 3 EASY steps:

STEP 1: Get 5 separate pieces of paper and write the following on each sheet of paper...."PLEASE PUT ME ON YOUR MAILING LIST", and then write your NAME AND ADDRESS. Get five $1.00 bills and place ONE inside each piece of paper that you just wrote on. Fold each paper so the bill will not be seen in the envelope, (otherwise, nosey people who like to steal envelopes with money in it won't get yours). Put one paper inside each envelope, and seal it. Do the same for all five. You should now have 5 envelopes, sealed, EACH with a piece of

paper AND a $1.00 bill, stuffed inside of the paper. Make sure those words that were stated above, are written on each paper. What you are doing is creating a service; this is PERFECTLY LEGAL. Now then, mail the 5 envelopes, with the paper and $1.00 bill in each, to the following 5 addresses:

1. D. Ellis, 8301 W. 92nd St., Overland Park, KS 662122.

2. J. Krakowiak , 1112 W. Broadway #1, Anaheim, Ca 928053.

3. J. Sides, Lamar Box 1, South Plains College, 1401 S. College Ave.,Levelland, TX 79336

4. Areg Mkrian, 15 Alma Ave. Belmont, MA 02178-4404

5. A Karns, 4000 NW 53rd, Oklahoma City, OK, 73112

STEP 2: Now take the #1 name off the list that you see above, move the other 4 names up, (5 becoming 4, 4 becoming 3, etc.), and put YOURNAME as number 5 on the list. You can slightly alter this article ifyou need to; editing what you need to edit.

STEP 3: Post your amended article, (with your name at #5), to at least 200 newsgroups, (There are close to 19,000 of them). HOW TO DO THIS:If you are using Netscape 3.0, do EXACTLY the following:
1) Click on any newsgroup, like normal, THEN click on 'TO NEWS',which as on the far left when you're in the newsgroup page. This will bring up a box to type a message in.
2) Leave the newsgroup box like it is. CHANGE the subject box to something flashy, like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH"!!
3) Tab once, and you should be ready to type. Now, re-type, (onlyonce), this WHOLE ARTICLE WORD FOR WORD, except to insert your name at#5, and to remove #1 off the list; plus any other small changes youthink you need to make. Keep most of it the same!!
4) When you're done typing the WHOLE article, click on FILE in THISBOX, right above send, not where it says Netscape News On The FirstBox. Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS. Once saved, move on to number 5 below.
5) If you still have all of your text, send, or post, to this news group, now, by just clicking send; which is located below FILE, and right above Cc:.
6) Here's where you're going to post all 200. OK, click on any newsgroup, then click on 'TO NEWS', again, in the top left corner. Leave theNEWSGROUPS BOX alone. Again, put a flashy subject title in the SUBJECT BOX. Hit TAB once you're in the body of the message, and then click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find YOUR file that you saved; click once on the file, and then click 'OPEN'. Now click on OK. If you did this right, you should be able to see your file name in the attachments box, and it will be shaded green.If you use IE EXPLORER, it's just as easy......HOLDING DOWN THE LEFT BUTTON,

HIGHLIGHT THIS ARTICLE. THEN PRINT THIS ARTICLE FOR YOURRECORDS TO HAVE THE NAMES OF THOSE YOU WILL BE SENDING $1.00 TO. NEXT, GO TO THE NEWSGROUPS AND PRESS "POST AN ARTICLE". A WINDOWWILL OPEN. TYPE YOUR HEADLINE IN THE SUBJECT AREA AND THEN CLICK INTHE LARGE WINDOW BELOW. PRESS "CRTL" AND THEN "V", AND THE ARTICLE WILLBE PLACED IN THE WINDOW. IF YOU WANT TO EDIT THE ARTICLE, DO SO, AND THEN HIGHLIGHT AND COPY IT AGAIN. NOW EVERY TIME YOU POST THE ARTICLE IN A NEWNEWSGROUP, ALL YOU HAVE TO DO IS REPEAT "CRTL" AND "V" AND PRESS POST.
7) That's it. Each time you do this, all you have to do is type in a different newsgroup, so that way, it posts to 200 different newsgroups. You see? Now you just have 199 to go!!! (Don't worry, eac hone takesabout 30 seconds; once you get used to it). REMEMBER ..200 IS THE MINIMUM. The more you post, the more money you'll make.AND THAT'S IT!!!! THOSE ARE THE ONLY 3 STEPS THERE ARE!!! You are now in the mail order business, and will start receiving $1.00 envelopes from various people, all over the world, within days.(HINT: THE MORE NEWSGROUPS YOU POST TO, THE MORE MONEY YOU WILLMAKE!). You may want to rent a PO Box, eventually, because of all the mail. If you wish to stay anonymous, you can come up with a name, suchas "manager" or"investor". Just make sure all the addresses are CORRECT, please! LET ME TELL YOU WHY THIS SYSTEMS WORKS!! Out of every 200 postings, let's say I ONLY receive 5 replies, (this is actually VERY LOW). So, I made $5.00 with my name at #5. Now then,each person who just sent me $1.00 makes, say, only 200 postings, now with your name at number 4, WHICH IS A TOTAL OF 1000 POSTINGS, not including yours too. 50 people send you $1.00 now; that's $50.00 you just made! Now then, your new 50 agents post 200 each with YOUR NAME AT NUMBER 3, or10,000 postings, (50 X 200). Average return is 500 at $1.00 each, which is $500.00! They make 200 postings, which is 5000 returns at $1.00 each,which is $5000.00!! And finally, 5000 people make 200 postings each,with YOUR NAME AT NUMBER 1. YOU NOW GET A RETURN OF $50,000.00 BEFOREYOUR NAME DROPS OFF THE LIST!! AND THAT'S IF EVERYONE MAKES ONLY 200 POSTINGS, AND IF ONLY A SMALL % PEOPLE RESPOND!!!When your name is no longer on the list, you just take the latest posting that is appearing in the newsgroups, and SEND OUT ANOTHER $5.00 to THE NAMES ON THE LIST, PUTTING YOUR NAME AT #5 AGAIN, AND START POSTING AGAIN!! The thing to remember is, do you realize that THOUSANDS OF PEOPLE ALL OVER THE WORLD ARE JOINING THE INTERNET AND ARE READING THESE ARTICLES EVERY DAY!! JUST LIKE YOU ARE RIGHT NOW!!! So, can you afford $5.00 and see if it really works? I think so.......People have said, "What if the plan is played out and no one sends you the money?" So what! What are the chances of that happening when there are TONS OF NEW, HONEST USERS AND NEW, HONEST PEOPLE joining theInternet and Newsgroups everyday? and, are willing to give it a try? Estimates are at 20,000 to 50,000 new users, each and every day!! Remember, play FAIRLY and HONESTLY and this WILL WORK, I PROMISE YOU!! You just have to behonest. Make sure you print this article out, RIGHT NOW, also, try to keep a list of everyone that sends you money, and always keep an eye on the newsgroups to make sure everyone is playing fairly. REMEMBER: HONESTY IS THE BEST POLICY!!

YOU DON'T NEED TO CHEAT THE BASIC IDEA TO MAKE MONEY! GOOD LUCK TO ALL, AND PLEASE, PLAY FAIRLY; YOU WILL REAP THE HUGE REWARDS FROM THIS.....WHICH IS TONS OF CASH!!! ****By the way, if you try to deceive people by posting the messages with your name on the list, and by not sending the money to the people already on the list, you will not get much. Someone I talked to knew someone who did that, and he only made $150.00; and that was after seven or eight weeks!! Then, he sent the 5 $1.00 bills; people addedhim to their lists, and in 4 - 5 weeks, he had over $10,000.00. THIS IS THE FAIREST, AND MOST HONEST, WAY I HAVE EVER SEEN TO SHARE THE WEALTH OF THE WORLD WITHOUT COSTING ANYTHING BUT OUR TIME! GOOD LUCK, AND HAVE FUN!!!!

617. Re: frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.239.000CF0F3@hugo.rz.fh-ulm.de>
Source record: 19913

>Hi all,

>I am very much a novice in this extremely interesting hobby.
>Could someone please advise me if MIR has 70cm on board
>and if so what frequencies I should watch for. I have just purchased
>a 2m/70cm transceiver and are keen to try it out.

Hi Jim,
there are several frequencies You can try:

1) 145,800 MHz down 145,200 up, doppler shift approx. +/- 3kHz voice or packet

2) 437,950 MHz down 435,750 up, doppler shift +/- 10 kHz, this is a repeater,
You will also need a CTCSS tone to open it. Cannot remeber, 141.?? maybe

3) 437.925 MHz down 435,725 up, doppler shift +/- 10 kHz, this is the QSO-
mode where You can talk to the astronauts. Voice messages will be
transmitted as well on this frequency.

4) 437,975 MHz down 435,775 up, doppler shift +/- 10 kHz, packet radio

there is always only one of the 70 cm frequencies in use. Good luck,
73, Roman (DL2SFE)

618. NORAD Two-Line Orbital Element Set: Space Shuttle (97050.27936321)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5eiqdp$74o@blackbird.afit.af.mil>
Source record: 19914

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

HST
1 20580U 90037B 97050.27936321 .00000149 00000-0 00000+0 0 9283
2 20580 28.4692 70.2009 0014650 50.8005 134.7418 14.86363977175498
STS 82
1 24719U 97004A 97051.36279198 .00000158 00000-0 37388-6 0 349
2 24719 28.4691 63.2856 0024554 59.0284 176.5366 14.89068701 1338
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

619. STS-82 freqs wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <3.0.1.32.19970221150301.0068c708@nautilus.spidernet.net>
Source record: 19915

Can someone send me the freqs of the STS82 space shuttle if any??
73 de Aris-5B4JE

620. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970221125650_515664.456256_IHM46-63@CompuServe.COM>
Source record: 19916

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #61

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-1.compuserve.com (8.6.10/5.950515)
id HAA07211; Fri, 21 Feb 1997 07:56:45 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA26537 for <ham-space-list@mailbox.ucsd.edu>; Fri, 21 Feb
1997 04:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id EAA02755
sendmail 8.8.5/UCSD8.3
Fri, 21 Feb 1997 04:33:38 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA02743
sendmail 8.8.5/UCSD8.3
Fri, 21 Feb 1997 04:33:36 -0800 (PST)
Message-Id: <199702211233.EAA02743@noc.ucsd.edu>
Date: Fri, 21 Feb 97 04:33:35 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #61
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 21 Feb 97 Volume 97 : Issue 61

Today's Topics:
frequencies
IC725 FOR SALE!
Need information on Weather/Amatuer Satellites

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 21 Feb 1997 08:09:33 GMT
From: jirving@taranaki.ac.nz (Jim Irving)
Subject: frequencies

Hi all,

I am very much a novice in this extremely interesting hobby.
Could someone please advise me if MIR has 70cm on board
and if so what frequencies I should watch for. I have just purchased
a 2m/70cm transceiver and are keen to try it out.

Date: Wed, 19 Feb 1997 23:45:34 +0000
From: Gkenn <glenn@indigo.ie>
Subject: IC725 FOR SALE!

HF Radio & Accessories for Sale.

ICOM IC-725 ALL BAND HF TRANSCIEVER.
500 kHz - 30 MHz
AM, SSB, CW and FM
26 User Programmable Memories
3 Scan Types
Selectable Tuning Rate
Band stacking register capability
10 dB preamp
20 dB attenuator
100W output

ICOM AH3 HF AUTOMATIC ANTENNA TUNER
Wide tuning range
Automatic digital control tuning
Eight-frequency memory for fast tuning
Weatherproof design
Max 0.3W radiated power
Controlled directly by IC-725

DRAE 24 AMPERE POWER SUPPLY

All items are in mint condition and have the original instruction
manuals.

I am looking for L800 ono.

For more information email glenn@indigo.ie

Date: Fri, 21 Feb 1997 05:19:14 GMT
From: P.Dalliessi@massey.ac.nz (Peter Dalliessi)

Subject: Need information on Weather/Amatuer Satellites

Could anyone direct me to magazines/publications that provide detailed
information on Amatuer and Polar Orbiting Weather Satellites, e.g.,
NOAA , Fengyung, and METEOR satellites. In particular I would like to
know precisely what is up there, what is planned for launching in the
future, and a comprehensive list of satellite operating frequencies.

Thank in anticipation.

Peter Dalliessi, ZL4MS,
FIMS,
MAssey University,
Palmerston North, New Zealand.

End of Ham-Space Digest V97 #61
****

621. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC007.628E@geocities.com>
Source record: 19917
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Fred wrote:
>
> Burt, Just what are you doing to make ham radio more interesting to the
> young folks. What are you doing to bring more young folks into the hobby
> and keep them there??

I show 30 9th graders ham radio every year on the air, they also see the
ARRL self serving video tape and I talk about the hobby spewing the
company line.
And you are doing just what?

> There are many of us out here trying to put
> the ham back in ham radio and make it fun again, both for us and the young
> folks. Please quit lumping all hams in one heap and cutting us down. You
> are the one that gives ham radio a bad name to the non hams that read the

There may be "many" as you say but overall these many are a very small
percentage.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

622. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC12F.466C@geocities.com>
Source record: 19918
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> Unfortunately or fortunately (depending on your point of view), the man
> who challenges others intestinal fortitude wouldn't have the guts to face
> the very group(s) of people he so easily insults. It's far easier to
> insult from a distance (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)

I will be very pleased to present myself anywhere on Cape Cod that you
invite me to.
I will not barge in UNINVITED.
I will speak to any group about my views but if off CApe travel is
involved, I need expenses.

> > Please quit lumping all hams in one heap and cutting us down. You
> > are the one that gives ham radio a bad name to the non hams that read the
> > news groups that you post your tirades to.

Most belong in one group.
The reason few here agree with me is that all those that agree with me
left the HOBBY.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

623. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC1A3.4981@geocities.com>
Source record: 19919
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:

> Simple: He just refers them to the following newsgroup:
> news://alt.radio.pirate
> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
> repeater network from the ground up, he thinks these things should be left to the
> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some
> time doing some technical things (he's an extra), but he must now be bored.

Do not give me that much credit. I takes few brains to pass ANY ham
license TODAY.
I was in RACES.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

624. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Madd DOG <bmoceri@flash.net>
Message-ID: <330DFD45.72D7@flash.net>
Source record: 19920
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Glenn Schultz wrote:
>
> >
> > First of all, this clown is just looking for attention and enjoy's pushing
> > everyones buttons. He is looking for a response from a large group of
> > people, and he got it!
>
> And you are one of the ones who gave it to me.
> What is it about spineless hams that they think they can tell others
> what to do and not do it themselves? Are you German?
>
> > Don't give him the satisfaction of a response
>
> Like you did?
>
> > I really wonder what his daughter, KA1VBQ thinks about
> > Amateur Radio?
>
> She says, "it's boring....I do not relate to them in anyway what so
> ever."
> quoted at 1133 EST. She is a straight A student.
>

Straight A student, who gives a SHIT!!!Im supposed to be impressed?
Damn, I will have to call her for every decision in my life..hehehehe..
Shes a straight A student..Carefull guys, your dealing with the power of
GOD now...Her statements will mean everything now..

> >Does he really hate Amateur Radio that much? I don't think
> > so...His web page has several references, links, etc to Amateur Radio.
>
> Have you READ the references, they are hardly positive.
>
> > He even has some quotes paying homage to CW. Let's see, photo's of him and his
> > daughter with their call signs prominently displayed, callsign search,
> > links to Ham Radio info, and obviously very proud to be an Amateur Radio
> > Operator! At least that's what it looks like from this end!
>
> I do pay homage to CW, it is the one mode where hams get to the point.
> READ the K1OIK reference page.
>

> > So Burt, what's the real story? Are you AND your daughter going to give up
> > your calls?
>
> She wants to give hers up.
>
> Are you going to continue this rediculous thread? If you feel
> > such hatred towards the hobby, why don't you show it on your web page?
>
> Look at the WWW page man, it is all there.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

625. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-21 00:00:00 UTC
From: Villy R&#65533;lv&#65533;g <la4gy@online.no>
Message-ID: <330E09F9.26B6@online.no>
Source record: 19921
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Tom@astro.net wrote:
>
> In article <330BFA4C.2BF4@idecc.com>, tim_hynde@idecc.com wrote:
> >Burt Fisher wrote:
> >>
> >> A man went to a guts store to get some guts for dinner. He sees a sign
> >> remarking on the quality of guts offered at this particular gut
> >> store. So he asks the butcher: "How much for Engineer guts?"
> >>
> >Burt,
> >
> >The part that takes guts is to promote this hobby of ours in a positive
> >way,
> >bitching and moaning about how bad things are takes NO GUTS AT ALL and
> >that's
> >all I've ever seen from your posts. Nothing positive, no creative ideas
> >just good
> >ole belly achin.
> >
> >Do you have guts Burt?
>
> Ignore Burt please. This crap has no place in this newsgroup. Save it for
> policy or the CB group.
>
> Tom
>
> E-mail me with the address below, not with the above address.
> That address is to help stop junk e-mail!
>
> Tom Randall Amateur Radio - KB2SMS
> trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
> Member: AAVSO Solar Division
>
> Opinions herein are mine and may not be that of MHV.NET!
I am looking in to this groups for the first time.
Is this the normal level of discussion on these groups ??
Just want to know, before moving on to more serious groups...
73 de Villy (Will by the way be active from EU-062 next weekend)
--
Villy Rolvaag E-mail: la4gy@online.no
Langneset 10 AX-25 : LA4GY@LA3M.MO.W.NOR.EU
N-8600 Mo i Rana Tel. : +47 75 15 85 90 (priv)

Norway Tel. : +47 75 12 96 17 (work)

626. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: akent@bga.com
Message-ID: <5elldc$14ec@news3.realtime.net>
Source record: 19780
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

If you want ANY licensed amateur's address and phone number, do a search for QRZ on the web. Once there, you can input the callsign, and instantly get the info you want. Beware, that sometimes weird people use others' callsigns. Please be careful not to flame an innocent bystander in the process.

Good luck, and please think before you act harshly. The net is fun, and some people just are 'that way'.

Kent - de KC5WPW

chainsaw@tfs.net (Bob) wrote:

>Could somebody please post Burt Fisher's home address and telephone
>number on these newsgroups he keeps crossposting to so we can call him
>(like maybe when I'm reading the news at 2:00 A.M.) and tell him what
>we think of his abusive drivel and/or mail him dead rodents and such?

>I read somewhere about some guy being a public pain in the ass and
>being subscribed to like 300 "bill me later" subscriptions to
>everything from porn magazines to Forbes. Surely somebody out there
>has a similarly wonderful idea about how to deal with Butt Fisher. If
>he wants to make himself a public figure, then we can treat him as
>such, you know posting details about his formerly private life, what
>kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
>that life as a private citizen is a little nicer than life as a public
>figure. I think a good argument can be made that his repeated
>controversial postings on USENET already make him a public figure.
>Thoughts?

>Burt Fisher <burtfisher@geocities.com> wrote:

>>Bob wrote:
>>
>>> Simple: He just refers them to the following newsgroup:
>>> news://alt.radio.pirate
>>> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
>>> repeater network from the ground up, he thinks these things should be left to the
>>> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent
some
>>> time doing some technical things (he's an extra), but he must now be bored.
>>
>>Do not give me that much credit. I takes few brains to pass ANY ham
>>license TODAY.

>>I was in RACES.
>>
>>
>>#================#===#
>>| Burt Fisher | Teacher of video, broadcasting and electronics |
>>| Amateur call | South Dennis, Ma. (Cape Cod) |
>>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>>#================#===#
>>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>>#===#

627. AO-10 and A1A mode ???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Mike Tatum <miket@cybatek.dungeon.com>
Message-ID: <01bc206b$8a55ce80$ae9482c1@cybatek.dungeon.com>
Source record: 19781

Hi All!

I'm very much into Morse at the moment and am attempting to get contacts via AO-10 in A1A mode.

I am a very good signal on the downlink, no S reading but very load, however I never get any replies??

There are plenty of voice contacts going on but no A1A ???

Does anyone use A1A on AO-10 anymore ???

Would like to hear from anyone interested in a sched!!

Please E-Mail direct ...

73

Mike de G1SYT

mike@cybatek.dungeon.com

628. Satellite Cyberposts Available at http://www.sarrio.com

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-2102972054010001@host28.cyberg8t.com>
Source record: 19782

Use the WWW to announce your interest in working hams all over the world
by satellite. Below are two examples of such posts that have been added to
my Cyberpost web page. I provide an e-mail link to the posting station, so
schedules can be easily arranged or changed if neccessary.

Post your contact needs and prepare to have those needs quickly met with
the help of the Web. 73's Ray

Station: N2QXF

Name: Nick
QTH: New Jersey
Mode:Satellite
Comments: Need to get asked for RS-10 and or RS-15 Mode A for Alaska and
Hawaii for WAS
Satellite.......time flexible.
Equip.
13el beam w/ 180 watts SSB/or CW uplink
Rotatable Dipole @ 40ft for dwnlink
FT-290RII plus amp uplink
IC-736 Downlink
Skeds by email or call 24hr beeper 917 738 7602
Will get on the air for stations needing NJ and/or FN21 on sat.
Nick
Post Date: Sept. 6, 1996

Station: NY1F

Name:Burt Eldridge
QTH: Vermont, USA
Grid: FN32ru
Comments: Satellite skeds stations outside No. America.
All satellites LEO's or AO-10/13
Post Date: 8/21/96
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located
at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount
CD-Roms!

629. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330e8da6.185950918@news.erinet.com>
Source record: 19783
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
>
>> Its called a hobby Burt! Remember!!!!!!!!!
>> Brian
>
>It is a hobby but the silly FCC calls it a service because that is what
>it is SUPPOSED to be.

Burt, this is we will AGREE! I have nothing against the "hobby"
aspect of it, BUT I really dislike people relegating it entirely to a
hobby. I am a member of the Amateur Radio Service and am proud of
that fact. Its when to many of us forget that fact that all these
dire predictions we keep seeing will occur.
```

630. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF9C8.FC2@geocities.com>
Source record: 19784
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG wrote:

> Straight A student, who gives a SHIT!!!Im supposed to be impressed?
> Damn, I will have to call her for every decision in my life..hehehehe..
> Shes a straight A student..Carefull guys, your dealing with the power of
> GOD now...Her statements will mean everything now..

She also has the guts to use her real name.
Usually the more impressive the handle the more wimpy the user.
That leaves you just where?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

631. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF94F.60B3@geocities.com>
Source record: 19785
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Brian Carling AF4K/G3XLQ wrote:
>
> ROTFLVVL Steve !! I can't WAIT to see what this is all about!
> Will they list this "Burtie's Special Event Station" in QST
> as "Celebrating 5 years of obnoxiousness and Stupidity from Cape Cod?"

Actually iff there are sufficent numbers maybe the hams there will have
sufficent guts to call me names to my face. Is that what YOU need,
10 hams in back of you while you play tough guy?

Because even if there are 100 hams for me to face I will appear.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

632. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF8C5.40FD@geocities.com>
Source record: 19786
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> Burt, this is we will AGREE! I have nothing against the "hobby"
> aspect of it, BUT I really dislike people relegating it entirely to a
> hobby. I am a member of the Amateur Radio Service and am proud of
> that fact. Its when to many of us forget that fact that all these
> dire predictions we keep seeing will occur.

You can call it God's calling but it is an fact ENTIRELY a hobby.
It serves only the hams, rarely the public.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

633. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFA66.AF3@geocities.com>
Source record: 19787
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kory Hamzeh wrote:
>
> Some people could constantly mail bomb his account until his ISP cuts him
> off. Of course, he could switch to another ISP, and then the mail bombing
> might start again. However, I'm not recommending such a thing....

Some people coul;d look you up in the call book, rape your wife to see
your reaction, However, I'm not recommending such a thing....

> But..., its real easy to set up a cron jobs under unix to send it a huge
> 100k message every five minutes. If 50 people started doing that ...
> well, you get the pictures.

The sword goes two ways tough guy.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

634. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFF34.735E@geocities.com>
Source record: 19788
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Villy Rï¿½lvï¿½g wrote:

> I am looking in to this groups for the first time.
> Is this the normal level of discussion on these groups ??
> Just want to know, before moving on to more serious groups...
> 73 de Villy (Will by the way be active from EU-062 next weekend)

Don't you think the normal level of discussion on these groups is more impressive than on air conversations?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

635. The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFED7.20D0@geocities.com>
Source record: 19789
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
------------------------------------------------------------------------
I may not always agree with what you say. But I will defend to the
death your right to say it.

------------------------------------------------------------------------

The above quote clearly does not apply to Packet SYSOPS, does it?

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

636. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F0289.68C7@geocities.com>
Source record: 19790
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kent Farnsworth wrote:

> Good luck, and please think before you act harshly. The net is fun,
> and some people just are 'that way'.

Your advice is wise.
I never claimed to be sane (hi hi?)

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

637. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F02FF.1681@geocities.com>
Source record: 19791
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,comp.unix.solaris,alt.activism,alt.games.doom.ii,,alt.music.celine-di.alt.tasteless.jokes

Bob wrote:
> If
> he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
> that life as a private citizen is a little nicer than life as a public
> figure.

I am clearly not a public figure as spelled out in libel laws, keep that
in mind.
But if you want to make any true fact about me public, be my guest.
But it must be true and so provable by you.
The sword goes two ways dearest Bob.

AUTHOR PROFILE: chainsaw@tfs.net (Bob)

58 unique articles posted.
Number of articles posted to individual newsgroups (slightly skewed
by cross-postings):
8 alt.comp.periphs.mainboard.tyan
4 comp.sys.ibm.pc.games.flight-sim
3 rec.aviation.simulators
3 rec.models.rc.air
3 rec.radio.amateur.misc
3 rec.radio.scanner
2 alt.comp.periphs.mainboard.asus
2 alt.tasteless.jokes
2 rec.radio.amateur.dx
2 rec.radio.amateur.equipment
2 rec.radio.amateur.policy
2 rec.radio.amateur.space
2 rec.radio.swap
1 alt.activism
1 alt.alt.test
1 alt.games.doom
1 alt.games.doom.ii
1 alt.music.celine-dion
1 comp.dcom.fax
1 comp.periphs.scsi
1 comp.unix.solaris
1 misc.consumers
1 rec.music.makers.guitar.acoustic
1 rec.music.makers.guitar.tablature

1 rec.outdoors.fishing.fly
1 rec.outdoors.rv-travel
1 rec.radio.amateur.antenna
1 rec.radio.amateur.digital.misc
1 sci.geo.satellite-nav
TFSnet Inc (TFS2-DOM)

5700 Broadmoor, Suite 1014
Mission, KS 66202
USA

Domain Name: TFS.NET (WWW?)

Administrative Contact:
Lane, Walt (WL14) wlane@TFS.NET
(913) 262-4638

Technical Contact, Zone Contact:
Ricketts, Joel (JR419) jharvre@TFS.NET
(913) 262-4638 ext. 112

Billing Contact:
Lane, Walt (WL14) wlane@TFS.NET
(913) 262-4638

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

638. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970222082153.19622B-100000@dmapub.dma.org>
Source record: 19792
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997, Burt Fisher wrote:

> Fred wrote:
> >
> > Burt, Just what are you doing to make ham radio more interesting to the
> > young folks. What are you doing to bring more young folks into the hobby
> > and keep them there??
>
> I show 30 9th graders ham radio every year on the air, they also see the
> ARRL self serving video tape and I talk about the hobby spewing the
> company line.
> And you are doing just what?
>
> > There are many of us out here trying to put
> > the ham back in ham radio and make it fun again, both for us and the young
> > folks. Please quit lumping all hams in one heap and cutting us down. You
> > are the one that gives ham radio a bad name to the non hams that read the
>
> There may be "many" as you say but overall these many are a very small
> percentage.
>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>
>
Nope, sorry Burt but I am not an ARRL type person. Those of us that work
with the young folks here show them **REAL*** ham radio and not the tripe
that is spouted by some on the news groups or on the HF bands in certain
places. But then I doubt that you would do any differant to lure the
young in as your posts show that you really only do the motions of trying
not put any heart into it. It is plain to see that your love is in the
commercial area. Yup, I was in the commercial area too, I guess if you
call being a chief engineer for a couple of radio stations commercial.
But that is a differant story....And only has enhanced my abilities and
enjoyment of ham radio.

enuff said. end of thread.

Fred Ke8tq

I may not always agree with what you say. But I will defend to the
death your right to say it.
---

639. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5en3to$2pi@dfw-ixnews12.ix.netcom.com>
Source record: 19793
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In <330EFED7.20D0@geocities.com> Burt Fisher <burtfisher@geocities.com>
writes:
>
>---
--
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>---
--
>
>The above quote clearly does not apply to Packet SYSOPS, does it?

The right of free speech comes as a bundle with the responsibility of free speech. Since you demonstrate little responsibility yourself it would appear that packet sysops are forced to take responsibility. The pity is that now you will have your electronic tantrums on the news groups. Perhaps if all of those on the news groups who were tired of your spamming were to flood your provider with complaints your provider would take the same action as the packet sysops. Then you could scream your complaints out on the beach.

To answer your as yet unasked question, Yes I would say the above to your face, I just would not fly across the country to do it.

>
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

640. ARLK015 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk015.1997@arrl.org>
Source record: 19794
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK015
ARLK015 Keplerian data

ZCZC SK15
QST de W1AW
Keplerian Bulletin 15 ARLK015
From ARRL Headquarters
Newington, CT February 22, 1997
To all radio amateurs

SB KEP ARL ARLK015
ARLK015 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97052.17592215 .00000037 00000-0 24535-4 0 03256
2 18129 82.9270 324.4913 0010934 176.9484 183.1744 13.72374591484324
UO-11
1 14781U 84021B 97052.48555416 .00000130 00000-0 29840-4 0 9527
2 14781 97.8212 38.4260 0012547 17.3961 342.7675 14.69526187694261
RS-12/13
1 21089U 91007A 97051.92993770 .00000019 00000-0 40263-5 0 09748
2 21089 82.9200 4.8603 0027778 262.4255 97.3740 13.74077229303199
UO-14
1 20437U 90005B 97052.15452000 .00000029 00000-0 28120-4 0 02531
2 20437 98.5257 136.3028 0010561 186.0010 174.1049 14.29949787369639
RS-15
1 23439U 94085A 97052.15056469 -.00000039 00000-0 10000-3 0 02109
2 23439 64.8188 340.4773 0152285 154.1646 206.6980 11.27525743088853
AO-16
1 20439U 90005D 97052.17319012 .00000062 00000-0 40618-4 0 00553
2 20439 98.5440 139.0101 0010970 186.6861 173.4180 14.29999394369650
DO-17
1 20440U 90005E 97046.29377975 -.00000043 00000-0 15485-6 0 00470
2 20440 98.5478 134.0162 0010765 204.4498 155.6176 14.30140200368845
```

```
WO-18
1 20441U 90005F 97052.16594610 -.00000012 00000-0 12207-4 0 00621
2 20441 98.5483 139.6986 0011673 186.8784 173.2242 14.30109165369685
LO-19
1 20442U 90005G 97051.79269492 -.00000003 00000-0 15650-4 0 00543
2 20442 98.5481 139.9351 0011875 187.1822 172.9195 14.30222343369658
FO-20
1 20480U 90013C 97052.48515781 .00000085 00000-0 27381-3 0 9468
2 20480 99.0250 35.9091 0538961 279.3841 74.6737 12.83237096329867
AO-21
1 21087U 91006A 97052.17216245 .00000094 00000-0 82657-4 0 08056
2 21087 82.9441 137.4510 0034014 230.9784 128.8343 13.74577523304217
UO-22
1 21575U 91050B 97052.17832547 .00000028 00000-0 23620-4 0 07631
2 21575 98.3177 116.7345 0006772 241.9697 118.0797 14.37057782293825
KO-23
1 22077U 92052B 97052.05248248 -.00000037 00000-0 10000-3 0 06501
2 22077 66.0776 28.3971 0014438 240.7182 119.2392 12.86300992212817
KO-25
1 22828U 93061F 97052.18838769 .00000002 00000-0 17987-4 0 05268
2 22828 98.5520 129.2243 0009630 202.1515 157.9258 14.28168572145652
IO-26
1 22826U 93061D 97052.26645789 -.00000029 00000-0 56876-5 0 5365
2 22826 98.5557 129.2299 0008381 221.9159 138.1382 14.27826652177547
AO-27
1 22825U 93061C 97052.14897880 -.00000062 00000-0 -77427-5 0 05400
2 22825 98.5579 128.8967 0007643 218.3905 141.6739 14.27717040177518
FO-29
1 24278U 96046B 97052.15747259 -.00000049 00000-0 -16731-4 0 00618
2 24278 98.5585 109.1385 0352052 126.7375 236.6640 13.52628596025438
Mir
1 16609U 86017A 97052.80368910 .00003351 00000-0 45950-4 0 666
2 16609 51.6525 305.9588 0011660 101.4444 258.7817 15.60568371629016

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
February 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

641. UHF/Microwave components FS

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <330F58AE.42F6@worldnet.att.net>
Source record: 19795

I have a large assortment of like new boards, modules, 1/8" flexible hard
line with SMA connectors on both ends, BNC chassis connectors, various interconnecting cables,etc.

The many boards contain such things as SAWTEK SAW filters of various bandwidths, transitors, IC's, miniture relays, torriods, trimmer capacitors,
filters, modules, etc.

I am selling as a "grab box". If you are a builder, this is a gold mine of
goodies.

I will sell the above for $50 plus $10 shiping.

I also have one have one Hewlett Packard 33314A coaxial switch left. DC to 4 GHz. Will sell for $45 shipped UPS.

One Amplica broad band pre amplifier which works from 1 to 3 GHz perhaps even lower and higher. I only checked it in that range. Letting it go for $25 shipped UPS.

Seller: George Keller W3SAP
Email: gakeller@worldnet.att.net

642. How to be a class ham (not always any oxymoron).

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F721F.53D4@geocities.com>
Source record: 19796
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Released with the permission of the author who required no editing take
place:
(this is what a person of class and intellect says, it does not
necessarily agree
with me and where he does not he resorts to facts over insults).
Burt

>Hello Burt,
> I just wanted to drop you a note concerning the thread currently running
on the rec.radio.amateur.equipment newsgroup. After ready the many
replies,
flames, etc, I would have to agree with *some* of your comments and
thoughts. I think you have a picture in your minds-eye of the "typical"
ham
operator being a rag-chewing, cigar smoking, foul-mouthed,
over-glorified
CB'er. Though there are MANY that fit that bill, but, I think better
than
half don't fit that desciption. As I'm sure you know, there are many of
us
who do public service such as Skywarn, RACES, ARES, etc. To group those
of
us who do public service with the lids is an unfair condemnation. I
literally put myself at risk when I go out and spot for the weather
service
and don't look at myself as being involved with a hobby at that point,
but
rather, an important part of a system that can and does save lives.
> After looking over your website, following the thread for the past few
days, and reflecting on the garbage I hear on some of the bands, I can't
argue with a good portion of your comments. Many of the respondants have
been very articulate, others have shown that they think with their
southern-most body part. I believe you are a person who is truly
concerned
about the state of Amateur Radio and it's related services. Your
opinions
may not neccessarily be within the mainstream of the hobby, but they do
count, and I respect that. I hope that you can also respect the efforts
of
those of us who DO look at Amateur Radio as a way to help others, and
show
that by doing the service work. We are not all lids, and I hope you can
see

that.
> I decided to send this note to you personally, rather than through the newsgroup, so as to try and get it back to the subject it is supposed to cover. I look forward to your reply, and your thoughts on my comments.
>
>Best Regards,
>
Glenn
10x #68391
N0VYK

interNET ==>> glenn@spacestar.net

Check out the IPL Amateur and Antique Radio Homepage:
http://www.spacestar.net/users/glenn/

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

643. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F7381.5365@geocities.com>
Source record: 19797
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Gerald Schmitt wrote:

> The right of free speech comes as a bundle with the responsibility of
> free speech. Since you demonstrate little responsibility yourself it
> would appear that packet sysops are forced to take responsibility.

It is curious how would write me nice Email put in public you have to
impress the "boys."

> your spamming were to flood your provider with complaints your provider
> would take the same action as the packet sysops. Then you could scream
> your complaints out on the beach.

What spam? I merely reply to messages AS SENT.
What provider?

> To answer your as yet unasked question, Yes I would say the above to
> your face, I just would not fly across the country to do it.

Why is a guy down the street will not do it either?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

644. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330F56CB.78B2@flinet.com>
Source record: 19798
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> Hams are so gutless that none will meet me on the air to discuss my so
> called outrageous views. It is not like I can hit them on the air.

I suspect you are a ham in the tradition of KV4FZ, that notorious personality of the (14.313 MHz) airwaves. Never the less, I would enjoy meeting you on the air sometime, say, on 20 Meter phone in the General class portion of the band. I know you are a cw buff but I think phone would give a bigger audience for you and allows others to make comments more readily. However, if hams are as gutless as you say, there should be few comments.

As far as the facts about Little Leo's are concerned, I am sure you are armed with all sorts of technical data about their compatibility with the existing uses in the bands. However, I would like to know where you got such data because everywhere I go says that such data does not exist.
This is not to say that such data would change my position. I am against any commercial intrusion into the amateur radio allocations, especially the ones that are being fully utilized such as the 2 M and 75 cm bands.

I look forward to your reply.

Sincerely,

Michael Goad
KA4EZY

645. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330F4EB7.57EF@flinet.com>
Source record: 19799
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will
> help to drive home the point that there is broad-based approval to well
> conceived 2 metere sharing proposals. It ought to be clear to the FCC
> the public good is poorly served by allowing hams exclusive use of these
> valuable
> frequencies.
>
> Please note! The proposals the League opposes are not FCC proposals, nor
> are
> they endorsed by any other branch of the government. They are industry
> proposals. The League's objective is to falsely demonstrate there is
> broad citizen opposition to the industry proposals.
>
> Additional arguments or evidence also is welcome. Important! Comments
> should
> reach the FCC no later than March 4, 1997!
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

Actually, Burt, your news article has helped me to decide in favor of
sending the FCC an e-mail in SUPPORT of the ARRL's position and to
further encourage every ham I talk with to do the same. If you are so
against amateur radio and all it is and does that you are willing to let
the commercial interests come in and take over (you know they won't be
"shared" for long) two of the most utilized bands we have, why don't you
turn in your license and get out of ham radio all together.

If you believe that protecting the interest of amateur radio is not in
the best interest of the general public, perhaps you should come down
and
talk to some of the victims and rescuers involved in the aftermath of
hurricane Andrew in Dade County, FL. Amateur radio's ability to be used

in times of disaster is highly dependent on the bands the little leo's want. We cannot allow any intrusion on these bands if we are to be useful
to the public in times of emergency.

For the record, I am a communications technician for the fire-rescue department of a local county, so I do have some first hand knowledge of the events following hurricane Andrew and the utilization of amateur radio there prior to the arrival of outside help from FEMA and others. Because of its usefulness, there has been a greater effort by the local governments in south Florida to work with the amateur radio community to ensure that this service will be available in the future. Many agencies now have amateur radio stations in key facilities and have lined up operators to run them in emergencies. Some have provided learning materials for their own personnel who expressed interest in becoming ham radio operators.

I am not sure what your motivation is in backing the little leo's, but I suspect it is financial. What we are talking about here goes way beyond the almighty dollar in my book. I am here to let you and all who read this that we will fight this to the end.

Sincerely,

Michael Goad
KA4EZY

646. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d795bdf414cfe259897d1@news.planet.net>
Source record: 19800
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330F56CB.78B2@flinet.com>, ka4ezy@flinet.com says...
> Burt Fisher wrote:
>
> > Hams are so gutless that none will meet me on the air to discuss my so
> > called outrageous views. It is not like I can hit them on the air.
>
> I suspect you are a ham in the tradition of KV4FZ, that notorious
> personality of the (14.313 MHz) airwaves. Never the less, I would enjoy
> meeting you on the air sometime, say, on 20 Meter phone in the General
> class portion of the band. I know you are a cw buff but I think phone
> would give a bigger audience for you and allows others to make comments
> more readily. However, if hams are as gutless as you say, there should
> be few comments.

In actuality, Burt has been invited numerous times to a moderated roundtable type forum on the band and frequency of his choosing. Each time, he is, what is referred to as a no show, thus proving the saying that those who talk the talk (the gut vs gutless scenario) don;t necessarily walk the walk

Look for the Burt special event station to be setup VERY near his home sometime around the end of March. The amateurs of Cape Cod and surrounding areas will be invited to attend this. One special feature will be to show Burt in his true environment. Hopefully, Burt will make an appearance and even work some stations (after all, we will be parked in his neighborhood) We (and there is going to be more than one) will be connected to the Internet and will be demonstrating the public minded Burt to all his neighbors

More details as time progresses

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

647. Re: AO-10 and A1A mode ???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970222153209.20083E-100000@oso.slonet.org>
Source record: 19801

Yes Mike, CW is very much used on AO10 for the simple reason that it works so very well! Do not become too discouraged by the lack of replies although I must admit it might seem more useful to be on SSB. Right now the path between us is rather bad but I will certainly look for you and others that care to keep CW alive on AO10! Cliff Buttschardt K7RR

On 22 Feb 1997, Mike Tatum wrote:

> Hi All!
>
> I'm very much into Morse at the moment and am attempting to get contacts
> via AO-10 in A1A mode.
>
> I am a very good signal on the downlink, no S reading but very load,
> however I never get any replies??
>
> There are plenty of voice contacts going on but no A1A ???
>
> Does anyone use A1A on AO-10 anymore ???
>
> Would like to hear from anyone interested in a sched!!
>
> Please E-Mail direct ...
>
> 73
>
> Mike de G1SYT
>
> mike@cybatek.dungeon.com
>
>

648. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970222172337.1843A-100000@avatar.avatar.com>
Source record: 19802
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997, Burt Fisher wrote:

> Kory Hamzeh wrote:
> >
> > Some people could constantly mail bomb his account until his ISP cuts him
> > off. Of course, he could switch to another ISP, and then the mail bombing
> > might start again. However, I'm not recommending such a thing....
>
> Some people coul;d look you up in the call book, rape your wife to see
> your reaction, However, I'm not recommending such a thing....
>

Or your daughter ...

> > But..., its real easy to set up a cron jobs under unix to send it a huge
> > 100k message every five minutes. If 50 people started doing that ...
> > well, you get the pictures.
>
> The sword goes two ways tough guy.
>

Most certainly does....

649. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB6D8.1487@geocities.com>
Source record: 19803
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael and Jayne Goad wrote:

> I am not sure what your motivation is in backing the little leo's, but I
> suspect it is financial. What we are talking about here goes way beyond
> the almighty dollar in my book. I am here to let you and all who read
> this that we will fight this to the end.

Your suspicions are wrong.
Fight all you want, it is ATYPICAL of a ham to fight for ANYTHING.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

650. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB795.58CF@geocities.com>
Source record: 19804
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael and Jayne Goad wrote:

> I suspect you are a ham in the tradition of KV4FZ, that notorious
> personality of the (14.313 MHz) airwaves. Never the less, I would enjoy
> meeting you on the air sometime, say, on 20 Meter phone in the General
> class portion of the band. I know you are a cw buff but I think phone
> would give a bigger audience for you and allows others to make comments
> more readily. However, if hams are as gutless as you say, there should
> be few comments.

I will appear on 20 meter voice and you can gather a crowd as I doubt
you can talk to me without a fan club for support. Hams are as gutless
as I say. If there are comments there will be no calls attached to them.

> As far as the facts about Little Leo's are concerned, I am sure you are
> armed with all sorts of technical data about their compatibility with
> the existing uses in the bands.

I have zero facts except any use has got to be better than loser hams.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

651. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB8C5.2A3B@geocities.com>
Source record: 19805
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> In actuality, Burt has been invited numerous times to a moderated
> roundtable type forum on the band and frequency of his choosing. Each
> time, he is, what is referred to as a no show, thus proving the saying
> that those who talk the talk (the gut vs gutless scenario) don;t
> necessarily walk the walk

Total bullshit. Tommorow is Sunday let us have a go at it.
I can go on almost ANY band.
Why don't you cite ANY time a ham has accepted my challenge, they always have an excuse, (my rig is packed away, the antenna is down, or just no reply).

> Look for the Burt special event station to be setup VERY near his home
> sometime around the end of March. The amateurs of Cape Cod and
> surrounding areas will be invited to attend this. One special feature
> will be to show Burt in his true environment. Hopefully, Burt will make
> an appearance and even work some stations (after all, we will be parked
> in his neighborhood)

I already told a local ham of your offer. If I am invited I will come.
The local hams despise me more than you do but they have zero guts.

You know I do not hide, you can see AND hear me on my WWW page, can you say the same for any others around here?

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

652. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330FB0F9.6B35@flinet.com>
Source record: 19806
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
>
> I read somewhere about some guy being a public pain in the ass and
> being subscribed to like 300 "bill me later" subscriptions to
> everything from porn magazines to Forbes. Surely somebody out there
> has a similarly wonderful idea about how to deal with Butt Fisher. If
> he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
> that life as a private citizen is a little nicer than life as a public
> figure. I think a good argument can be made that his repeated
> controversial postings on USENET already make him a public figure.
> Thoughts?
>

As much as I disagree with Burt Fisher, I think that if any ham radio
operator follows your suggestions then they are no better than the
people
Burt is talking about. We must rise above this.

Mike Goad
KA4EZY

653. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FBC7C.2DBE@geocities.com>
Source record: 19807
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Kory Hamzeh wrote:
>
> > > But..., its real easy to set up a cron jobs under unix to send it a huge
> > > 100k message every five minutes. If 50 people started doing that ...
> > > well, you get the pictures.
> >
> > The sword goes two ways tough guy.
> >
>
> Most certainly does....

Shall I visit?

AC6RN HAMZEH, KOUROSH LIC ISU
12-JAN-1996
EXTRA 6217 MELBA AVE LIC EXP
10-JUL-2005
DOB 6-FEB-1965 WOODLAND HILLS CA 91367 LST UPD
12-JAN-1996
(PREVIOUSLY KE6VWO, GENERAL)

Hamzeh, Kourosh K 6217 Melba Ave, Woodland Hills, CA
91367-1520
Phone: (818)884-7503
#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

654. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330FB1B3.E57@flinet.com>
Source record: 19808
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
>
>
> If he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc.
> ...Thoughts?
>

As much as I disagree with Burt Fisher, I think that if any ham radio operator follows your suggestions then they are no better than the people
Burt is talking about. We must rise above this.

Mike Goad
KA4EZY

655. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: The Bakers <mbaker@monmouth.com>
Message-ID: <330FC081.2643@monmouth.com>
Source record: 19809
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:
>
> (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)
>
What a great idea! Will you operate on the beachfront road in
Hyannisport down by the actual Kennedy compound? Will Senator Kennedy
stop by in person to chat with everyone?

Oh, you mean "ham" as in Amateur Radio?

Never mind........

656. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5end8ptbn3@news.mhv.net>
Source record: 19810

In article <330E09F9.26B6@online.no>, la4gy@online.no wrote:
>Tom@astro.net wrote:

>>
>> Ignore Burt please. This crap has no place in this newsgroup. Save it
> for
>> policy or the CB group.
>>
>> Tom

>> Opinions herein are mine and may not be that of MHV.NET!
>I am looking in to this groups for the first time.
>Is this the normal level of discussion on these groups ??
>Just want to know, before moving on to more serious groups...
>73 de Villy (Will by the way be active from EU-062 next weekend)
>--
>Villy Rolvaag E-mail: la4gy@online.no

In this group it's not normal. Ignore it and don't reply to it on the
group. IF you must reply use e-mail. Just my opinion.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

657. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <331006de.1435008@news.monad.net>
Source record: 19811
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997 09:12:39 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>---
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>---
>
>The above quote clearly does not apply to Packet SYSOPS, does it?
>
Not so long as the FCC holds them responsible for message content
transmitted through their systems. Besides, I don't mind you speaking
your opinions, but not over my radios.

658. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-22 00:00:00 UTC
From: rb@cyberhighway.net*
Message-ID: <330ebb1d.116856396@news.cyberhighway.net>
Source record: 19812
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Thu, 20 Feb 1997 09:15:58 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>It takes guts to kiss ass?
>Thatr is what hams are experts at.

Burt,

You call yourself a teacher? A mentor entrusted to help shape the minds of our young children? Heaven forbid, a roll model? By your posts you have proven that you are incredibly opinionated, not above using foul language in an open forum of mutual learning that is easily accesable by curious young minds, you point your "holier-than-thou" finger at Amateur Radio Operators and seem to have no problem speaking ill-will of this group of human beings. Can you tell me just what exactly it is that makes you a better person than any of these people you speak so poorly of? I am an Amateur Radio Operator myself and I take great pride in it, I also pride myself on being a volunteer interpreter for the deaf, a volunteer for the American Legion, an advocate for the rights of Veterans and the disabled, among other similar interests. I literally volunteer more of my time than I work for a wage, I may be poor but if pride were gold I'm a very rich man.. Can you say that, Burt?

This is America, Burt, and you are by the first ammendment entitled to voice your opinion, but you already know that. I too am an American and am entitled to my opinions and my opinion is that you are a bigot and have no business in the teaching profession if you are incapable of treating other human beings as the equals that they are. In the mean time, I'll be praying for your students..

If you have such a problem with Hams, why not (on the way to church next Sunday) rip up your FCC license into little pieces and go about helping your fellow man in a manner more constructive than the one you have chosen.

John KB7VZL (and darn proud of it)

659. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <3310a3b9.4484601@news.ma.ultranet.com>
Source record: 19722
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997 16:25:28 -0800, Kory Hamzeh <kory@avatar.com>
wrote:

>
>
>On Fri, 21 Feb 1997, Steve - KF2TI wrote:
>
>> In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>,
>> peerenbf@dma.org says...
>> > If you come to Dayton this year look me up. The
>> > Consolidated Electronics Booth as I work for them and get stuck there for
>> > the three days.
>>
>> Unfortunately or fortunately (depending on your point of view), the man
>> who challenges others intestinal fortitude wouldn't have the guts to face
>> the very group(s) of people he so easily insults. It's far easier to
>> insult from a distance (however, that will change towards the end of
>> March..more on that as time progresses..and it will be something GREAT!!.
>> a hint...a special event station from a certain town on Cape Cod
>> celebrating the ham who everyone loves to dislike)
>>
>>
>
>Some people could constantly mail bomb his account until his ISP cuts him
>off. Of course, he could switch to another ISP, and then the mail bombing
>might start again. However, I'm not recommending such a thing....
>
>But..., its real easy to set up a cron jobs under unix to send it a huge
>100k message every five minutes. If 50 people started doing that ...
>well, you get the pictures.
>
>Kory
>AC6RN
>

The true spirit of Amateur Radio shows itsef.

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****

.

660. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <3310a405.4560478@news.ma.ultranet.com>
Source record: 19723
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997 22:58:57 -0500, The Bakers <mbaker@monmouth.com>
wrote:

>Steve - KF2TI (Landing, NJ) wrote:
>>
>> (however, that will change towards the end of
>> March..more on that as time progresses..and it will be something GREAT!!.
>> a hint...a special event station from a certain town on Cape Cod
>> celebrating the ham who everyone loves to dislike)
>>
>What a great idea! Will you operate on the beachfront road in
>Hyannisport down by the actual Kennedy compound? Will Senator Kennedy
>stop by in person to chat with everyone?
>

Depends on how much booze is there.

>Oh, you mean "ham" as in Amateur Radio?
>
>Never mind........

```
**************************************************************
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
**************************************************************
```
.

661. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B19B.68B3@geocities.com>
Source record: 19724
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
Brian Carling AF4K/G3XLQ wrote:
>
> Could someone perhaps post his address and phone number here too?
> I am sure that a lot of readers would enjoy having them!

Why don't you do it?
It is not hard.

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=======================================================================#
```

662. Why I am the way I am.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B1E9.7BF1@geocities.com>
Source record: 19725
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I am the way I am because as a teen I was an active ham radio operator. I used "the mike" to not face real people thus missing my teen years the way real people experience it. It is not ham radio's fault of course, the fault is entirely mine. However I am not that person now and I despise in others what I despised in myself. I am much like a reformed smoker (they tend to be fanatics against smoking). When I hear hams on the air blabbing on about nothing, doing nothing, being nothing, kissing each others butts so much their lips turn brown I want to anything other than be like them. Further I was a gutless wimp up to 18 years of age (fit
in well with ham radio), I would cower with the slightest threat but I learned that fear is far worse than being beat up and rarely would have anyone beat me anyway. So today if you want to threaten me the odds are high (especially if you are a ham) that nothing will ever be carried out. And if threatened I always tell the person to carry out the threat even if my acts that caused the threat were wrong because once you threaten me that closes the door as to the legitimacy of your cause.

To those folks in the ASD support group much of the above applies. Most of you are uncaring men whose spouses finally wised up (hams make great uncaring spouses). In the end I am a far deeper and caring person than 90% of you. And to those that PERSONALLY insult me and/or use profanity, those acts say so far more about you than I. If you read my mail carefully you will rarely see me personally insult anyone and rarely will I use profanity. I argue ON THE MERITS. When you see someone attack the person it means their cause is without foundation.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

663. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B4E8.2BF5@geocities.com>
Source record: 19726
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Steve - KF2TI (Landing, NJ) wrote:
>
> Excellent, BTW can I set up on your front lawn??? Operating from a car
> seems a bit difficult/ Very do able, but it would be so much nicer to
> spread out on a table with electrical power.

I will try on the hour near 7.2 MHZ until 9 PM today, Sunday.

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

664. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B581.4BB8@geocities.com>
Source record: 19727
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
Bruce Beford wrote:
>
> Not so long as the FCC holds them responsible for message content
> transmitted through their systems. Besides, I don't mind you speaking
> your opinions, but not over my radios.

Cut the bull about the FCC, none of my messages are illegal.
If you operate a PBBS to serve all amateurs who the hell are you to
decide what THEY should read.

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

665. General Radio Adpters FS

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <3310BD23.566@worldnet.att.net>
Source record: 19728

I have 36 General Radio adapters/connectors for sale. The assortment include a variety of connections plus termination's, pads, etc. All in good condition.

Will sell all 36 for $55 including shipping.

George W3SAP
gakeller@worldnet.att.ne

666. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7a8c13fbc480049897d8@news.planet.net>
Source record: 19729
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com says...

> If you operate a PBBS to serve all amateurs who the hell are you to
> decide what THEY should read.

Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets read. *I* take the input of the people who utilize MY equipment, *I* decide what content is acceptable or not. Not YOU or the FCC

That's who the hell *I* am. *I* and the others on my PBBS consider your posts inappropriate to anything related to amateur radio, hence, no posts.

I firmly believe you have every right to show the fool that you may or may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the platform to prove it. That's for others to do.

If you're suggesting that I have to allow you to access my property (equipment, etc.) then you are barking up the wrong tree.

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

667. 7.208 Sunday hourly

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310C3A7.7389@geocities.com>
Source record: 19730
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Until 9 PM
Join me
#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

668. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310DD29.742D@geocities.com>
Source record: 19731
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

I HEARD YOU on 7208 but you were VERY weak, you called many times but
you
did not hear me. How about 75m? give time and freq

> Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
> read. *I* take the input of the people who utilize MY equipment, *I*
> decide what content is acceptable or not. Not YOU or the FCC

It is your right but it is NOT right.

> That's who the hell *I* am. *I* and the others on my PBBS consider your
> posts inappropriate to anything related to amateur radio, hence, no
> posts.

So they are not required to read them. Do you think that those that
agree with me will risk
being locked out by you if they tell you they agree?

> If you're suggesting that I have to allow you to access my property
> (equipment, etc.) then you are barking up the wrong tree.

You are using public frequencies you have a moral right to allow all
comers.
Next Maybe you will deny access based on color?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

669. Re: 7.208 Sunday hourly

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7aaf004d3600579897da@news.planet.net>
Source record: 19732
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3310C3A7.7389@geocities.com>, burtfisher@geocities.com says...
> Until 9 PM
> Join me

At 7pm EST 20 over noise level, plus SW brdcst station at 7.204

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

670. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7ab426227e3a1d9897db@news.planet.net>
Source record: 19733
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3310DD29.742D@geocities.com>, burtfisher@geocities.com
says...
> Steve - KF2TI (Landing, NJ) wrote:
>
> I HEARD YOU on 7208 but you were VERY weak, you called many times but
> you
> did not hear me. How about 75m? give time and freq

First things first 75 very crowded right now (7:55 EST) but will try
3.875 at 9:00 EST

Now for the rest
>
>
> > Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
> > read. *I* take the input of the people who utilize MY equipment, *I*
> > decide what content is acceptable or not. Not YOU or the FCC
>
> It is your right but it is NOT right.

And you are entitled to believe that.

>
>
> > That's who the hell *I* am. *I* and the others on my PBBS consider your
> > posts inappropriate to anything related to amateur radio, hence, no
> > posts.
>
> So they are not required to read them. Do you think that those that
> agree with me will risk
> being locked out by you if they tell you they agree?

In all honesty, Burt, you are the only one I've ever "locked out". And
quite frankly, I have found very few if any locally who will agree with
anything you have to say concerning amateur radio

I also reserve the right to preview all for sale messages for content. I
allow only amateur and amateur related materials to be posted. Cars,
guns, recipes all get round filed.

>
> > If you're suggesting that I have to allow you to access my property
> > (equipment, etc.) then you are barking up the wrong tree.
>

> Next Maybe you will deny access based on color?

Funny, I have yet to see a radio that can determine a person's color
based on a callsign. Is this something new?? How can I tell a person's
color based on his posting to my PBBS?? Enlighten us Burt
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

671. Maybe next time

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7ac1d120e5cc0f9897dd@news.planet.net>
Source record: 19734
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

[This followup was posted to rec.radio.amateur.misc and a copy was sent
to the cited author.]

In article <3310DD29.742D@geocities.com>, burtfisher@geocities.com
says...
> Steve - KF2TI (Landing, NJ) wrote:
>
> I HEARD YOU on 7208 but you were VERY weak, you called many times but
> you
> did not hear me. How about 75m? give time and freq

Tried again on 75 at 9pm EST, no luck, to much noise. Maybe next week

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

672. FS:*Complete* Mode B setup

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: "Reed C." <rsc@cougarnet.byu.edu>
Message-ID: <331137F6.64B@cougarnet.byu.edu>
Source record: 19735

Hello,

I am from california and this is a rather large item(s) so pick up is
Prefered.

I am selling my satellite station to pay for school.

TX/RX
FT-726R: (2m,430,6m,sat unit) (Just serviced at yaesu so A-OK)
With external tone encoder (For mir)
AMPS
Mirage 1010 UHF amp (10watt in =100 out)
Mirage 1070? vhf (I am not sure on the numbers but its 10w -> 70w.)
PRE-AMPS
VHF Lanwheir pre-amp (Very sensitive low noise..they are hard to find,
but it might be worth looking it up for the specs...they costed about
$150 each)

UHF " "

ANTENAS
KLM-435-40CX (40 element circ. polarized beam for uhf)
KLM-2M-22C (22 element circ. poloarized for vhf)

MISC:
Yaesu 5600 azmuth/elevation rotor (similar to the 5400 but "heavyduty")
2 30 foot runs of 3/4 inch hardline with conector etc.
fiberglass cross boom re-inforced with a hardwood dowel
20 foot tower
All the conectors and misc coax needed to hook up the amps,pre amps,
radio and antenias together.
2 50 foot runs of rotor cable

To buy all this stuff new would cost a small fortune.
E-mail me for offers.. I am looking for about $2000 you pay shipping or
pick it up in california (Bishop, ca)

73's Reed

673. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5epuh6$em1@news.Hawaii.Edu>
Source record: 19736
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>
>
>177 unique articles posted.
>Number of articles posted to individual newsgroups (skewed by cross-postings):
> 69 rec.radio.amateur.misc
> 51 alt.support.divorce
> 35 rec.radio.amateur.digital.misc
> 4 ne.weather

Oh geez, now Burp's flaming the weather, too?
```

674. What's my Yaesu FT-726r worth?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <3310C956.305A@amsat.org>
Source record: 19737
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

Hi:

I'm thinking about selling my Yaesu FT-726r and I was wondering what they are currently going for. This one has the 2m/430 modules and satellite board.

It works like a champ but I decided to upgrade to the FT-736r and I don't want to let it sit around in a box.

Thanks,

Mark Fossum - N0NSV

675. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <33251448.40798592@news.cyberhighway.net>
Source record: 19738
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>In <330EFED7.20D0@geocities.com> Burt Fisher <burtfisher@geocities.com>
>writes:
>>
>>--
>--
>> I may not always agree with what you say. But I will defend to the
>> death your right to say it.
>>
>>--
>--
>>
>>The above quote clearly does not apply to Packet SYSOPS, does it?
>
>The right of free speech comes as a bundle with the responsibility of
>free speech. Since you demonstrate little responsibility yourself it
>would appear that packet sysops are forced to take responsibility. The

The BBS for which I'm a co-sysop has been on the air for about 8
years, and in all that time we have never locked one legitimate ham
out of the BBS for any reason. We've handled dozens of Burt's
rantings, as have all the upstream SysOps, obviously. Burt loves to
tar hams with a broad brush, but he gets more on himself than he does
on others.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

676. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3322f013.31528165@news.cyberhighway.net>
Source record: 19739
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>Michael and Jayne Goad wrote:
>
>> I am not sure what your motivation is in backing the little leo's, but I
>> suspect it is financial. What we are talking about here goes way beyond
>> the almighty dollar in my book. I am here to let you and all who read
>> this that we will fight this to the end.
>
>Your suspicions are wrong.
>Fight all you want, it is ATYPICAL of a ham to fight for ANYTHING.

Burt, you're making a fool of yourself. I've fought other hams, the
Forest Service, the BLM, and the FCC. Won most of the battles, BTW.
And I have some fightin' ham friends who've done a bit of fighting for
the hobby, too. Why don't you go back to your lame web page with its
"naked chic (sic)" and your brag picture of you and Slick Willie, and
quit cluttering up these newsgroups with your trolling?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

677. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: shnews@laser.net
Message-ID: <330e0b0f.1012251@news1.laser.net>
Source record: 19813
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997 10:32:23 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

I still don't know how anyone can "teach" broadcasting.

sean hall/W1SWH

678. Icom 27h looking for Mods

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Michael Lussier <mlussier@pop.erols.com>
Message-ID: <330FE10D.3329@pop.erols.com>
Source record: 19814

I have an Icom 27h . this is a good radio but it has a poorly limited number of channels. any help out there on this one
Mike KF4MQF

679. Re: Need information on Weather/Amatuer Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: anutley@acslink.aone.net.au
Message-ID: <330f82e7.2121240@news.bne.aone.net.au>
Source record: 19815

On Fri, 21 Feb 1997 05:19:14 GMT, P.Dalliessi@massey.ac.nz (Peter
Dalliessi) wrote:

>Could anyone direct me to magazines/publications that provide detailed
>information on Amatuer and Polar Orbiting Weather Satellites, e.g.,
>NOAA , Fengyung, and METEOR satellites. In particular I would like to
>know precisely what is up there, what is planned for launching in the
>future, and a comprehensive list of satellite operating frequencies.
>
>Thank in anticipation.
>
>Peter Dalliessi, ZL4MS,
>FIMS,
>MAssey University,
>Palmerston North, New Zealand.
>

Peter,

A US publication, "Satellite Times" printed by Grove publishing
http://www.grove.net/hmpgst.html
has bi-monthly WeSAT and HamSAT information.

Cheerio, Alan.

Alan (NUTLEY)
Spring Hill Observatory
DALVEEN Qld 4374.
Elev. 910m
E151d57m30s S28d29m00s
E397850m N6848880m, AMG Zone 56

680. Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Henrik Hansen <hhansen@post4.tele.dk>
Message-ID: <33102103.DE7@post4.tele.dk>
Source record: 19816

Can someone tell me ?
What is the best satelite tracking program.
I am using STS-plus V.9435A
Is there anything better ?

OZ1GMQ Henrik Hansen..

--

Henrik Kjï¿½rsgaard Hansen
Radio-amateurcall:OZ1GMQ
http://home4.inet.tele.dk/hhansen
mailto:hhansen@post4.tele.dk

681. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970223125440_515664.456256_CHU95-42@CompuServe.COM>
Source record: 19817
Body handling: HTML body converted to readable text

```
Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #63

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
hil-img-2.compuserve.com (8.6.10/5.950515)
id HAA13607; Sun, 23 Feb 1997 07:54:35 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA10001 for ; Sun, 23 Feb 1997 04:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id EAA24928
sendmail 8.8.5/UCSD8.3
Sun, 23 Feb 1997 04:31:16 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA24916
sendmail 8.8.5/UCSD8.3
Sun, 23 Feb 1997 04:31:14 -0800 (PST)
Message-Id: <199702231231.EAA24916@noc.ucsd.edu>
Date: Sun, 23 Feb 97 04:31:13 PST
From: Ham-Space Mailing List and Newsgroup
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #63
To: Ham-Space@ucsd.edu

Ham-Space Digest Sun, 23 Feb 97 Volume 97 : Issue 63

Today's Topics:
AO-10 and A1A mode ???
ARLK015 Keplerian data
Need information on Weather/Amatuer Satellites (2 msgs)
STS-82 freqs wanted
UHF/Microwave components FS

Send Replies or notes for publication to:
Send subscription requests to:
Problems you can't solve otherwise to brian@ucsd.edu.
```

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 22 Feb 1997 15:34:36 -0800
From: Clifford Buttschardt
Subject: AO-10 and A1A mode ???

Yes Mike, CW is very much used on AO10 for the simple reason that it works
so very well! Do not become too discouraged by the lack of replies
although I must admit it might seem more useful to be on SSB. Right now
the path between us is rather bad but I will certainly look for you and
others that care to keep CW alive on AO10! Cliff Buttschardt K7RR

On 22 Feb 1997, Mike Tatum wrote:

> Hi All!
>
> I'm very much into Morse at the moment and am attempting to get contacts
> via AO-10 in A1A mode.
>
> I am a very good signal on the downlink, no S reading but very load,
> however I never get any replies??
>
> There are plenty of voice contacts going on but no A1A ???
>
> Does anyone use A1A on AO-10 anymore ???
>
> Would like to hear from anyone interested in a sched!!
>
> Please E-Mail direct ...
>
> 73
>
> Mike de G1SYT
>
> mike@cybatek.dungeon.com
>
>

Date: 22 Feb 1997 13:16:39 -0500
From: w1aw@arrl.org
Subject: ARLK015 Keplerian data

SB KEP @ ARL $ARLK015
ARLK015 Keplerian data

ZCZC SK15
QST de W1AW
Keplerian Bulletin 15 ARLK015

Date: Fri, 21 Feb 1997 21:03:20 +0000
From: Tom Woolner
Subject: Need information on Weather/Amatuer Satellites

In article <5ej7mv$pdn@cc-server9.massey.ac.nz>, Peter Dalliessi
writes
>Could anyone direct me to magazines/publications that provide detailed
>information on Amatuer and Polar Orbiting Weather Satellites, e.g.,
>NOAA , Fengyung, and METEOR satellites. In particular I would like to
>know precisely what is up there, what is planned for launching in the
>future, and a comprehensive list of satellite operating frequencies.
>
>Thank in anticipation.
>
>Peter Dalliessi, ZL4MS,
>FIMS,
>MAssey University,
>Palmerston North, New Zealand.
>

Hello Peter,

I recommend the British magazine Short Wave Magazine - I think you can get it in NZ. Among many other features it runs a monthly 2 or 3 page column on weather staellites written by Lawrence Harris, in a very accessible form.

I also strongly recommend subscribing to the automatic WXSat mailer list. Below are attached a couple of recent posts complete with visible header. If you study these you will see who to mail to subscribe. Here you will see amateurs and professionals exchanging information. This is an excellent forum.

You might also consider joining the Remote Imaging Group (RIG). For 10 Quid each year you get a solid journal every quarter containing first class articles on satellites, receiver and antenna construction, pictures and how to interpret them plus much more. Take a look at the RIG web-site, given below.

The following is forwarded by the wxsat mail list daemon.
Mail addressed to wxsat-mail-daemon@ssg will be discarded.
Replies: wxsat-l@ssg.com - subscription changes: wxsat-request@ssg.com
-->>>^^^

The following is forwarded by the wxsat mail list daemon.
Mail addressed to wxsat-mail-daemon@ssg will be discarded.
Replies: wxsat-l@ssg.com - subscription changes: wxsat-request@ssg.com

>Subject: wxsat status report 171
>From: Peter Wakelin
>Date: Tue, 18 Feb 1997 16:47:28 +0000

>STATUS 171
>METSAT APT STATUS REPORT 18 February 1997
>As monitored in the UK

>NOAA 12 ON 137.50MHz
>NOAA 14 ON 137.62
>METEOR 2-21 OFF
>METEOR 3-5 ON 137.85
>OKEAN 4 (1-7) ON 137.40
>SICH 1 OFF Off until March

>Peter Wakelin, Remote Imaging Group. Europe's leading group for
>weather satellite enthusiasts with 2000 members in 41 countries.
>E-mail: peter@ascotrig.demon.co.uk Fax: +44 1344 26028 Tel: +44 1344
>23200
>http://www.rig.org.uk/index.html

Regards,
--
Tom Woolner The rain it raineth on the just
And also on the unjust fella:
But chiefly on the just, because
http://www.woolner.demon.co.uk The unjust steals the just's umbrella
(Bowen 1835-94)

Date: Sun, 23 Feb 1997 09:34:58 GMT
From: anutley@acslink.aone.net.au (Alan Nutley)
Subject: Need information on Weather/Amatuer Satellites

On Fri, 21 Feb 1997 05:19:14 GMT, P.Dalliessi@massey.ac.nz (Peter
Dalliessi) wrote:

>Could anyone direct me to magazines/publications that provide detailed
>information on Amatuer and Polar Orbiting Weather Satellites, e.g.,
>NOAA , Fengyung, and METEOR satellites. In particular I would like to
>know precisely what is up there, what is planned for launching in the
>future, and a comprehensive list of satellite operating frequencies.
>
>Thank in anticipation.
>
>Peter Dalliessi, ZL4MS,
>FIMS,
>MAssey University,
>Palmerston North, New Zealand.
>

Peter,

A US publication, "Satellite Times" printed by Grove publishing
http://www.grove.net/hmpgst.html
has bi-monthly WeSAT and HamSAT information.

Cheerio, Alan.

Alan (NUTLEY)
Spring Hill Observatory
DALVEEN Qld 4374.
Elev. 910m
E151d57m30s S28d29m00s
E397850m N6848880m, AMG Zone 56

Date: Fri, 21 Feb 1997 17:09:04 -0500
From: "John M. Yellenic"
Subject: STS-82 freqs wanted

Aristides Kaponides wrote:
>
> Can someone send me the freqs of the STS82 space shuttle if any??
> 73 de Aris-5B4JE

STS-82 landed this morning (21Feb97) at 8:32 UTC.

Visit the site at http://shuttle.nasa.gov/ for more info.

John - N3YPR

Date: Sat, 22 Feb 1997 15:35:58 -0500
From: George Keller
Subject: UHF/Microwave components FS

I have a large assortment of like new boards, modules, 1/8" flexible
hard
line with SMA connectors on both ends, BNC chassis connectors, various
interconnecting cables,etc.

The many boards contain such things as SAWTEK SAW filters of various
bandwidths, transitors, IC's, miniture relays, torriods, trimmer
capacitors,
filters, modules, etc.

I am selling as a "grab box". If you are a builder, this is a gold mine
of
goodies.

I will sell the above for $50 plus $10 shiping.

I also have one have one Hewlett Packard 33314A coaxial switch left. DC
to 4 GHz. Will sell for $45 shipped UPS.

One Amplica broad band pre amplifier which works from 1 to 3 GHz perhaps
even lower and higher. I only checked it in that range. Letting it go
for $25 shipped UPS.

Seller: George Keller W3SAP
Email: gakeller@worldnet.att.net

Date: (null)
From: (null)

SB KEP ARL ARLK015
ARLK015 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97052.17592215 .00000037 00000-0 24535-4 0 03256
2 18129 82.9270 324.4913 0010934 176.9484 183.1744 13.72374591484324
UO-11
1 14781U 84021B 97052.48555416 .00000130 00000-0 29840-4 0 9527
2 14781 97.8212 38.4260 0012547 17.3961 342.7675 14.69526187694261
RS-12/13
1 21089U 91007A 97051.92993770 .00000019 00000-0 40263-5 0 09748
2 21089 82.9200 4.8603 0027778 262.4255 97.3740 13.74077229303199
UO-14
1 20437U 90005B 97052.15452000 .00000029 00000-0 28120-4 0 02531
2 20437 98.5257 136.3028 0010561 186.0010 174.1049 14.29949787369639
RS-15
1 23439U 94085A 97052.15056469 -.00000039 00000-0 10000-3 0 02109
2 23439 64.8188 340.4773 0152285 154.1646 206.6980 11.27525743088853
AO-16
1 20439U 90005D 97052.17319012 .00000062 00000-0 40618-4 0 00553
2 20439 98.5440 139.0101 0010970 186.6861 173.4180 14.29999394369650
DO-17
1 20440U 90005E 97046.29377975 -.00000043 00000-0 15485-6 0 00470
2 20440 98.5478 134.0162 0010765 204.4498 155.6176 14.30140200368845
WO-18
1 20441U 90005F 97052.16594610 -.00000012 00000-0 12207-4 0 00621
2 20441 98.5483 139.6986 0011673 186.8784 173.2242 14.30109165369685
LO-19
1 20442U 90005G 97051.79269492 -.00000003 00000-0 15650-4 0 00543
2 20442 98.5481 139.9351 0011875 187.1822 172.9195 14.30222343369658
FO-20
1 20480U 90013C 97052.48515781 .00000085 00000-0 27381-3 0 9468
2 20480 99.0250 35.9091 0538961 279.3841 74.6737 12.83237096329867
AO-21
1 21087U 91006A 97052.17216245 .00000094 00000-0 82657-4 0 08056
2 21087 82.9441 137.4510 0034014 230.9784 128.8343 13.74577523304217

```
UO-22
1 21575U 91050B 97052.17832547 .00000028 00000-0 23620-4 0 07631
2 21575 98.3177 116.7345 0006772 241.9697 118.0797 14.37057782293825
KO-23
1 22077U 92052B 97052.05248248 -.00000037 00000-0 10000-3 0 06501
2 22077 66.0776 28.3971 0014438 240.7182 119.2392 12.86300992212817
KO-25
1 22828U 93061F 97052.18838769 .00000002 00000-0 17987-4 0 05268
2 22828 98.5520 129.2243 0009630 202.1515 157.9258 14.28168572145652
IO-26
1 22826U 93061D 97052.26645789 -.00000029 00000-0 56876-5 0 5365
2 22826 98.5557 129.2299 0008381 221.9159 138.1382 14.27826652177547
AO-27
1 22825U 93061C 97052.14897880 -.00000062 00000-0 -77427-5 0 05400
2 22825 98.5579 128.8967 0007643 218.3905 141.6739 14.27717040177518
FO-29
1 24278U 96046B 97052.15747259 -.00000049 00000-0 -16731-4 0 00618
2 24278 98.5585 109.1385 0352052 126.7375 236.6640 13.52628596025438
Mir
1 16609U 86017A 97052.80368910 .00003351 00000-0 45950-4 0 666
2 16609 51.6525 305.9588 0011660 101.4444 258.7817 15.60568371629016

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
February 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

End of Ham-Space Digest V97 #63
******************************
```

682. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331041E9.7B08@geocities.com>
Source record: 19818
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bob wrote:
>
> To all who have seen Burt Fisher's relentless attacks in various newsgroups:
> Don't feel alone. He got a new Packard Bell for christmas and discovered that he could
> try to force his views on more people than if he just stuck to the classroom full of
> ninth graders he's trying to teach broadcasting. I wonder if he still needs help getting
> rid of that bus mouse he doesn't really have?

Actually the 9th graders do not need to hear my views. They have open
minds.
They are far more alive than most hams or ASDers.
I do not have a Packard Bell.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

683. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5epn0u$hob@news1.mnsinc.com>
Source record: 19819
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bob <pmw5@cornell.edu> whistled a happy tune like:

|>To all who have seen Burt Fisher's relentless attacks in various
newsgroups:
|>Don't feel alone. He got a new Packard Bell for christmas and discovered
that he could
|>try to force his views on more people than if he just stuck to the
classroom full of
|>ninth graders he's trying to teach broadcasting. I wonder if he still
needs help getting
|>rid of that bus mouse he doesn't really have?

|>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>

|> 177 unique articles posted.
|> Number of articles posted to individual newsgroups (skewed by
cross-postings):
|> 69 rec.radio.amateur.misc
|> 51 alt.support.divorce
|> 35 rec.radio.amateur.digital.misc
|> 4 ne.weather
|> 2 comp.sys.ibm.pc.hardware.cd-rom
|> 2 comp.sys.ibm.pc.misc
|> 2 misc.invest.stocks
|> 2 ne.forsale
|> 1 alt.child-support
|> 1 alt.support.diet
|> 1 alt.test
|> 1 comp.sys.ibm.pc.hardware.storage
|> 1 misc.foresale.computers
|> 1 rec.radio.amateur.boatanchors
|> 1 rec.radio.amateur.dx
|> 1 rec.radio.amateur.equipment
|> 1 rec.radio.amateur.policy

Could someone perhaps post his address and phone number here too?
I am sure that a lot of readers would enjoy having them!

684. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: pmann@juno.COM
Message-ID: <19970222.125602.2127.4.PMANN@juno.com>
Source record: 19820

```
delete
```

685. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7a1368ad210bd49897d7@news.planet.net>
Source record: 19821
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330FB8C5.2A3B@geocities.com>, burtfisher@geocities.com says...
> Tommorow is Sunday let us have a go at it.
> I can go on almost ANY band.
> Why don't you cite ANY time a ham has accepted my challenge, they always
> have an excuse, (my rig is packed away, the antenna is down, or just no
> reply).
>

Better yet BURT.. you choose. Post it here, post it on the NE DX cluster, time and place, I will be there and I am sure many others will be there. If fact, e-mail me a code word so that any Burt wanna-bes how get on the frequency first will be exposed as liars and fabricators

> I already told a local ham of your offer. If I am invited I will come.
> The local hams despise me more than you do but they have zero guts.
>

Excellent, BTW can I set up on your front lawn??? Operating from a car seems a bit difficult/ Very do able, but it would be so much nicer to spread out on a table with electrical power.

> You know I do not hide, you can see AND hear me on my WWW page, can you
> say the same for any others around here?

Never been there. Have read about having to download files to access certain things...a BIG NONO in my book

>
>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

686. Re: Mir Overpass?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: jrespler@injersey.com
Message-ID: <5er1sp$mh1@news.injersey.com>
Source record: 19740

History67 (history67@aol.com) wrote:
> Can someone tell me where there might be a good link that predicts Mir
> overpasses? I had one, but lost it when harddrive failed.

You can find links at vsohp, below.

--

Jay Respler
--
Details of how to get on the Satellite Observer Mail List, satellite elements,
prediction programs and other satellite information, at the Visual Satellite
Observers Home Page: http://www.physics.ox.ac.uk/sat/vsohp/satintro.html
--
JRespler@InJersey.com
Satellite Tracker * Early Typewriter Collector
Freehold, New Jersey

687. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5er1if$320@dfw-ixnews3.ix.netcom.com>
Source record: 19741
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In <MPG.d7a8c13fbc480049897d8@news.planet.net> adell@planet.net (Steve
- KF2TI (Landing, NJ)) writes:
>
>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>says...
>
>> If you operate a PBBS to serve all amateurs who the hell are you to
>> decide what THEY should read.
>
>Exactly..*I* am the owner/operator of the PBBS and *I* decide what
gets
>read. *I* take the input of the people who utilize MY equipment, *I*
>decide what content is acceptable or not. Not YOU or the FCC
>
>That's who the hell *I* am. *I* and the others on my PBBS consider
your
>posts inappropriate to anything related to amateur radio, hence, no
>posts.
>
>I firmly believe you have every right to show the fool that you may or

>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>platform to prove it. That's for others to do.
>
>If you're suggesting that I have to allow you to access my property
>(equipment, etc.) then you are barking up the wrong tree.
>
>--
>Steve KF2TI
>ARRL LIFE Member
>You can't make a difference if you don't belong
>

Gosh Steve,

Note the date and time; I agree totally with you on this issue.

73 Jerry

688. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5er1aq$17h@dfw-ixnews6.ix.netcom.com>
Source record: 19742
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In <3310B581.4BB8@geocities.com> Burt Fisher <burtfisher@geocities.com>
writes:
>
>Bruce Beford wrote:
>>
>> Not so long as the FCC holds them responsible for message content
>> transmitted through their systems. Besides, I don't mind you
speaking
>> your opinions, but not over my radios.
>
>Cut the bull about the FCC, none of my messages are illegal.
>If you operate a PBBS to serve all amateurs who the hell are you to
>decide what THEY should read.

He my friend is the guy who owns the PBBS. The 18th century equivalent
was the printing press. Perhaps as an educator you remember the famous
quote, "Freedom of the press is for he who owns a press." Mr. Beford
owns the press and takes the responsibility, he get to decide what
passes his node. You don't like it tough.

Jerry
>
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

689. Re: Why I am the way I am.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <01bc221e$e19605c0$5ba19ecd@expressp5.insighttec.com>
Source record: 19743
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bravo Burt....
--
Ron Curry
KE6WED
recurry@insighttec.com
recurry@inside.intel.com

Burt Fisher <burtfisher@geocities.com> wrote in article
<3310B1E9.7BF1@geocities.com>...
> I am the way I am because as a teen I was an active ham radio operator.
> I used "the mike" to not face real people thus missing my teen years the
> way real people experience it. It is not ham radio's fault of course,
> the fault is entirely mine. However I am not that person now and I
> despise in others what I despised in myself. I am much like a reformed
> smoker (they tend to be fanatics against smoking). When I hear hams on
> the air blabbing on about nothing, doing nothing, being nothing, kissing
> each others butts so much their lips turn brown I want to anything other
> than be like them. Further I was a gutless wimp up to 18 years of age
> (fit
> in well with ham radio), I would cower with the slightest threat but I
> learned that fear is far worse than being beat up and rarely would have
> anyone beat me anyway. So today if you want to threaten me the odds are
> high (especially if you are a ham) that nothing will ever be carried
> out. And if threatened I always tell the person to carry out the threat
> even if my acts that caused the threat were wrong because once you
> threaten me that closes the door as to the legitimacy of your cause.
>
> To those folks in the ASD support group much of the above applies. Most
> of you are uncaring men whose spouses finally wised up (hams make great
> uncaring spouses). In the end I am a far deeper and caring person than
> 90% of you. And to those that PERSONALLY insult me and/or use profanity,
> those acts say so far more about you than I. If you read my mail
> carefully you will rarely see me personally insult anyone and rarely
> will I use profanity. I argue ON THE MERITS. When you see someone attack
> the person it means their cause is without foundation.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

>

690. What's an FBOM?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: n9vjg@aol.com
Message-ID: <33113721.3681293@news.imaxx.net>
Source record: 19744

Are you reading this? Great! That means it wasn't written it for nothing. Not to worry, you won't be wasting your time.

Amateur Radio is a hobby and like all hobbies, it needs to be fun and rewarding. We at FBOM Magazine may not be able to straighten out your 40
meter beam after a hurricane or stop commercial satellites from squatting
on your VHF repeater input, but what we can do is present a lighter side
to all the QRM.

FBOM Magazine is the new generation of radio hobby publications, focusing
mostly on amateur radio operators (Hams). FBOM Magazine is for everyone,
from the guilt-ridden Extra class ham to a Technician or CBer that's tired
of being blamed for the erosion of family values in America. FBOM Magazine, the official publication of the Bad Signal Club--A free-thinking
state of mind where you are certified to transmit scratchy signals, crack a
joke without saying "hihi," tune up on some Little LEOS and have a good
time laughing at others as well as yourself.

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scanner junkie and the strongest competition to wireless communications,
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*
* GET YOUR FREE SAMPLE ISSUE!!!
*
* Email N9VJG@aol.com now for your free sample of the latest issue!
*
* Visit our Web Site which is still under construction and
* in bad need of updating. Just nudge your favorite browser to:
* http://www.interaccess.com/uncle-del/FBOM/.
* If you have America Online, visit the FBOM Magazine folder
* in the Ham Radio Forum message boards, under "Manufacturers,
* Dealers & Vendors."
*

Why YOU should subscribe to FBOM Magazine:

1. You will earn your official Bad Signal Club membership and will be
able to operate any bands with a scratchy signal and tell the
complainers
to stick it where the sun doesn't shine.
2. Blatantly hilarious and unusual commentaries on life as a radio
hobbyist.
3. No boring propagation charts. We replaced those with "Radio
Horoscopes".
4. No articles for home-brewing outrageous tri-banders and RF amps.
Just
step-by-step guides on how to build contraptions like a
"rubber-duckie
plane" for your HT and how to clean nasty things out of your
microphone.
5. Wacky contests where you can win antennas, free chunks of used
RG-58
and other prizes.
6. Free classifieds for paid subscribers.
7. We don't make you feel inferior if you work channel 19.
8. Hey.. we're writing it, so why aren't you reading it?
9. FBOM is 100% biodegradable and fat-free!
10. No test is required for this upgrade.

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Hey
that's a pretty good deal--especially for a publisher that is terribly
desperate to gain more subscribers!

How you can give us your hard-earned money:

*
* Mail a check or money order for a 1 or 2 year subscription to
* "Eric Bond" (That's me, the publisher and janitor) and send it
* to FBOM Magazine, P.O. Box 7711, Westchester, IL 60154-7711.
*

(FBOM Magazine c1997)

691. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ermq2joe1@nadine.teleport.com>
Source record: 19745
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Please, guys, can't you keep this stuff to rec.radio.amateur.misc? Isn't one newsgroup enough for this sort of childish squabbling without splattering it around to the homebrew and space newsgroups too?

Roy Lewallen, W7EL

692. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33117499.2E1D@geocities.com>
Source record: 19746
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> First things first 75 very crowded right now (7:55 EST) but will try
> 3.875 at 9:00 EST

Did not get this message until 6 AM Monday.

> In all honesty, Burt, you are the only one I've ever "locked out". And
> quite frankly, I have found very few if any locally who will agree with
> anything you have to say concerning amateur radio

Of course no one else will dare risk losing access for displeasing King
Steve.
I have been locked out of several PBBSes and the few that allow me in
get a lot of pressure to take me off but they are real men, they do not
like what I say but they believe in free speech.

> I also reserve the right to preview all for sale messages for content. I
> allow only amateur and amateur related materials to be posted. Cars,
> guns, recipes all get round filed.

You are doing what is legally required in most cases.

> > Next Maybe you will deny access based on color?
>
> Funny, I have yet to see a radio that can determine a person's color
> based on a callsign. Is this something new?? How can I tell a person's
> color based on his posting to my PBBS?? Enlighten us Burt

Most of those that access your PBBS are local and you can see them
easily.
Are you available evenings on air?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

693. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331174E1.292F@geocities.com>
Source record: 19747
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Gerald Schmitt wrote:
>
> He my friend is the guy who owns the PBBS. The 18th century equivalent
> was the printing press. Perhaps as an educator you remember the famous
> quote, "Freedom of the press is for he who owns a press." Mr. Beford
> owns the press and takes the responsibility, he get to decide what
> passes his node. You don't like it tough.

That some how makes it morally right?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

694. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7b426261b0d6609897de@news.planet.net>
Source record: 19748
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330EFED7.20D0@geocities.com>, burtfisher@geocities.com says...

> ---
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
> ---
>
> The above quote clearly does not apply to Packet SYSOPS, does it?

Actually it does. I myself agree 100% with the above. HOWEVER, there is nothing that compels me to provide you with the soapbox by which you may practice it.

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

695. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7b43511a66becd9897df@news.planet.net>
Source record: 19749
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

[This followup was posted to rec.radio.amateur.misc and a copy was sent
to the cited author.]

In article <5er1if$320@dfw-ixnews3.ix.netcom.com>, kc5egg@ix.netcom.com
says...
> In <MPG.d7a8c13fbc480049897d8@news.planet.net> adell@planet.net (Steve
> - KF2TI (Landing, NJ)) writes:
> >
> >In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
> >says...

--snip-->
> Gosh Steve,
>
> Note the date and time; I agree totally with you on this issue.
>
> 73 Jerry
>
>

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

Hey Jerry, just finished reading yours as well. Either there is hope for
all of us or the universe as we know it will end just about now

696. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970224101140.15483B-100000@avatar.avatar.com>
Source record: 19750
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

On Sat, 22 Feb 1997, Burt Fisher wrote:

> Kory Hamzeh wrote:
> >
> > > > But..., its real easy to set up a cron jobs under unix to send it a huge
> > > > 100k message every five minutes. If 50 people started doing that ...
> > > > well, you get the pictures.
> > >
> > > The sword goes two ways tough guy.
> > >
> >
> > Most certainly does....
>
> Shall I visit?
>
> AC6RN HAMZEH, KOUROSH LIC ISU
> 12-JAN-1996
> EXTRA 6217 MELBA AVE LIC EXP
> 10-JUL-2005
> DOB 6-FEB-1965 WOODLAND HILLS CA 91367 LST UPD
> 12-JAN-1996
> (PREVIOUSLY KE6VWO, GENERAL)
>
> Hamzeh, Kourosh K 6217 Melba Ave, Woodland Hills, CA
> 91367-1520
> Phone: (818)884-7503

Go for, chicken heart, let's see if you have any guts or if you're like
all the hams which you despise.

697. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Chris Lewicki <chrisl@gamma1.lpl.arizona.edu>
Message-ID: <5eso3e$l6q@news.ccit.arizona.edu>
Source record: 19751

STS-plus is a nice satellite tracking program. You might want to get a
more recent version, however, as he is constantly making changes to it.

Get it at ftp.seds.org/pub/software/pc/sat

The sop* files are what you are looking for.

Henrik Hansen <hhansen@post4.tele.dk> wrote:
: Can someone tell me ?
: What is the best satelite tracking program.
: I am using STS-plus V.9435A
: Is there anything better ?

: OZ1GMQ Henrik Hansen..

: --

: Henrik Kj�rsgaard Hansen
: Radio-amateurcall:OZ1GMQ
: http://home4.inet.tele.dk/hhansen
: mailto:hhansen@post4.tele.dk

--

Christopher A. Lewicki KC7NYV 520.621.4662 Maintainer of SEDS.LPL.Arizona.EDU
Chair, Students for the Exploration and Development of Space (SEDS-USA)
"Watch the stars, and from them learn." - Albert Einstein

698. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: kb7et@pipeline.com
Message-ID: <5esp1c$3d1@camel4.mindspring.com>
Source record: 19752
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote:

>>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>
>>
>>177 unique articles posted.
>>Number of articles posted to individual newsgroups (skewed by cross-postings):
>> 69 rec.radio.amateur.misc
>> 51 alt.support.divorce
>> 35 rec.radio.amateur.digital.misc
>> 4 ne.weather

>Oh geez, now Burp's flaming the weather, too?

Seems a shame to waste all that creative energy, when he
could be adding something constructive.

699. FS: G-5400B Yaesu Rotor

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Z029 <bmyers@primenet.com>
Message-ID: <3311EE2B.5F0@primenet.com>
Source record: 19753

For Sale: Yaesu G5400B az/el rotor. Brand new, box never opened. $479.00 plus shipping.

Also have Yaesu G2800SDX heavy duty rotor. Brand new, box never opened. $977.00 plus shipping.

Please reply to Bob: bmyers@primenet.com

Thanks.

700. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3311F564.71D@geocities.com>
Source record: 19754
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
> Could somebody please post Burt Fisher's home address and telephone
> number on these newsgroups he keeps crossposting to so we can call him
> (like maybe when I'm reading the news at 2:00 A.M.) and tell him what
> we think of his abusive drivel and/or mail him dead rodents and such?
>

Burton E. Fisher, K1OIK
389 Old Bass River Rd
South Dennis, MA 02660

(508) 385-6962

701. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5esvu4ggp2@decius.ultra.net>
Source record: 19755
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kory Hamzeh <kory@avatar.com> wrote:

>Some people could constantly mail bomb his account until his ISP cuts him
>off. Of course, he could switch to another ISP, and then the mail bombing
>might start again. However, I'm not recommending such a thing....

>But..., its real easy to set up a cron jobs under unix to send it a huge
>100k message every five minutes. If 50 people started doing that ...
>well, you get the pictures.

Arrrg, you only discredit hams with this stuff. Your making Burt's
argument. Unfortunatly, A lot of Hams do.

Steve

702. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33120871.1F6A@geocities.com>
Source record: 19756
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.misc,rec.radio.amateur.space

```
> Go for, chicken heart, let's see if you have any guts or if you're like
> all the hams which you despise.

Message received.
You friendly potal worker
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

703. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33120913.295C@geocities.com>
Source record: 19757
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:
>...
> > ----------
> > I may not always agree with what you say. But I will defend to the
> > death your right to say it.
> >
> > ----------
> >
> > The above quote clearly does not apply to Packet SYSOPS, does it?
>
> Actually it does. I myself agree 100% with the above. HOWEVER, there is
> nothing that compels me to provide you with the soapbox by which you may
> practice it.

How can you defend to the death something you will cause to lockout
someone.
You are a hoot.
Let us meet on the air!!

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

704. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33120650.4DB8@geocities.com>
Source record: 19758
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.misc,rec.radio.amateur.space

```
Jeffrey Herman wrote:
>
> Oh geez, now Burp's flaming the weather, too?

How's that?
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

705. NORAD Two-Line Orbital Element Sets (TLE952)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5et714$qqr@blackbird.afit.af.mil>
Source record: 19759

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #952 -
Alouette 1
1 00424U 62049A 97053.00932815 .00000024 00000-0 17747-4 0 2699
2 00424 80.4633 37.2408 0024236 109.3930 250.9837 13.67887688716495
ATS 1
1 02608U 66110A 97043.13326308 -.00000144 00000-0 10000-3 0 28
2 02608 14.5550 350.2433 0006837 102.8383 257.2577 1.00287744 27273
ATS 3
1 03029U 67111A 97050.25234941 -.00000121 00000-0 10000-3 0 6234
2 03029 14.9083 357.1279 0011695 273.3372 224.3553 1.00272544107247
Starlette
1 07646U 75010A 97054.93904050 -.00000146 00000-0 -20347-5 0 367
2 07646 49.8298 235.2578 0205653 341.8574 17.5058 13.82192297113780
LAGEOS
1 08820U 76039A 97054.71611720 .00000021 00000-0 00000+0 0 2662
2 08820 109.8363 112.2027 0043720 74.0302 286.5332 6.38664471229891
ETS-2
1 09852U 77014A 97053.25332272 -.00000288 00000-0 10000-3 0 1000
2 09852 13.5287 30.0925 0004829 153.8690 206.2140 1.00022465 20148
GOES 2
1 10061U 77048A 97051.66222845 .00000062 00000-0 10000-3 0 8082
2 10061 12.6916 34.2890 0010413 130.0103 51.1366 1.00298528 16934
IUE
1 10637U 78012A 97047.43794688 .00000005 00000-0 10000-3 0 3657
2 10637 35.8587 79.6590 1347237 64.2693 355.4664 1.00075282 22381
GOES 3
1 10953U 78062A 97052.33581035 -.00000107 00000-0 10000-3 0 7847
2 10953 11.6992 37.2475 0002276 239.1895 249.7768 1.00263928 21557

```
SeaSat 1
1 10967U 78064A 97052.31327451 -.00000054 00000-0 26610-4 0 5543
2 10967 107.9972 330.2426 0002696 275.7151 84.3667 14.38151697977261
Nimbus 7
1 11080U 78098A 97054.62654063 -.00000018 00000-0 21346-4 0 6514
2 11080 98.9117 270.1951 0009682 12.4805 347.6588 13.83686404925940
GOES 5
1 12472U 81049A 97053.08028703 .00000053 00000-0 10000-3 0 9846
2 12472 8.5953 47.7040 0005765 108.1145 252.0220 1.00314630 15606
Cosmos 1383
1 13301U 82066A 97052.79350840 .00000014 00000-0 -18208-6 0 5671
2 13301 82.9327 310.7847 0026183 273.9353 85.8805 13.68080200731501
LandSat 4
1 13367U 82072A 97055.17104757 -.00000044 00000-0 45722-8 0 489
2 13367 98.0429 103.9498 0008230 72.8676 287.3424 14.57193126777232
DMSP B5D2-1
1 13736U 82118A 97052.56030325 -.00000001 00000-0 17734-4 0 1852
2 13736 98.6203 242.9144 0009347 25.3699 334.7937 14.25819445736604
IRAS
1 13777U 83004A 97054.55986479 -.00000220 00000-0 -12185-3 0 5888
2 13777 98.9691 240.7607 0012808 121.2569 238.9851 13.99262345388526
Cosmos 1447
1 13916U 83021A 97053.87949462 .00000039 00000-0 25214-4 0 6590
2 13916 82.9444 5.6108 0037216 171.1449 189.0370 13.74352027698172
TDRS 1
1 13969U 83026B 97054.24610821 -.00000297 00000-0 00000+0 0 7127
2 13969 9.3403 41.2784 0003767 274.5502 236.9796 1.00277458 23903
GOES 6
1 14050U 83041A 97054.65606622 -.00000014 00000-0 10000-3 0 6250
2 14050 7.4412 51.2986 0001151 92.2588 128.0399 1.00222328108712
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97053.18576664 -.00000012 00000-0 76851-5 0 5927
2 14780 98.3020 116.5526 0001282 236.2588 123.8488 14.57067491690369
UO-11
1 14781U 84021B 97052.48555416 .00000130 00000-0 29840-4 0 9527
2 14781 97.8212 38.4260 0012547 17.3961 342.7675 14.69526187694261
Cosmos 1574
1 15055U 84062A 97054.11378743 .00000032 00000-0 17756-4 0 8595
2 15055 82.9534 60.8841 0028498 6.1878 353.9623 13.73645073635438
Cosmos 1602
1 15331U 84105A 97052.59993169 .00000196 00000-0 20157-4 0 5413
2 15331 82.5304 239.3336 0018877 200.4501 159.5960 14.84842309669985
ERBS
1 15354U 84108B 97053.21592913 -.00000185 00000-0 47248-5 0 2577
2 15354 56.9950 99.0018 0002209 57.6379 302.4862 14.95017571674238
NOAA 9
1 15427U 84123A 97054.93822056 .00000064 00000-0 57231-4 0 495
```

```
2 15427 98.9158 125.6039 0014691 323.9564 36.0615 14.13838969629202
Mir
1 16609U 86017A 97055.10900268 .00002032 00000-0 30338-4 0 726
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Kvant-1
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RS-10/11
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2 18312 82.5594 153.6476 0011082 235.7944 124.2166 13.84091701480781
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2 19336 82.5414 349.4084 0017319 335.0474 24.9809 13.16980628412404
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1 21152U 91019A 97054.77026837 .00000014 00000-0 -14761-5 0 7679
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2 21218 64.8055 314.9004 0008495 334.9306 25.1067 2.13102525 45796
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Meteor 3-4
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Glonass 59
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ASTRO-D
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2 22521 31.1048 285.5721 0055063 104.7096 255.9653 15.03335399219768
UFO F1
1 22563U 93015A 97041.56985684 .00000043 00000-0 00000+0 0 5529
2 22563 24.8563 284.7092 0006458 326.3515 171.1338 0.99249374 18446
GPS BIIA-19
1 22581U 93017A 97 51.23650388 -.00000005 00000-0 10000-3 0 6486
2 22581 55.1566 337.9951 0069977 37.4227 323.0960 2.00570032 28594
GPS BIIA-20
1 22657U 93032A 97051.86983773 -.00000086 00000-0 00000+0 0 8186
2 22657 55.1601 337.8549 0075839 233.7394 125.5268 2.00561504 23933
RADCAL
1 22698U 93041A 97051.60455307 .00000035 00000-0 10000-4 0 5557
2 22698 89.5422 258.4888 0089046 236.9301 122.3316 14.21391380189719
GPS BIIA-21
1 22700U 93042A 97054.32891662 .00000016 00000-0 10000-3 0 6540
2 22700 54.1440 218.0750 0060221 8.7430 351.3106 2.00563770 26789
NOAA 13
1 22739U 93050A 97054.93984250 .00000056 00000-0 56580-4 0 2728
2 22739 99.0777 18.3143 0009428 234.7596 125.2690 14.10985076182550
GPS BIIA-22
1 22779U 93054A 97054.91643360 .00000006 00000-0 10000-3 0 7128
2 22779 54.1963 276.9279 0005979 300.7046 59.2926 2.00558750 25551
Meteor 2-21
1 22782U 93055A 97055.24913943 .00000170 00000-0 14182-3 0 5458
2 22782 82.5523 147.3907 0022288 356.1233 3.9737 13.83070687175975
UFO F2
1 22787U 93056A 97037.33212492 -.00000077 00000-0 00000+0 0 7072
2 22787 3.9615 328.7818 0005211 323.5359 36.1235 1.00278388 11175
SPOT 3
1 22823U 93061A 97052.26038611 -.00000043 00000-0 00000+0 0 6596
2 22823 98.7300 128.0710 0017408 46.2517 314.0096 14.16988096176559
STELLA
1 22824U 93061B 97054.80916530 -.00000044 00000-0 -42740-6 0 5386
2 22824 98.5516 130.6780 0005835 211.7623 148.3207 14.27106929177823
AO-27
1 22825U 93061C 97051.72848764 -.00000088 00000-0 -18327-4 0 5388
2 22825 98.5579 128.4849 0007703 219.7252 140.3372 14.27716836177454
IO-26
1 22826U 93061D 97052.26645789 -.00000029 00000-0 56876-5 0 5365
2 22826 98.5557 129.2299 0008381 221.9159 138.1382 14.27826652177547
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HEATHSAT
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2 22827 98.5555 128.5964 0008401 208.2751 151.7976 14.27968213177489
KO-25
1 22828U 93061F 97054.22012094 -.00000002 00000-0 16542-4 0 5155
2 22828 98.5520 131.2144 0009666 196.2008 163.8859 14.28168707145949
POSAT
1 22829U 93061G 97055.22081261 .00000001 00000-0 17663-4 0 5310
2 22829 98.5543 132.2791 0009653 194.9363 165.1533 14.28151633178006
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2 22877 55.7961 39.2267 0046302 306.4936 53.0974 2.00556667 24399
METEOSAT 6
1 22912U 93073B 97 30.58304859 .00000000 00000-0 10000-3 0 5977
2 22912 0.2745 333.8247 0002482 159.7150 200.2978 1.00421244 10142
HST Array
1 22920U 90037C 97053.84296954 .00005073 00000-0 31616-3 0 5996
2 22920 28.4725 286.1179 0003614 282.7183 77.2928 15.07314134177249
Meteor 3-6
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2 22969 82.5585 83.1368 0015361 335.0201 25.0179 13.16742204148133
TUBSAT-B
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2 22970 82.5575 85.1049 0016631 340.4170 19.6308 13.16828681147752
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2 23027 55.0321 339.7668 0065309 208.4244 151.2350 2.00572220 21696
Glonass 62
1 23043U 94021A 97054.12846545 -.00000023 00000-0 00000+0 0 4730
2 23043 64.5434 315.1299 0004373 196.4963 163.5617 2.13103219 22358
Glonass 63
1 23044U 94021B 97053.07234875 -.00000027 00000-0 00000+0 0 4421
2 23044 64.5452 315.1629 0028905 205.3817 154.5337 2.13103060 22332
Glonass 64
1 23045U 94021C 97055.12742038 -.00000022 00000-0 00000+0 0 4396
2 23045 64.5294 315.0901 0011649 29.2699 330.8623 2.13102705 22373
GOES 8
1 23051U 94022A 97048.52329493 -.00000272 00000-0 10000-3 0 6446
2 23051 0.2313 268.1044 0003113 5.7617 347.4013 1.00266831 17828
MSTI 2
1 23101U 94028A 97052.10722309 .00006082 00000-0 86591-4 0 4104
2 23101 97.0726 249.0304 0011340 112.3083 247.9339 15.56639158157985
STRV-1A
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2 23125 6.9921 128.6282 7239886 275.9252 13.1319 2.33057399 21985
STRV-1B
1 23126U 94034C 97051.22509321 .00001305 00000-0 31779-3 0 3555
2 23126 7.0073 129.9179 7243430 273.3490 13.8564 2.33212543 21940
Nadezhda 4
1 23179U 94041A 97054.91168593 .00000043 00000-0 28642-4 0 2599
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2 23179 82.9434 50.0308 0037120 138.1850 222.2156 13.75690796131401
Glonass 65
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2 23203 64.7648 195.7398 0007414 139.7834 220.2310 2.13102027 19727
Glonass 66
1 23204U 94050B 97053.15175370 .00000006 00000-0 00000+0 0 4273
2 23204 64.7441 195.7516 0014675 351.0712 8.8565 2.13102361 19725
Glonass 67
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2 23205 64.7593 195.7934 0000922 5.2930 354.6681 2.13102571 19698
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2 23233 98.7948 115.5932 0012402 182.8617 177.2487 14.12779719128373
OKEAN 1-7
1 23317U 94066A 97053.04411860 .00000140 00000-0 17844-4 0 2221
2 23317 82.5446 189.1596 0026526 351.6086 8.4672 14.74078134127349
ELEKTRO (GOMS)
1 23327U 94069A 97054.60226609 -.00000113 00000-0 00000+0 0 2483
2 23327 0.5365 97.1303 0002094 317.0880 32.5035 1.00271628 8523
RESURS 1-3
1 23342U 94074A 97055.36208612 .00000012 00000-0 10000-4 0 6852
2 23342 97.9316 111.9381 0001102 83.7173 276.4136 14.69901744123851
Glonass 68
1 23396U 94076A 97053.34770432 .00000023 00000-0 00000+0 0 3801
2 23396 65.1959 75.7917 0029110 195.3280 164.6472 2.13102643 17579
Glonass 69
1 23397U 94076B 97054.46281982 .00000021 00000-0 00000+0 0 3766
2 23397 65.1818 75.7577 0014163 312.8355 47.1049 2.13101919 17599
Glonass 70
1 23398U 94076C 97054.81589343 .00000020 00000-0 00000+0 0 3903
2 23398 65.1739 75.7230 0005286 284.1926 75.8059 2.13101896 17615
LUCH (Altair-2)
1 23426U 94082A 97054.46204906 -.00000284 00000-0 00000+0 0 4872
2 23426 0.9240 261.8765 0002345 72.5370 80.5746 1.00268400 8028
RS-15
1 23439U 94085A 97055.16615805 -.00000039 00000-0 10000-3 0 2007
2 23439 64.8184 335.6019 0151946 153.5180 207.3608 11.27525600 89192
NOAA 14
1 23455U 94089A 97054.90819138 .00000083 00000-0 70213-4 0 9496
2 23455 98.9765 6.0203 0008611 254.7667 105.2555 14.11648204110960
Glonass 71
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2 23511 64.5612 315.4512 0005130 231.5169 128.4950 2.13104412 15299
Glonass 72
1 23512U 95009B 97052.07863397 -.00000033 00000-0 00000+0 0 3060
2 23512 64.5503 315.4843 0007267 327.2825 32.7277 2.13101535 15271
Glonass 73
1 23513U 95009C 97054.24628021 -.00000023 00000-0 00000+0 0 3334
2 23513 64.5604 315.4238 0011954 205.5021 154.4970 2.13103269 15320
GMS 5
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DMSP B5D2-8
1 23533U 95015A 97054.92867634 -.00000001 00000-0 23068-4 0 8787
2 23533 98.8459 60.2096 0008245 63.1193 297.0826 14.12775960 99178
OSC 1
1 23545U 95017A 97053.74956774 .00000299 00000-0 10171-3 0 2024
2 23545 69.9784 308.6711 0015391 201.7861 158.2621 14.45474940 99863
OSC 2
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2 23546 69.9778 311.0662 0014596 196.4341 163.6320 14.45496392 99736
Microlab 1
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2 23547 69.9787 310.7213 0014402 197.7852 162.2778 14.45655694 99747
OFEQ 3
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2 23549 143.3661 320.9268 0200414 96.0629 266.2975 15.22083160104428
GFZ-1
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2 23558 51.6524 296.0293 0006742 83.3646 276.8129 15.63891830628946
ERS-2
1 23560U 95021A 97051.77352888 -.00000031 00000-0 46224-5 0 3366
2 23560 98.5517 128.2478 0000984 82.2032 277.9264 14.32244052 96158
Spektr
1 23579U 95024A 97053.12385196 .00001840 00000-0 28086-4 0 5802
2 23579 51.6533 304.3478 0011626 104.3254 255.7829 15.60565330100491
GOES 9
1 23581U 95025A 97053.47884759 .00000076 00000-0 10000-3 0 3201
2 23581 0.1126 96.5653 0002086 232.0423 220.5922 1.00268188 6436
Helios 1A
1 23605U 95033A 97054.89492069 .00000064 00000-0 21215-4 0 4459
2 23605 98.1445 353.2816 0001369 69.1489 290.9858 14.63816310 87383
UPM SAT 1
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2 23606 98.1253 354.6827 0008391 106.4311 253.7805 14.67353673 87559
CERISE
1 23607U 95033C 97053.36630746 .00000055 00000-0 18465-4 0 1560
2 23607 98.1273 353.4238 0007153 107.6972 252.5004 14.67000651 87414
TDRS 7
1 23613U 95035B 97052.25164809 .00000084 00000-0 00000+0 0 3057
2 23613 1.2095 82.2936 0003382 246.0073 102.4759 1.00267326 5877
Glonass 74
1 23620U 95037A 97052.62210868 .00000003 00000-0 00000+0 0 2516
2 23620 64.8194 195.6249 0018427 163.8851 196.1344 2.13102824 12326
Glonass 75
1 23621U 95037B 97053.73865751 .00000011 00000-0 00000+0 0 2583
2 23621 64.8259 195.5958 0018022 174.8444 185.1356 2.13102172 12345
Glonass 76
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2 23622 64.8194 195.5776 0036737 163.9362 196.1444 2.13102457 12350
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SICH-1
1 23657U 95046A 97054.18364849 .00000142 00000-0 18367-4 0 1487
2 23657 82.5345 329.5255 0027052 318.3985 41.5167 14.73532528 79792
RADARSAT
1 23710U 95059A 97054.53493704 .00000142 00000-0 72025-4 0 2418
2 23710 98.5796 63.6341 0001144 69.3014 290.8291 14.29978679 68169
Glonass 79
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2 23734 64.8214 195.5240 0017458 326.4092 33.4408 2.13102036 9305
Glonass 78
1 23735U 95068B 97054.56969562 .00000020 00000-0 00000+0 0 2322
2 23735 64.8199 195.4734 0006506 204.5620 155.3714 2.13124933 9326
Glonass 77
1 23736U 95068C 97054.61842693 .00000020 00000-0 00000+0 0 2201
2 23736 64.8172 195.4814 0007348 192.0541 167.8914 2.13102080 9324
XTE
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2 23757 22.9771 156.9461 0013728 158.2477 201.8588 14.97776648 62831
Polar
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2 23802 86.3719 23.3050 6539029 273.8120 19.5292 1.36263329 4974
1996010E
1 23824U 96010E 97 51.69502163 .00108212 00000-0 19228-1 0 1741
2 23824 47.4741 179.4461 6884561 95.4348 339.9520 2.80141191 8535
GPS BIIA-25
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2 23833 54.6324 337.8179 0028302 145.6350 214.5709 2.00565232 6696
Priroda
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2 23848 51.6533 304.3478 0011626 104.3254 255.7829 15.60565330 47580
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1 23851U 96024A 97051.88898543 -.00000837 00000-0 -56253-3 0 1946
2 23851 99.4082 42.6672 0007211 183.7646 176.3466 13.97396024 42234
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1 23857U 96027A 97054.17028323 .00001119 00000-0 35293-4 0 540
2 23857 3.9558 81.9871 0014469 36.4642 323.9668 14.91735573 44684
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2 23868 97.1105 244.6920 0010254 351.7285 8.5129 15.46668180 43357
TOMS-EP
1 23940U 96037A 97052.23075760 .00001925 00000-0 87281-4 0 882
2 23940 97.4294 320.6143 0012010 186.0616 174.0475 15.21997899 35507
GPS BIIA-26
1 23953U 96041A 97036.14977935 -.00000006 00000-0 00000+0 0 1147
2 23953 55.0699 98.8998 0021172 331.4544 28.4957 2.00558745 4146
ADEOS
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2 24277 98.6063 133.5360 0001850 105.1189 255.0205 14.27642378 27109
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2 24278 98.5585 108.7543 0352035 127.8847 235.4686 13.52628637 25372
Soyuz TM-24
1 24280U 96047A 97053.12385196 .00001840 00000-0 28086-4 0 1725
2 24280 51.6533 304.3478 0011626 104.3254 255.7829 15.60565330 29480
FAST
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2 24285 82.9866 91.8662 2208220 193.5482 159.5467 10.81827202 20136
1996049B
1 24286U 96049B 97054.23164646 .00001666 00000-0 16326-3 0 774
2 24286 83.0036 92.1420 2206481 193.8237 159.1380 10.82234759 20097
Microsat
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2 24291 62.7926 150.9889 0578221 133.2767 231.8224 14.73656577 26232
MO-30
1 24305U 96052B 97054.54464463 .00000204 00000-0 20364-3 0 756
2 24305 82.9315 78.5703 0029906 159.0411 201.1967 13.73089318 23465
GPS BIIA-27
1 24320U 96056A 97049.97088399 .00000011 00000-0 00000+0 0 643
2 24320 54.6491 278.4401 0048746 93.8116 266.8091 2.00571461 3084
SAC-B/HETE
1 24645U 96061A 97052.79341891 .00000505 00000-0 32554-4 0 475
2 24645 37.9741 191.8419 0046957 89.5355 271.0789 15.14873481 16556
Progress M-33
1 24663U 96066A 97054.47064952 .00003870 00000-0 52372-4 0 925
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GE 2
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NAHUEL 1A
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2 24715 7.3833 263.6351 7297364 202.1596 93.3656 2.26237840 516
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1 24716U 97002D 97053.72318099 .00044447 00000-0 54720-2 0 209
2 24716 6.9485 267.8484 7276808 198.0124 106.3431 2.30502781 529
Soyuz TM-25
1 24717U 97003A 97055.04497180 .00002799 00000-0 39407-4 0 51
2 24717 51.6518 294.6799 0011278 109.2863 250.9631 15.60576976629367
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1 24718U 97003B 97044.09270681 .22144272 12761-4 19081-3 0 244
2 24718 51.6110 348.9966 0007906 69.9357 290.4334 16.51368987 418
Haruka
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2 24720 31.3308 247.6052 6032943 109.0780 322.6162 3.80542222 306
1997005B
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2 24721 31.3176 245.7512 6159074 111.5295 322.2118 3.84369205 404
Cosmos 2337
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2 24725 82.5967 223.7250 0006527 205.6645 154.4115 12.61216426 842
Cosmos 2338
1 24726U 97006B 97051.88881410 .00000011 00000-0 00000+0 0 108
2 24726 82.6055 223.7392 0010132 211.2812 148.7674 12.60520613 846
Cosmos 2339
1 24727U 97006C 97051.87716553 .00000011 00000-0 00000+0 0 91
2 24727 82.5948 223.7191 0003274 61.1025 299.0396 12.62723688 852
Gonets-D1 4
1 24728U 97006D 97053.85160643 .00000011 00000-0 00000+0 0 118
2 24728 82.6024 222.4548 0007445 32.3448 327.8099 12.63656950 1066
Gonets-D1 5
1 24729U 97006E 97053.86173805 .00000011 00000-0 00000+0 0 114
2 24729 82.6026 222.4647 0001361 227.7920 132.3056 12.62176584 1066
Gonets-D1 6
1 24730U 97006F 97053.86152149 .00000011 00000-0 00000+0 0 79
2 24730 82.6052 222.4673 0001927 129.8998 230.2262 12.62210068 1064
1997006G
1 24731U 97006G 97054.94615939 .00000010 00000-0 00000+0 0 115
2 24731 82.5968 221.8464 0041542 214.2681 145.5726 12.55181649 1209
JCSAT 4
1 24732U 97007A 97050.97599479 -.00000728 00000-0 00000+0 0 56
2 24732 6.5264 355.9176 6586530 181.3855 332.2835 0.58061460 10
1997007B
1 24733U 97007B 97051.61068486 .00167508 00000-0 12245+0 0 107
2 24733 23.4326 354.9522 8763146 181.6525 168.9019 0.70664604 12
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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706. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3310f797.24400477@news.cyberhighway.net>
Source record: 19760
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

adell@planet.net (Steve - KF2TI (Landing, NJ)) wrote:

>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>says...
>
>> If you operate a PBBS to serve all amateurs who the hell are you to
>> decide what THEY should read.
>
>Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
>read. *I* take the input of the people who utilize MY equipment, *I*
>decide what content is acceptable or not. Not YOU or the FCC
>
>That's who the hell *I* am. *I* and the others on my PBBS consider your
>posts inappropriate to anything related to amateur radio, hence, no
>posts.
>
>I firmly believe you have every right to show the fool that you may or
>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>platform to prove it. That's for others to do.
>
>If you're suggesting that I have to allow you to access my property
>(equipment, etc.) then you are barking up the wrong tree.

You are technically correct, but ethically wrong wet. If you set up
to provide a public service as a BBS, you have a moral obligation to
forward all legal mail, or at least not to limit forwarding based on
personal considerations such as who is saying what. SysOps who censor
mail are a big problem on the ham BBS network, and responsible SysOps
should and will route around them.

If you're not part of an open network, you're just cluttering up
valuable space on the bands, and are giving jerks like Burt more
ammunition.
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

707. FS: Fiberglass Crossboom for Satellite Ant.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: B077 <bmyers@primenet.com>
Message-ID: <33128D21.6478@primenet.com>
Source record: 19761
Cross-posted to: rec.radio.amateur.space,rec.radio.swap,rec.radio.amateur.antenna

For Sale:

Fiberglass 1-1/2 inch X 8 foot crossboom, new. Perfect for OSCAR Satellite Antenna setup. Consists of 1 eight-foot piece 1-1/2 inches diameter, 1/4 inch wall (1-1/4 inch I.D.) with 1 eight-foot piece of 1-1/4 inch solid rod inserted in it (tight fit). That makes, for all practical purposes, an 8 foot solid fiberglass crossboom to nicely fit your G-5400 rotor. Strong.

Price: $79.00 plus shipping UPS (it meets UPS requirements for length) in U.S.A.

Please reply to Bob: bmyers@primenet.com

Thanks.

708. WTB:Knwood TS-811-A 432mHz All Mode Tranciever

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: "M. Cobb" <mco@terraworld.net>
Message-ID: <33126603.F5B@terraworld.net>
Source record: 19762
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.space

Wanted To Buy:

Kenwood TS-811-A All Mode tranciever in excellent or better condition.

Please e-mail or call 316-421-6139

Thanks very much,

Mike, KB0QMF

709. FO-29 analog mode

Newsgroup: rec.radio.amateur.space
Date: 1997-02-24 00:00:00 UTC
From: Jeff Griffin <kb2wqm@amsat.org>
Message-ID: <331210DA.6C1C@amsat.org>
Source record: 19763

Has anyone heard FO-29 in analog mode? If so is there some kind of schedule that they follow to turn it on. Let us know.

73 Jeff

710. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CF4F.32E2@geocities.com>
Source record: 19672
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

John Jordan wrote:
>
> You call yourself a teacher? A mentor entrusted to help shape the
> minds of our young children? Heaven forbid, a roll model? By your
> posts you have proven that you are incredibly opinionated, not above
> using foul language in an open forum of mutual learning that is easily
> accesable by curious young minds, you point your "holier-than-thou"
> finger at Amateur Radio Operators and seem to have no problem speaking
> ill-will of this group of human beings.

You are welcome as is anyone to contact my students (dormouse1@juno.com
or my daughter at aurora24@rocketmail.com) and ask them for your self.
Foul language? I used ass, report me. You no doubt have seen the vile
profanity used against me? When compared to the public at large I am
indeed an ass but when compared to hams I am far superior than MOST.

Can you tell me just what
> exactly it is that makes you a better person than any of these people
> you speak so poorly of?

I do not call my wife THE WIFE or my daughter a harmonic.
I have a life, I care about other people, I have guts to name just a
few.

I also pride myself on being a volunteer
> interpreter for the deaf, a volunteer for the American Legion, an
> advocate for the rights of Veterans and the disabled, among other
> similar interests. I literally volunteer more of my time than I work
> for a wage, I may be poor but if pride were gold I'm a very rich man..
> Can you say that, Burt?

All of the above makes you a better man than I. Notice I deleted what
you "do" for ham radio.

I too am an American
> and am entitled to my opinions and my opinion is that you are a bigot
> and have no business in the teaching profession if you are incapable
> of treating other human beings as the equals that they are. In the
> mean time, I'll be praying for your students..

No need to pray for them, ask them if they need your prayers.
Hams are not equals, all others are or are superior than I.
Just how am I bigot?

No one here has the intellect to deal with my students OR THE GUTS.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

711. K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CFC3.34D5@geocities.com>
Source record: 19673
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
Tuesday.
From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
Meet me

#===============#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#===============#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

712. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: rwhitacre@lucent.com
Message-ID: <3312e0b4.85913815@nntpa.cb.lucent.com>
Source record: 19674
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

What does this have to do with equipment? Take your stupid argument
elsewhere

On Sat, 22 Feb 1997 09:12:39 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>--
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>--
>
>The above quote clearly does not apply to Packet SYSOPS, does it?
>
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

713. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: POSTMASTER@compuserve.COM
Message-ID: <970225125325_515664.456256_JHO37-11@CompuServe.COM>
Source record: 19675

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #66

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-4.compuserve.com (8.6.10/5.950515)
id HAA14597; Tue, 25 Feb 1997 07:53:16 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA08170 for <ham-space-list@mailbox.ucsd.edu>; Tue, 25 Feb
1997 04:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id EAA07152
sendmail 8.8.5/UCSD8.3
Tue, 25 Feb 1997 04:30:54 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA07139
sendmail 8.8.5/UCSD8.3
Tue, 25 Feb 1997 04:30:51 -0800 (PST)
Message-Id: <199702251230.EAA07139@noc.ucsd.edu>
Date: Tue, 25 Feb 97 04:30:50 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #66
To: Ham-Space@ucsd.edu

Ham-Space Digest Tue, 25 Feb 97 Volume 97 : Issue 66

Today's Topics:
AO-10 and A1A mode ???
FS:*Complete* Mode B setup
FS: Fiberglass Crossboom for Satellite Ant.
FS: G-5400B Yaesu Rotor
Icom 27h looking for Mods
Sat. Tracking program. (3 msgs)
The duplicity of hams
What's an FBOM?
What's my Yaesu FT-726r worth?

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Feb 97 03:45:25 GMT
From: "Mike Tatum" <miket@cybatek.dungeon.com>
Subject: AO-10 and A1A mode ???

Hi All!

I'm very much into Morse at the moment and am attempting to get contacts
via AO-10 in A1A mode.

I am a very good signal on the downlink, no S reading but very load,
however I never get any replies??

There are plenty of voice contacts going on but no A1A ???

Does anyone use A1A on AO-10 anymore ???

Would like to hear from anyone interested in a sched!!

Please E-Mail direct ...

73

Mike de G1SYT

mike@cybatek.dungeon.com

Date: Sun, 23 Feb 1997 23:40:54 -0700
From: "Reed C." <rsc@cougarnet.byu.edu>
Subject: FS:*Complete* Mode B setup

Hello,

I am from california and this is a rather large item(s) so pick up is
Prefered.

I am selling my satellite station to pay for school.

TX/RX
FT-726R: (2m,430,6m,sat unit) (Just serviced at yaesu so A-OK)
With external tone encoder (For mir)
AMPS
Mirage 1010 UHF amp (10watt in =100 out)
Mirage 1070? vhf (I am not sure on the numbers but its 10w -> 70w.)

PRE-AMPS
VHF Lanwheir pre-amp (Very sensitive low noise..they are hard to find,
but it might be worth looking it up for the specs...they costed about
$150 each)

UHF " "

ANTENAS
KLM-435-40CX (40 element circ. polarized beam for uhf)
KLM-2M-22C (22 element circ. poloarized for vhf)

MISC:
Yaesu 5600 azmuth/elevation rotor (similar to the 5400 but "heavyduty")
2 30 foot runs of 3/4 inch hardline with conector etc.
fiberglass cross boom re-inforced with a hardwood dowel
20 foot tower
All the conectors and misc coax needed to hook up the amps,pre amps,
radio and antenias together.
2 50 foot runs of rotor cable

To buy all this stuff new would cost a small fortune.
E-mail me for offers.. I am looking for about $2000 you pay shipping or
pick it up in california (Bishop, ca)

73's Reed

Date: 24 Feb 1997 23:56:08 -0700
From: B077 <bmyers@primenet.com>
Subject: FS: Fiberglass Crossboom for Satellite Ant.

For Sale:

Fiberglass 1-1/2 inch X 8 foot crossboom, new. Perfect for OSCAR
Satellite Antenna setup. Consists of 1 eight-foot piece 1-1/2 inches
diameter, 1/4 inch wall (1-1/4 inch I.D.) with 1 eight-foot piece of
1-1/4 inch solid rod inserted in it (tight fit). That makes, for all
practical purposes, an 8 foot solid fiberglass crossboom to nicely fit
your G-5400 rotor. Strong.

Price: $79.00 plus shipping UPS (it meets UPS requirements for length)
in U.S.A.

Please reply to Bob: bmyers@primenet.com

Thanks.

Date: 24 Feb 1997 12:38:06 -0700
From: Z029 <bmyers@primenet.com>
Subject: FS: G-5400B Yaesu Rotor

For Sale: Yaesu G5400B az/el rotor. Brand new, box never opened. $479.00 plus shipping.

Also have Yaesu G2800SDX heavy duty rotor. Brand new, box never opened. $977.00 plus shipping.

Please reply to Bob: bmyers@primenet.com

Thanks.

Date: Sun, 23 Feb 1997 01:17:49 -0500
From: Michael Lussier <mlussier@pop.erols.com>
Subject: Icom 27h looking for Mods

I have an Icom 27h . this is a good radio but it has a poorly limited number of channels. any help out there on this one
Mike KF4MQF

Date: Sun, 23 Feb 1997 11:50:43 +0100
From: Henrik Hansen <hhansen@post4.tele.dk>
Subject: Sat. Tracking program.

Can someone tell me ?
What is the best satelite tracking program.
I am using STS-plus V.9435A
Is there anything better ?

OZ1GMQ Henrik Hansen..

--

Henrik Kjarsgaard Hansen
Radio-amateurcall:OZ1GMQ
http://home4.inet.tele.dk/hhansen
mailto:hhansen@post4.tele.dk

Date: Tue, 25 Feb 97 01:47:02 GMT
From: Tom@astro.net
Subject: Sat. Tracking program.

In article <33102103.DE7@post4.tele.dk>, Henrik Hansen <hhansen@post4.tele.dk> wrote:
>Can someone tell me ?
>What is the best satelite tracking program.
>I am using STS-plus V.9435A
>Is there anything better ?

STSPLUS is one of the best around. I think it's the best anyway. There are other great programs as well. Check the amateur satellite web sites for the others.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

Date: 24 Feb 1997 18:53:34 GMT
From: Chris Lewicki <chrisl@gamma1.lpl.arizona.edu>
Subject: Sat. Tracking program.

STS-plus is a nice satellite tracking program. You might want to get a
more recent version, however, as he is constantly making changes to it.

Get it at ftp.seds.org/pub/software/pc/sat

The sop* files are what you are looking for.

Henrik Hansen <hhansen@post4.tele.dk> wrote:
: Can someone tell me ?
: What is the best satelite tracking program.
: I am using STS-plus V.9435A
: Is there anything better ?

: OZ1GMQ Henrik Hansen..

: --

: Henrik Kjarsgaard Hansen
: Radio-amateurcall:OZ1GMQ
: http://home4.inet.tele.dk/hhansen
: mailto:hhansen@post4.tele.dk

--

Christopher A. Lewicki KC7NYV 520.621.4662 Maintainer of SEDS.LPL.Arizona.EDU
Chair, Students for the Exploration and Development of Space (SEDS-USA)
"Watch the stars, and from them learn." - Albert Einstein

Date: Mon, 24 Feb 1997 05:59:37 -0500
From: Burt Fisher <burtfisher@geocities.com>
Subject: The duplicity of hams

Steve - KF2TI (Landing, NJ) wrote:

> First things first 75 very crowded right now (7:55 EST) but will try
> 3.875 at 9:00 EST

Did not get this message until 6 AM Monday.

> In all honesty, Burt, you are the only one I've ever "locked out". And
> quite frankly, I have found very few if any locally who will agree with
> anything you have to say concerning amateur radio

Of course no one else will dare risk losing access for displeasing King
Steve.
I have been locked out of several PBBSes and the few that allow me in
get a lot of pressure to take me off but they are real men, they do not
like what I say but they believe in free speech.

> I also reserve the right to preview all for sale messages for content. I
> allow only amateur and amateur related materials to be posted. Cars,
> guns, recipes all get round filed.

You are doing what is legally required in most cases.

> > Next Maybe you will deny access based on color?
>
> Funny, I have yet to see a radio that can determine a person's color
> based on a callsign. Is this something new?? How can I tell a person's
> color based on his posting to my PBBS?? Enlighten us Burt

Most of those that access your PBBS are local and you can see them
easily.
Are you available evenings on air?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

Date: Mon, 24 Feb 1997 06:37:35 GMT
From: n9vjg@aol.com
Subject: What's an FBOM?

Are you reading this? Great! That means it wasn't written it for
nothing. Not to worry, you won't be wasting your time.

Amateur Radio is a hobby and like all hobbies, it needs to be fun and
rewarding. We at FBOM Magazine may not be able to straighten out your
40
meter beam after a hurricane or stop commercial satellites from
squatting
on your VHF repeater input, but what we can do is present a lighter
side
to all the QRM.

FBOM Magazine is the new generation of radio hobby publications,
focusing
mostly on amateur radio operators (Hams). FBOM Magazine is for

everyone,
from the guilt-ridden Extra class ham to a Technician or CBer that's
tired
of being blamed for the erosion of family values in America. FBOM
Magazine, the official publication of the Bad Signal Club--A
free-thinking
state of mind where you are certified to transmit scratchy signals,
crack a
joke without saying "hihi," tune up on some Little LEOS and have a
good
time laughing at others as well as yourself.

As if that wasn't enough, FBOM also pokes it's nose into the world of
the
scanner junkie and the strongest competition to wireless
communications,
the Internet.

*
* GET YOUR FREE SAMPLE ISSUE!!!
*
* Email N9VJG@aol.com now for your free sample of the latest issue!
*
* Visit our Web Site which is still under construction and
* in bad need of updating. Just nudge your favorite browser to:
* http://www.interaccess.com/uncle-del/FBOM/.
* If you have America Online, visit the FBOM Magazine folder
* in the Ham Radio Forum message boards, under "Manufacturers,
* Dealers & Vendors."
*

Why YOU should subscribe to FBOM Magazine:

1. You will earn your official Bad Signal Club membership and will be
able to operate any bands with a scratchy signal and tell the
complainers
to stick it where the sun doesn't shine.
2. Blatantly hilarious and unusual commentaries on life as a radio
hobbyist.
3. No boring propagation charts. We replaced those with "Radio
Horoscopes".
4. No articles for home-brewing outrageous tri-banders and RF amps.
Just
step-by-step guides on how to build contraptions like a
"rubber-duckie
plane" for your HT and how to clean nasty things out of your
microphone.
5. Wacky contests where you can win antennas, free chunks of used
RG-58
and other prizes.
6. Free classifieds for paid subscribers.

7. We don't make you feel inferior if you work channel 19.
8. Hey.. we're writing it, so why aren't you reading it?
9. FBOM is 100% biodegradable and fat-free!
10. No test is required for this upgrade.

Why YOU should subscribe to FBOM Magazine NOW:

Rates are CHEAP! 2-year (4 issues) subscription rate of $9. 1-year subscription rate (2 issues) for $5.

For only $9 you can have 4 issues of FBOM Magazine delivered to you. Hey
that's a pretty good deal--especially for a publisher that is terribly desperate to gain more subscribers!

How you can give us your hard-earned money:

*
* Mail a check or money order for a 1 or 2 year subscription to
* "Eric Bond" (That's me, the publisher and janitor) and send it
* to FBOM Magazine, P.O. Box 7711, Westchester, IL 60154-7711.
*

(FBOM Magazine c1997)

Date: Sun, 23 Feb 1997 16:48:54 -0600
From: Mark Fossum <n0nsv@amsat.org>
Subject: What's my Yaesu FT-726r worth?

Hi:

I'm thinking about selling my Yaesu FT-726r and I was wondering what they are currently going for. This one has the 2m/430 modules and satellite board.

It works like a champ but I decided to upgrade to the FT-736r and I don't want to let it sit around in a box.

Thanks,

Mark Fossum - N0NSV

End of Ham-Space Digest V97 #66
****

714. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: POSTMASTER@compuserve.COM
Message-ID: <970225105622_515664.456256_IHO44-18@CompuServe.COM>
Source record: 19676

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #65

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-4.compuserve.com (8.6.10/5.950515)
id FAA26749; Tue, 25 Feb 1997 05:56:08 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id CAA05088 for <ham-space-list@mailbox.ucsd.edu>; Tue, 25 Feb
1997 02:52:24 -0800 (PST)
Received: by noc.ucsd.edu; id QAA22269
sendmail 8.8.5/UCSD8.3
Mon, 24 Feb 1997 16:24:38 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id PAA05788
sendmail 8.8.5/UCSD8.3
Mon, 24 Feb 1997 15:26:29 -0800 (PST)
Message-Id: <199702242326.PAA05788@noc.ucsd.edu>
Date: Mon, 24 Feb 97 15:26:26 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #65
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 24 Feb 97 Volume 97 : Issue 65

Today's Topics:
NORAD Two-Line Orbital Element Sets (TLE952)
Support Little Leo instructions

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 24 Feb 1997 23:08:20 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE952)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system.

Element sets (also updated daily) and some documentation and software are
available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the
directory pub/space.

As a service to the satellite user community, the most current of these
elements are uploaded weekly to sci.space.news and rec.radio.amateur.space.
This week's elements are provided below.

****

- Current Two-Line Element Sets #952 -
Alouette 1
1 00424U 62049A 97053.00932815 .00000024 00000-0 17747-4 0 2699
2 00424 80.4633 37.2408 0024236 109.3930 250.9837 13.67887688716495
ATS 1
1 02608U 66110A 97043.13326308 -.00000144 00000-0 10000-3 0 28
2 02608 14.5550 350.2433 0006837 102.8383 257.2577 1.00287744 27273
ATS 3
1 03029U 67111A 97050.25234941 -.00000121 00000-0 10000-3 0 6234
2 03029 14.9083 357.1279 0011695 273.3372 224.3553 1.00272544107247
Starlette
1 07646U 75010A 97054.93904050 -.00000146 00000-0 -20347-5 0 367
2 07646 49.8298 235.2578 0205653 341.8574 17.5058 13.82192297113780
LAGEOS
1 08820U 76039A 97054.71611720 .00000021 00000-0 00000+0 0 2662
2 08820 109.8363 112.2027 0043720 74.0302 286.5332 6.38664471229891
ETS-2
1 09852U 77014A 97053.25332272 -.00000288 00000-0 10000-3 0 1000
2 09852 13.5287 30.0925 0004829 153.8690 206.2140 1.00022465 20148
GOES 2
1 10061U 77048A 97051.66222845 .00000062 00000-0 10000-3 0 8082
2 10061 12.6916 34.2890 0010413 130.0103 51.1366 1.00298528 16934
IUE
1 10637U 78012A 97047.43794688 .00000005 00000-0 10000-3 0 3657
2 10637 35.8587 79.6590 1347237 64.2693 355.4664 1.00075282 22381
GOES 3
1 10953U 78062A 97052.33581035 -.00000107 00000-0 10000-3 0 7847

```
2 10953 11.6992 37.2475 0002276 239.1895 249.7768 1.00263928 21557
SeaSat 1
1 10967U 78064A 97052.31327451 -.00000054 00000-0 26610-4 0 5543
2 10967 107.9972 330.2426 0002696 275.7151 84.3667 14.38151697977261
Nimbus 7
1 11080U 78098A 97054.62654063 -.00000018 00000-0 21346-4 0 6514
2 11080 98.9117 270.1951 0009682 12.4805 347.6588 13.83686404925940
GOES 5
1 12472U 81049A 97053.08028703 .00000053 00000-0 10000-3 0 9846
2 12472 8.5953 47.7040 0005765 108.1145 252.0220 1.00314630 15606
Cosmos 1383
1 13301U 82066A 97052.79350840 .00000014 00000-0 -18208-6 0 5671
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2 18312 82.5594 153.6476 0011082 235.7944 124.2166 13.84091701480781
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2 18820 82.5409 207.1809 0015764 303.7747 56.1910 13.84769576458308
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Meteor 2-21
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2 24732 6.5264 355.9176 6586530 181.3855 332.2835 0.58061460 10
1997007B
1 24733U 97007B 97051.61068486 .00167508 00000-0 12245+0 0 107
2 24733 23.4326 354.9522 8763146 181.6525 168.9019 0.70664604 12
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

------------------------------

Date: Mon, 24 Feb 1997 16:30:25 -0500
From: Burt Fisher <burtfisher@geocities.com>
Subject: Support Little Leo instructions

> Go for, chicken heart, let's see if you have any guts or if you're like
> all the hams which you despise.

Message received.
You friendly potal worker
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
```

#==#

End of Ham-Space Digest V97 #65
****

715. Re: What's my Yaesu FT-726r worth?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Chuck Wixson <cwixson@grfn.org>
Message-ID: <Pine.GSO.3.95.970225100702.26965A-100000@freenet.grfn.org>
Source record: 19677
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

On Sun, 23 Feb 1997, Mark Fossum wrote:

> Hi:
>
> I'm thinking about selling my Yaesu FT-726r and I was wondering what
> they are currently going for. This one has the 2m/430 modules and
> satellite board.
>
> Mark Fossum - N0NSV
>

Hi Mark,

I bought my 726r one year ago for $600.00. It was in perfect condition less the sat. bd.

Hope this helps....

Chuck, WD8DTH, NNN0XEX-MI

716. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33132D37.2B41@idecc.com>
Source record: 19678
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
> Surely somebody out there has a similarly wonderful idea about how to deal
> with Butt Fisher.

I am guilty of this myself but, the only way to end it is to STOP
responding to his posts. He will go away if no one acknowleges him.

> If he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc.

Bad idea, he has the right to post lets just stop responding.

> Thoughts?

Yes, let's start a club and join each other in solidarity to NOT respond
to Burt Fisher ANYMORE.

I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
again.
Any takers? I'll be number one, e-mail me your call for an official
"Stop Burt Fisher" club I.D number.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

717. dish antenna construction

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970225163001.LAA04907@ladder02.news.aol.com>
Source record: 19679

Hello
I am seeking info on constructing a small (3-4 ft.) dish antenna for
weather satellites. Any sources of info greatly appreciated.

please reply direct to :
jkktl@aol.com

tnx!

718. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: orion@capital.net**
Message-ID: <33133395.24715739@news.capital.net>
Source record: 19680
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Tue, 25 Feb 1997 10:19:35 -0800, tim_hynde <tim_hynde@idecc.com>
wrote:

>Bob wrote:
>> Surely somebody out there has a similarly wonderful idea about how to deal
>> with Burt Fisher.
>
>I am guilty of this myself but, the only way to end it is to STOP
>responding to his posts. He will go away if no one acknowleges him.

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

This is the ONLY tried and true way to deal with people like Burt
who's sole interest in public forums is trolling for flames. This is
how they get their kicks. The hotter the responses, the better they
like it.

--
73,
Butch N2YMJ
To send mail, delete
the two stars at the
end of my address.

719. Amateur space station

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: William Nolle <wa8inz@concentric.net>
Message-ID: <33135390.75EA@concentric.net>
Source record: 19681

Does anybody know the latest FCC rules on Amatuer Space Stations?.
I read the FCC part 97 subsection 97.207 that deals with this subject,
but i know i have read someplace that there are exemptions to this
section. The NASA HAL5 group will launch the first amateur rocket into
space and it will carry transmitting equipment, but of course will only
be in space for 150 or so seconds. This flight is planned for the
summer and the FCC part 97 requires a 27 month advanced notification.

Bill WA8INZ

720. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33136121.2684@geocities.com>
Source record: 19682
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

tim_hynde wrote:

> I am guilty of this myself but, the only way to end it is to STOP
> responding to his posts. He will go away if no one acknowleges him.

Like you did?

> Bad idea, he has the right to post lets just stop responding.

Like you did?

> Yes, let's start a club and join each other in solidarity to NOT respond
> to Burt Fisher ANYMORE.

Like you did.

> I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
> again.

Like you did?

>
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

721. Re: ICOM IC-970H ?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Chuck Vaughn <aa6g@aa6g.org>
Message-ID: <33136265.37EC@aa6g.org>
Source record: 19683

Bob Winingham wrote:

> I think you can get three down converters for the price of
> one 2.4 Ghz module

The last price I heard for the 2.4GHz module was $1800....
outrageously expensive. Its output power was 1 watt. One nice
thing you could do with it (as with all the bands) was the rig
would apply 12V to the coax to run a mast mounted pre-amp and
it was properly sequenced.

I'm not sure that IC-970A/H is out of production or if ICOM just
stopped exporting it to the US.

If there are any more questions, e-mail me directly as I have one
with most of the options except 2.4GHz. :-)

Chuck Vaughn - AA6G

<aa6g@aa6g.org>

722. Which TNC for PacSats???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <331367CD.2686@amsat.org>
Source record: 19684

I'm ready to induluge in the world of Packet Satellites. Keeping in mind that I'm a total beginner to this mode (PacSats, not Satellites) I'm seeking the opinions of those of you already working the digital birds.

I've enlisted the help of a couple of semi-local Elmers that feel the KPC-9612 is a good starter for the 9600 digital birds. Although it won't work all of the other modes, most of my Elmers say that once I work the 9600 birds, I won't want to mess with the slower ones.

Currently, I'm operating a Yaesu FT-736, AEA Satellite Trackbox, Yaesu G5400b Rotor, 2m & 70cm Preamps and antennas for 2m, 70cm & 2.4gig. I've been using Nova for Windows but it currently isn't being offered with a tuner so I'll probably call AMSAT and get a copy of WiSP for the automated tracking/tuning.

What do you think? Have you got any suggestions for me?

Mark Fossum - N0NSV
n0nsv@amsat.org

723. ARLK016 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk016.1997@arrl.org>
Source record: 19685
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK016
ARLK016 Keplerian data

ZCZC SK16
QST de W1AW
Keplerian Bulletin 16 ARLK016
From ARRL Headquarters
Newington, CT February 25, 1997
To all radio amateurs

SB KEP ARL ARLK016
ARLK016 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97056.18583242 .00000042 00000-0 29924-4 0 3265
2 18129 82.9273 321.5291 0011266 165.2814 194.8675 13.72374748484877
UO-11
1 14781U 84021B 97056.02624389 .00000058 00000-0 17721-4 0 09756
2 14781 97.8216 41.8187 0012081 7.2544 352.8799 14.69526582694784
RS-12/13
1 21089U 91007A 97056.15333312 .00000017 00000-0 24235-5 0 09792
2 21089 82.9194 1.7278 0027512 250.4254 109.3934 13.74077130303771
UO-14
1 20437U 90005B 97056.14295980 -.00000004 00000-0 15285-4 0 02549
2 20437 98.5247 140.2067 0010659 173.8774 186.2543 14.29949977370203
RS-15
1 23439U 94085A 97056.14179106 -.00000039 00000-0 10000-3 0 02083
2 23439 64.8181 334.0242 0151886 153.3281 207.5555 11.27525557089300
AO-16
1 20439U 90005D 97056.16149199 -.00000036 00000-0 28311-5 0 00552
2 20439 98.5436 142.9225 0011250 175.0052 185.1247 14.29999001370225
DO-17
1 20440U 90005E 97056.15859486 -.00000039 00000-0 17681-5 0 00618
2 20440 98.5414 143.6983 0011184 174.1761 185.9553 14.30141328370259
```

```
WO-18
1 20441U 90005F 97056.15393944 .00000002 00000-0 17672-4 0 00596
2 20441 98.5480 143.6142 0011814 174.9785 185.1520 14.30109595370250
LO-19
1 20442U 90005G 97055.78037359 .00000001 00000-0 17210-4 0 00553
2 20442 98.5479 143.8521 0011992 174.8104 185.3205 14.30222656370226
FO-20
1 20480U 90013C 97055.99360745 .00000106 00000-0 32060-3 0 09706
2 20480 99.0212 38.7498 0539127 271.3932 82.5495 12.83238790330318
AO-21
1 21087U 91006A 97056.24845107 .00000094 00000-0 82657-4 0 7917
2 21087 82.9431 134.4349 0034037 219.1512 140.7124 13.74577688304779
UO-22
1 21575U 91050B 97056.14706221 .00000013 00000-0 18535-4 0 07634
2 21575 98.3172 120.5687 0006820 228.5202 131.5401 14.37058203294393
KO-23
1 22077U 92052B 97055.93999103 -.00000037 00000-0 10000-3 0 06504
2 22077 66.0869 20.2580 0014017 240.8685 119.0925 12.86300978213319
KO-25
1 22828U 93061F 97056.18179605 -.00000027 00000-0 66113-5 0 05285
2 22828 98.5495 133.1344 0009671 191.1139 168.9842 14.28168454146227
IO-26
1 22826U 93061D 97056.12066530 -.00000008 00000-0 14398-4 0 05577
2 22826 98.5550 133.0030 0008307 209.6630 150.4083 14.27827199178094
AO-27
1 22825U 93061C 97056.21372426 .00000031 00000-0 29927-4 0 5399
2 22825 98.5529 132.8722 0007850 205.5524 154.5275 14.27718497178091
FO-29
1 24278U 96046B 97056.22587005 -.00000060 00000-0 -27985-4 0 606
2 24278 98.5572 112.6565 0352077 116.2165 247.5615 13.52628558 25982
MO-30
1 24305U 96052B 97056.07491106 .00000204 00000-0 20364-3 0 00873
2 24305 82.9312 77.4381 0030212 154.4860 205.7772 13.73089523023676
Mir
1 16609U 86017A 97056.51779452 .00002668 00000-0 37841-4 0 766
2 16609 51.6521 287.2671 0011457 114.3672 245.8554 15.60586929629594

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
March 1, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

724. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: tbryant@cannet.com
Message-ID: <5evit5$7q1@nerd.apk.net>
Source record: 19686
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
>> It is your right to pass or not pass as you see fit. In general I agree
>> with you Burt looks much worse for his posts. However if a sysop
>> chooses not to pass anti ham propaganda that too is his right. After
>> all you guys supply the time, equipment, location and expertise we all
>> enjoy thus it is your foot ball and you make the rules. Most reasonable
>> people would accept this but then Burt is not reasonable.
>
>I agree it is his right but it is not right.
>Can you understand this simple statement?

Some people tend to see a lot of gray areas. They only see the black and white
when it suits their purpose.

Tom - N8ECW
```

725. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5eu1tj$7v8$3@news.mhv.net>
Source record: 19764

In article <33102103.DE7@post4.tele.dk>, Henrik Hansen <hhansen@post4.tele.dk> wrote:
>Can someone tell me ?
>What is the best satelite tracking program.
>I am using STS-plus V.9435A
>Is there anything better ?

STSPLUS is one of the best around. I think it's the best anyway. There are other great programs as well. Check the amateur satellite web sites for the others.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

726. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5eu0e8$moj@dfw-ixnews12.ix.netcom.com>
Source record: 19765
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In <33251448.40798592@news.cyberhighway.net>
glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) writes:
>
>kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>>In <330EFED7.20D0@geocities.com> Burt Fisher
<burtfisher@geocities.com>
>>writes:
>>>
>>>--
-
>>--
>>> I may not always agree with what you say. But I will defend to the
>>> death your right to say it.
>>>
>>>--
-
>>--
>>>
>>>The above quote clearly does not apply to Packet SYSOPS, does it?
>>
>>The right of free speech comes as a bundle with the responsibility of
>>free speech. Since you demonstrate little responsibility yourself it
>>would appear that packet sysops are forced to take responsibility.
The
>
>The BBS for which I'm a co-sysop has been on the air for about 8
>years, and in all that time we have never locked one legitimate ham
>out of the BBS for any reason. We've handled dozens of Burt's
>rantings, as have all the upstream SysOps, obviously. Burt loves to
>tar hams with a broad brush, but he gets more on himself than he does
>on others.
>
>
>--
>glenq@cyberhighway.net
>WB7DOW @ KB7CFD.ID.USA.NOAM

It is your right to pass or not pass as you see fit. In general I agree with you Burt looks much worse for his posts. However if a sysop chooses not to pass anti ham propaganda that too is his right. After all you guys supply the time, equipment, location and expertise we all enjoy thus it is your foot ball and you make the rules. Most reasonable

people would accept this but then Burt is not reasonable.

Jerry

727. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Madd DOG <bmoceri@flash.net>
Message-ID: <3312818B.534F@flash.net>
Source record: 19766
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Madd DOG wrote:
>
> > Straight A student, who gives a SHIT!!!Im supposed to be impressed?
> > Damn, I will have to call her for every decision in my life..hehehehe..
> > Shes a straight A student..Carefull guys, your dealing with the power of
> > GOD now...Her statements will mean everything now..
>
> She also has the guts to use her real name.
> Usually the more impressive the handle the more wimpy the user.
> That leaves you just where?
>
>
> #================#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=================================================================#

Brian Moceri
22424 Fresard St
St Clair Shores
MI 48080
810-775-6486
There ya go wing nut!
```

728. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Roberto Franceschetti <roberto@netwide.net>
Message-ID: <01bc22d2$13f2ff60$068bd4d0@miseno.netwide.net>
Source record: 19767

My answer might be *slightly* biased since we produce it :-) but the best
tracking software is LogSat Professional for Windows. You can preview it at
http://www.logsat.com.

--
Roberto Franceschetti ik8sqi

http://www.logsat.com
roberto@logsat.com

Henrik Hansen <hhansen@post4.tele.dk> wrote in article
<33102103.DE7@post4.tele.dk>...
> Can someone tell me ?
> What is the best satelite tracking program.
> I am using STS-plus V.9435A
> Is there anything better ?
>
>
> OZ1GMQ Henrik Hansen..
>
> --
>
>
> Henrik Kjï¿½rsgaard Hansen
> Radio-amateurcall:OZ1GMQ
> http://home4.inet.tele.dk/hhansen
> mailto:hhansen@post4.tele.dk
>
>

729. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CA3C.2385@geocities.com>
Source record: 19768
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glen Quarnstrom wrote:
>
> The BBS for which I'm a co-sysop has been on the air for about 8
> years, and in all that time we have never locked one legitimate ham
> out of the BBS for any reason. We've handled dozens of Burt's
> rantings, as have all the upstream SysOps, obviously. Burt loves to
> tar hams with a broad brush, but he gets more on himself than he does
> on others.

And thus the greatest way to hurt me if you think I am a fool is not to
censor me but to let me be heard, as you have done.
You have decency even if you think me a fool.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

730. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CA94.6936@geocities.com>
Source record: 19769
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Gerald Schmitt wrote:

> It is your right to pass or not pass as you see fit. In general I agree
> with you Burt looks much worse for his posts. However if a sysop
> chooses not to pass anti ham propaganda that too is his right. After
> all you guys supply the time, equipment, location and expertise we all
> enjoy thus it is your foot ball and you make the rules. Most reasonable
> people would accept this but then Burt is not reasonable.

I agree it is his right but it is not right.
Can you understand this simple statement?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

731. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312C982.7B54@geocities.com>
Source record: 19770
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

> Burt, you're making a fool of yourself.

To be thought a fool by fools is what?

--
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

732. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CAD8.7288@geocities.com>
Source record: 19771
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Glen Quarnstrom wrote:

> You are technically correct, but ethically wrong wet. If you set up
> to provide a public service as a BBS, you have a moral obligation to
> forward all legal mail, or at least not to limit forwarding based on
> personal considerations such as who is saying what. SysOps who censor
> mail are a big problem on the ham BBS network, and responsible SysOps
> should and will route around them.
>
> If you're not part of an open network, you're just cluttering up
> valuable space on the bands, and are giving jerks like Burt more
> ammunition.

Very well said, all of it, even where you called me a jerk.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

733. Re: Which TNC for PacSats???

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: apbiddle@worldnet.att.net
Message-ID: <33139df9.574703@netnews.worldnet.att.net>
Source record: 19687

Mark,

Sounds like a good plan. Other possibilites include getting a G3RUH modem to use with a TAPR clone, or something like an AEA DSP-2232, _not_ the DSP-232. AEA is out of business, but the 2232 is a good performer on both 9600, 1200, and 400 baud (P3D) tlm, plus all the usual other modes. One used, or a new one on closeout would be a good purchase. The same for a used DSP-12. TAPR/AMSAT also have the DSP-93, which is a neat box with ongoing software development. If I were starting fresh today, that is what I would use.

BTW, you will need WISP. It will not only drive the tracking and tuning, but it also handles all the message details. And of course it helps support the P3D effort.

Alan
WA4SCA

734. NEED FAST CASH??? WE PAY TOP $$

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: fastcash@usacellular.com
Message-ID: <5f0prf$1u34@useneta1.news.prodigy.com>
Source record: 19688

$$$$$$$$$WE BUY ALL$$$$$ *F*A*S*T C*A*S*H*

CASH IS WAITING FOR YOUR UNWANTED ITEMS

* INCLUDING BUT NOT LIMITED TO
GOLD
DIAMONDS
WATCHES
SILVER
PLATINUM
ELECTRONICS,TVS, STEREOS,VCR'S
COMPUTERS, MEMORY CHIPS, MODEMS
*FOR MORE INFO STOP IN TO

http://www.usacellular.com/fastcash.htm

735. Re: Why I am the way I am.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2602970347260001@wd1v.mv.com>
Source record: 19689
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

> Burt Fisher <burtfisher@geocities.com> wrote in article
> <3310B1E9.7BF1@geocities.com>...
> > I am the way I am because as a teen I was an active ham radio operator.
> > I used "the mike" to not face real people thus missing my teen years the
> > way real people experience it. It is not ham radio's fault of course,
> > the fault is entirely mine. However I am not that person now and I
> > despise in others what I despised in myself. I am much like a reformed
> > smoker (they tend to be fanatics against smoking).

Good insights but why still play the role of a victim? To be liberated
from your past, you have to LET IT GO. Ten years from now, you'll hate
who you are today. There is no peace or healing going on when you
despise anything, past, present, or future. Its all INSIDE you - what
isn't there to love?

Peace and healing come with acceptance and forgiveness. Then you can love
instead of hate. Much better use of energy. In fact, the sensation is
that it takes no energy. What we resist (the pain of not loving) persists.

73,

John/WD1V

736. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970226125524_515664.456256_IHO34-11@CompuServe.COM>
Source record: 19690

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #68

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-3.compuserve.com (8.6.10/5.950515)
id HAA25183; Wed, 26 Feb 1997 07:55:12 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA07458 for <ham-space-list@mailbox.ucsd.edu>; Wed, 26 Feb
1997 04:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id EAA19975
sendmail 8.8.5/UCSD8.3
Wed, 26 Feb 1997 04:31:26 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA19962
sendmail 8.8.5/UCSD8.3
Wed, 26 Feb 1997 04:31:23 -0800 (PST)
Message-Id: <199702261231.EAA19962@noc.ucsd.edu>
Date: Wed, 26 Feb 97 04:31:21 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #68
To: Ham-Space@ucsd.edu

Ham-Space Digest Wed, 26 Feb 97 Volume 97 : Issue 68

Today's Topics:
ARLK016 Keplerian data
dish antenna construction
FO-29 analog mode
ICOM IC-970H ?
What's my Yaesu FT-726r worth?
Which TNC for PacSats??? (2 msgs)
WTB:Knwood TS-811-A 432mHz All Mode Tranciever

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 25 Feb 1997 19:22:11 -0500
From: w1aw@arrl.org
Subject: ARLK016 Keplerian data

SB KEP @ ARL $ARLK016
ARLK016 Keplerian data

ZCZC SK16
QST de W1AW
Keplerian Bulletin 16 ARLK016

Date: 25 Feb 1997 16:30:27 GMT
From: jkktl@aol.com (Jkktl)
Subject: dish antenna construction

Hello
I am seeking info on constructing a small (3-4 ft.) dish antenna for
weather satellites. Any sources of info greatly appreciated.

please reply direct to :
jkktl@aol.com

tnx!

Date: Mon, 24 Feb 1997 14:06:19 -0800
From: Jeff Griffin <kb2wqm@amsat.org>
Subject: FO-29 analog mode

Has anyone heard FO-29 in analog mode? If so is there some kind of
schedule that they follow to turn it on. Let us know.

73 Jeff

Date: Tue, 25 Feb 1997 14:07:24 -0800
From: Chuck Vaughn <aa6g@aa6g.org>
Subject: ICOM IC-970H ?

Bob Winingham wrote:

> I think you can get three down converters for the price of
> one 2.4 Ghz module

The last price I heard for the 2.4GHz module was $1800....
outrageously expensive. Its output power was 1 watt. One nice
thing you could do with it (as with all the bands) was the rig
would apply 12V to the coax to run a mast mounted pre-amp and
it was properly sequenced.

I'm not sure that IC-970A/H is out of production or if ICOM just
stopped exporting it to the US.

If there are any more questions, e-mail me directly as I have one
with most of the options except 2.4GHz. :-)

Chuck Vaughn - AA6G

<aa6g@aa6g.org>

Date: Tue, 25 Feb 1997 10:10:17 -0500
From: Chuck Wixson <cwixson@grfn.org>
Subject: What's my Yaesu FT-726r worth?

On Sun, 23 Feb 1997, Mark Fossum wrote:

> Hi:
>
> I'm thinking about selling my Yaesu FT-726r and I was wondering what
> they are currently going for. This one has the 2m/430 modules and
> satellite board.
>
> Mark Fossum - N0NSV
>
Hi Mark,

I bought my 726r one year ago for $600.00. It was in perfect condition
less the sat. bd.

Hope this helps....

Chuck, WD8DTH, NNN0XEX-MI

Date: Tue, 25 Feb 1997 16:29:33 -0600
From: Mark Fossum <n0nsv@amsat.org>
Subject: Which TNC for PacSats???

I'm ready to induluge in the world of Packet Satellites. Keeping in mind
that I'm a total beginner to this mode (PacSats, not Satellites) I'm
seeking the opinions of those of you already working the digital birds.

I've enlisted the help of a couple of semi-local Elmers that feel the
KPC-9612 is a good starter for the 9600 digital birds. Although it won't

work all of the other modes, most of my Elmers say that once I work the 9600 birds, I won't want to mess with the slower ones.

Currently, I'm operating a Yaesu FT-736, AEA Satellite Trackbox, Yaesu G5400b Rotor, 2m & 70cm Preamps and antennas for 2m, 70cm & 2.4gig. I've been using Nova for Windows but it currently isn't being offered with a tuner so I'll probably call AMSAT and get a copy of WiSP for the automated tracking/tuning.

What do you think? Have you got any suggestions for me?

Mark Fossum - N0NSV
n0nsv@amsat.org

Date: Wed, 26 Feb 1997 02:29:53 GMT
From: apbiddle@worldnet.att.net (Alan Biddle)
Subject: Which TNC for PacSats???

Mark,

Sounds like a good plan. Other possibilites include getting a G3RUH modem to use with a TAPR clone, or something like an AEA DSP-2232, _not_ the DSP-232. AEA is out of business, but the 2232 is a good performer on both 9600, 1200, and 400 baud (P3D) tlm, plus all the usual other modes. One used, or a new one on closeout would be a good purchase. The same for a used DSP-12. TAPR/AMSAT also have the DSP-93, which is a neat box with ongoing software development. If I were starting fresh today, that is what I would use.

BTW, you will need WISP. It will not only drive the tracking and tuning, but it also handles all the message details. And of course it helps support the P3D effort.

Alan
WA4SCA

Date: Mon, 24 Feb 1997 22:09:39 -0600
From: "M. Cobb" <mco@terraworld.net>
Subject: WTB:Knwood TS-811-A 432mHz All Mode Tranciever

Wanted To Buy:

Kenwood TS-811-A All Mode tranciever in excellent or better condition.

Please e-mail or call 316-421-6139

Thanks very much,

Mike, KB0QMF

Date: (null)
From: (null)

SB KEP ARL ARLK016
ARLK016 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97056.18583242 .00000042 00000-0 29924-4 0 3265
2 18129 82.9273 321.5291 0011266 165.2814 194.8675 13.72374748484877
UO-11
1 14781U 84021B 97056.02624389 .00000058 00000-0 17721-4 0 09756
2 14781 97.8216 41.8187 0012081 7.2544 352.8799 14.69526582694784
RS-12/13
1 21089U 91007A 97056.15333312 .00000017 00000-0 24235-5 0 09792
2 21089 82.9194 1.7278 0027512 250.4254 109.3934 13.74077130303771
UO-14
1 20437U 90005B 97056.14295980 -.00000004 00000-0 15285-4 0 02549
2 20437 98.5247 140.2067 0010659 173.8774 186.2543 14.29949977370203
RS-15
1 23439U 94085A 97056.14179106 -.00000039 00000-0 10000-3 0 02083
2 23439 64.8181 334.0242 0151886 153.3281 207.5555 11.27525557089300
AO-16
1 20439U 90005D 97056.16149199 -.00000036 00000-0 28311-5 0 00552
2 20439 98.5436 142.9225 0011250 175.0052 185.1247 14.29999001370225
DO-17
1 20440U 90005E 97056.15859486 -.00000039 00000-0 17681-5 0 00618
2 20440 98.5414 143.6983 0011184 174.1761 185.9553 14.30141328370259
WO-18
1 20441U 90005F 97056.15393944 .00000002 00000-0 17672-4 0 00596
2 20441 98.5480 143.6142 0011814 174.9785 185.1520 14.30109595370250
LO-19
1 20442U 90005G 97055.78037359 .00000001 00000-0 17210-4 0 00553
2 20442 98.5479 143.8521 0011992 174.8104 185.3205 14.30222656370226
FO-20
1 20480U 90013C 97055.99360745 .00000106 00000-0 32060-3 0 09706
2 20480 99.0212 38.7498 0539127 271.3932 82.5495 12.83238790330318
AO-21
1 21087U 91006A 97056.24845107 .00000094 00000-0 82657-4 0 7917
2 21087 82.9431 134.4349 0034037 219.1512 140.7124 13.74577688304779
UO-22
1 21575U 91050B 97056.14706221 .00000013 00000-0 18535-4 0 07634

```
2 21575 98.3172 120.5687 0006820 228.5202 131.5401 14.37058203294393
KO-23
1 22077U 92052B 97055.93999103 -.00000037 00000-0 10000-3 0 06504
2 22077 66.0869 20.2580 0014017 240.8685 119.0925 12.86300978213319
KO-25
1 22828U 93061F 97056.18179605 -.00000027 00000-0 66113-5 0 05285
2 22828 98.5495 133.1344 0009671 191.1139 168.9842 14.28168454146227
IO-26
1 22826U 93061D 97056.12066530 -.00000008 00000-0 14398-4 0 05577
2 22826 98.5550 133.0030 0008307 209.6630 150.4083 14.27827199178094
AO-27
1 22825U 93061C 97056.21372426 .00000031 00000-0 29927-4 0 5399
2 22825 98.5529 132.8722 0007850 205.5524 154.5275 14.27718497178091
FO-29
1 24278U 96046B 97056.22587005 -.00000060 00000-0 -27985-4 0 606
2 24278 98.5572 112.6565 0352077 116.2165 247.5615 13.52628558 25982
MO-30
1 24305U 96052B 97056.07491106 .00000204 00000-0 20364-3 0 00873
2 24305 82.9312 77.4381 0030212 154.4860 205.7772 13.73089523023676
Mir
1 16609U 86017A 97056.51779452 .00002668 00000-0 37841-4 0 766
2 16609 51.6521 287.2671 0011457 114.3672 245.8554 15.60586929629594

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
March 1, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

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End of Ham-Space Digest V97 #68
******************************
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737. Mir Information and Prediction

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: Kees Leune <s722413@kub.nl>
Message-ID: <5f1fq1$mnm@mailnews.kub.nl>
Source record: 19691

I have put up a Web page which contains information regarding ham activities on board space station Mir. The information you will find there deals with mainly with the frequencies used by the crew. Another, much more interesting possibility is the realtime creatings of predictions of passes over YOUR area.

By filling in your IARU qth locator and your locator UTC time offset, you will get a tailor made prediction which tells you exactly when the station will be in reach so that you can give it a go.

The URL:

http://stuwww.kub.nl/~pe1rhp

The server is located in the Netherlands (JO21MN) and optionally fetches information from Germany. More information will be put up on a later time.

I'm looking forward to any reactions you might have!

73 de Kees, PE1RHP

--
Kees Leune Tilburg University
Student of Information Management and Technology The Netherlands

Internet mail: C.J.Leune@KUB.NL AX25Mail : PE1RHP@PI8SHB.#NBO.NLD.EU
Finger s722413@kubstu.kub.nl for PGP WWW: http://stuwww.kub.nl/people/kees/

738. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2602970656470001@news.vcnet.com>
Source record: 19692
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3312C982.7B54@geocities.com>, burtfisher@geocities.com wrote:

> > Burt, you're making a fool of yourself.
>
> To be thought a fool by fools is what?

According to my dictionary:
PUERILE
1. Belonging to childhood; juvenile.
2. Immature; childish. See Synonyms at young. [Latin *puerlis*, from puer,
child, boy.] • puerilely adv. •puerility or puerileness n.

--
--Rich-- ag6k, 805-386-3734

739. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: niels <niels@blast.net>
Message-ID: <E67y49.FAy@nonexistent.com>
Source record: 19693
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

People,
You are missing the point! The object of newsgroups is the free exchange of ideas and information, just like ham radio is supposed to be enjoyed. Not by ignoring peoples views just because you don't agree with them. That is what makes the United States of America GREAT!
Not censorship!
You don't like don't logon or turn off your radio.

Burt Fisher <burtfisher@geocities.com> wrote in article
<33136121.2684@geocities.com>...
> tim_hynde wrote:
>
> > I am guilty of this myself but, the only way to end it is to STOP
> > responding to his posts. He will go away if no one acknowleges him.
>
> Like you did?
>
> > Bad idea, he has the right to post lets just stop responding.
>
> Like you did?
>
> > Yes, let's start a club and join each other in solidarity to NOT
respond
> > to Burt Fisher ANYMORE.
>
> Like you did.
>
> > I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
> > again.
>
> Like you did?
>
> >
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

740. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: wb4yuc
Message-ID: <5f1dc5$93m@lana.zippo.com>
Source record: 19694

This is the oddest conversation about the Little LEO Industry I have ever seen....

I'm beginning to think that noone is really serious about who they are and what they represent.

73,
WB4YUC

In article <3312C982.7B54@geocities.com>, Burt says...
>
>> Burt, you're making a fool of yourself.
>
>To be thought a fool by fools is what?
>
>--
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

741. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3321a5a0.27065598@news.cyberhighway.net>
Source record: 19695
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>In <33251448.40798592@news.cyberhighway.net>
>glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) writes:

<discussion of BBS censorship>

>>The BBS for which I'm a co-sysop has been on the air for about 8
>>years, and in all that time we have never locked one legitimate ham
>>out of the BBS for any reason. We've handled dozens of Burt's

>It is your right to pass or not pass as you see fit. In general I agree
>with you Burt looks much worse for his posts. However if a sysop
>chooses not to pass anti ham propaganda that too is his right. After

Correct. I agree with and support this right. However, just because
you have a "right" does not mean you have to exercise it. After all,
you have a "right" to make a fool of yourself, too. Remember, power
corrupts, and once you start censoring what goes through your BBS,
you'll find all sorts of excuses to filter out anything that annoys
you.

>all you guys supply the time, equipment, location and expertise we all
>enjoy thus it is your foot ball and you make the rules. Most reasonable
>people would accept this but then Burt is not reasonable.

And if all the Sysops who find various things unreasonable start
killing them, the network collapses. If you don't want to be part of
a free-flowing information net, then you have no business setting up a
BBS on such a net. Put your little up-tight closed BBS off on some
peripheral channel, and lock out folks to your heart's content.

I repeat: It's legal to lock out folks like Burt (or me - it's
happened more than once) but it's not ethical, nor is it in the spirit
of Amateur Radio. It's hard to overemphasize the importance of this
principle.

Hint: How far do you think the Internet would have grown if it
catered to the same sort of censorship that some hams practice?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

742. Who did I hear on 130.165 MHz?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: John Charles <jaycee@midmarsh.demon.co.uk>
Message-ID: <sQELBBAC6JFzEwIi@midmarsh.demon.co.uk>
Source record: 19696

For the first time I picked up some voice traffic on 130.165 MHz this afternoon, best reception here being 130.1625 MHz presumably due to the Doppler shift.

It sounded like an American accent and he was talking about how it felt to be wearing a mask overnight. It certainly wasn't the usual voice I've heard on 145.800 MHz in the past.

I'm wondering who I heard and to whom he could have been talking on that frequency as my listings show it as Shuttle to Mir traffic. I could only pick up one side of the conversation. Mir was passing over at the time.

BW John
--
John Charles

743. Re: Who did I hear on 130.165 MHz?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: Greg Boren <symntlab@netxpress.com>
Message-ID: <3314AB97.5D72@netxpress.com>
Source record: 19697

It was the American on board making reference to having to wear a oxegen mask because of the fire on MIR.

744. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3314C00B.6690@geocities.com>
Source record: 19698
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Glen Quarnstrom wrote:
>
> I repeat: It's legal to lock out folks like Burt (or me - it's
> happened more than once) but it's not ethical, nor is it in the spirit
> of Amateur Radio. It's hard to overemphasize the importance of this
> principle.
>
> Hint: How far do you think the Internet would have grown if it

I wish I was able to express myself with as much dignity as you.

#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

745. Re: Why I am the way I am.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <5f2im3$lat@vixen.cso.uiuc.edu>
Source record: 19699

In a previous article, john@wd1v.mv.com (John D. Seney) says:

>com> <330DFD45.72D7@flash.net> <330EF9C8.FC2@geocities.com> <330D719C.7C75@cornell.edu>
<5epn0u$hob@news1.mnsinc.com> <3310B1E9.7BF1@geocities.com>
<01bc221e$e19605c0$5ba19ecd@expressp5.insighttec.com>
>X-Nntp-Posting-Host: wd1v.mv.com
>Date: Wed, 26 Feb 1997 08:47:25 GMT
>Lines: 23
>Xref: vixen.cso.uiuc.edu alt.support.divorce:56261 rec.radio.amateur.digital.misc:22608
rec.radio.amateur.homebrew:25504 rec.radio.amateur.misc:126915
rec.radio.amateur.space:10191
>
>
>> Burt Fisher <burtfisher@geocities.com> wrote in article
>> <3310B1E9.7BF1@geocities.com>...
>> > I am the way I am because as a teen I was an active ham radio operator.
>> > I used "the mike" to not face real people thus missing my teen years the
>> > way real people experience it. It is not ham radio's fault of course,
>> > the fault is entirely mine. However I am not that person now and I
>> > despise in others what I despised in myself. I am much like a reformed
>> > smoker (they tend to be fanatics against smoking).
>
>Good insights but why still play the role of a victim? To be liberated
>from your past, you have to LET IT GO. Ten years from now, you'll hate
>who you are today. There is no peace or healing going on when you
>despise anything, past, present, or future. Its all INSIDE you - what
>isn't there to love?
>
>Peace and healing come with acceptance and forgiveness. Then you can love
>instead of hate. Much better use of energy. In fact, the sensation is
>that it takes no energy. What we resist (the pain of not loving) persists.
>
>73,
>
>John/WD1V
>

Why post these things on rec.radio.amateur.space? I came here to read
messages about amateur satellite.

Zack W9SZ

--

746. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: gary <tech@thereporter.com>
Message-ID: <5f1rs1$fgo@clark.zippo.com>
Source record: 19700
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:
>On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
>Tuesday.
>From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
>Meet me
>
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

BURT, I sorta hate to burst your bubble, but your steady flow of BS has
been steadily rejected on the packet network - what makes you think your
presence one either Internet or the ham bands is likely to be any more
successful? Do you often trip over your own ego and hurt yourself?
--
Gary... KJ6Q...I am the NRA...
(that NRA bit REALLY tics off the gun haters...:-)
==========
INTERNET NEWSGROUPS:
A world wide time wasting garage sale, where
the inmates constantly attempt to unload their mentally
defective baggage and lawn furniture on the gullible and
unwary - Shoppers beware, you'll NEVER find a bargain here!
ALSO, be warned that many of the yapping mongrels infesting
this area are not housebroken, watch where you step!
==========

747. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: The Bakers <mbaker@monmouth.com>
Message-ID: <3314E78C.24A2@monmouth.com>
Source record: 19701
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

gary wrote:
>
> BURT, I sorta hate to burst your bubble, but your steady flow of BS has
> been steadily rejected on the packet network - what makes you think your
> presence one either Internet or the ham bands is likely to be any more
> successful? Do you often trip over your own ego and hurt yourself?
> --
> Gary... KJ6Q...I am the NRA...
> (that NRA bit REALLY tics off the gun haters...:-)
> ==========
> INTERNET NEWSGROUPS:
> A world wide time wasting garage sale, where
> the inmates constantly attempt to unload their mentally
> defective baggage and lawn furniture on the gullible and
> unwary - Shoppers beware, you'll NEVER find a bargain here!
> ALSO, be warned that many of the yapping mongrels infesting
> this area are not housebroken, watch where you step!
> ==========

So Gary, what brings *you* here ??

748. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <3314E38F.598C@cadvision.com>
Source record: 19702
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> Burt Fisher wrote:
>
> Glen Quarnstrom wrote:
> >
> > I repeat: It's legal to lock out folks like Burt (or me - it's
> > happened more than once) but it's not ethical, nor is it in the spirit
> > of Amateur Radio. It's hard to overemphasize the importance of this
> > principle.
> >
> > Hint: How far do you think the Internet would have grown if it
>
> I wish I was able to express myself with as much dignity as you.
>

I use Netscape and it's newsreader. Is there anyway that I can filter
out certain subjects/individuals from having them show up in my reader.
If not can you reccomend a news reader that has this facility.

I am not denying individual's right to blow hot air. As far as I am
concerned, their argument is lost at the outset by posting it to an
inappropriate news group anyway. This last posting reminds me of "Oh you
are so good at milking cows. I wish I could do it as well as you do."
The only problem is someone doesn't know a cow from an ass.

Thank you for your help with ther news reader.

Raj VE6RAJ

749. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-26 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f33n5$2vf@lehi.kuentos.guam.net>
Source record: 19703
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>adell@planet.net (Steve - KF2TI (Landing, NJ)) wrote:

>>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>>says...
>>
>>> If you operate a PBBS to serve all amateurs who the hell are you to
>>> decide what THEY should read.
>>
>>Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
>>read. *I* take the input of the people who utilize MY equipment, *I*
>>decide what content is acceptable or not. Not YOU or the FCC
>>
>>That's who the hell *I* am. *I* and the others on my PBBS consider your
>>posts inappropriate to anything related to amateur radio, hence, no
>>posts.
>>
>>I firmly believe you have every right to show the fool that you may or
>>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>>platform to prove it. That's for others to do.
>>
>>If you're suggesting that I have to allow you to access my property
>>(equipment, etc.) then you are barking up the wrong tree.

>You are technically correct, but ethically wrong wet. If you set up
>to provide a public service as a BBS, you have a moral obligation to
>forward all legal mail, or at least not to limit forwarding based on
>personal considerations such as who is saying what. SysOps who censor
>mail are a big problem on the ham BBS network, and responsible SysOps
>should and will route around them.

Sounds like you have the U.S. Post Office and ham radio confused.
The big problem with the packet network is sysops who don't pay
attention, forward anything to anywhere, loose mail by letting things
sit on their system forever, etc. Running a BBS is something that
requires a) time and b) effort, and too many packet BBS's consist
of a TNC, a radio, a computer with BBS software that somebody's
buddy set up, and a ham running around patting himself on the back
calling himself a 'sysop'.

>If you're not part of an open network, you're just cluttering up
>valuable space on the bands, and are giving jerks like Burt more
>ammunition.

I think you have that backwards, too. I don't know who the first two hams were who hooked up TNC's and BBS software, but I imagine that the intent of the first link of the 'packet network' was to forward information, not garbage. Keeping the network free of garbage reserves valuable space for valid information to be passed.

The amateur packet radio network already forwards, by design, an incredible amount of garbage in the form of message headers. I don't recall the exact figure, but a few years ago I analyzed a months worth of ALLUS bulletins, and I think that headers accounted for between 40 and 50 percent of the total character count. Add to that garbage a totally unnecessary ASCII drawing at the end of every message, a few lines of advertising from the guy who wrote the whiz bang terminal program used to generate the message, and top it off with an ACK at the end so the receiving system generates a totally unnecessary return message saying the mail got there, and you run the percentage of garbage up well over 50%. The packet network does a wonderful job of diseminating garbage, but unfortunaly falls flat on it's face when it comes to delivering mail from one ham to another ham.

I agree one hundred percent with Steve. I supplied the two computers, three radios, three TNC's, assorted power supplies, cables, antennas, etc. that are used to run my packet BBS and DX cluster. I pay the electric bill every month. When the little red transmit light on one of my packet radios turns on, I decided what gets transmitted, and it damn sure won't be Bubble Head's Bible Quotes or daily birthday lists from the Happy Club. Steve chooses to keep certain people off his system. I choose to keep certain garbage off my system. We are both doing what we are supposed to be doing, monitoring and eliminating garbage.

My packet equipment isn't a 'public service'. It's a service provided for hams to use in relation to ham radio. Bible banging and birthday lists have nothing to do with ham radio, so I make the decision to keep that junk off my system, and not contribute to the confusion by sending it to other systems.

When you, TAPR, or the ARRL decide you would like to reimburse me for the cost of my equipment and start sending me a paycheck, I will be happy to revert to your system of not excluding anything from my BBS.

By the way, Burt's messages pass freely thru my BBS, as his topic of discussion always seems to be ham radio related.

73, Jim KH2D

750. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f5pje$fad@lehi.kuentos.guam.net>
Source record: 19622
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>And if all the Sysops who find various things unreasonable start
>killing them, the network collapses. If you don't want to be part of
>a free-flowing information net, then you have no business setting up a
>BBS on such a net. Put your little up-tight closed BBS off on some
>peripheral channel, and lock out folks to your heart's content.

I think we have found the problem here, Glen. You don't seem to have
a firm grasp of the definition of the word 'network'. Networks don't
collapse from lack of traffic, they just move the existing traffic much
faster.

73, Jim KH2D

751. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5f4qlt$pe5@news.Hawaii.Edu>
Source record: 19623
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:
>On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
>Tuesday.
>From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
>Meet me

14030 CW. I'll keep the rig on on day listening for your call.

Jeff KH2PZ

752. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2457$40d6b9a0$ac102399@desktop>
Source record: 19704
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

niels <niels@blast.net> wrote in article <E67y49.FAy@nonexistent.com>...
> People,
> You are missing the point! The object of newsgroups is the free exchange
of
> ideas and information, just like ham radio is supposed to be enjoyed.

In another message about trunked systems you question the motives of
someone
who seeks information.

Aren't you being just a wee bit inconsistent?

753. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc245c$af28a940$a3d879a8@soho>
Source record: 19705
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> I am not denying individual's right to blow hot air. As far as I am
> concerned, their argument is lost at the outset by posting it to an
> inappropriate news group anyway.

This last posting reminds me of "Oh you
> are so good at milking cows. I wish I could do it as well as you do."
> The only problem is someone doesn't know a cow from an ass.
>
> Thank you for your help with ther news reader.
>
> Raj VE6RAJ
>

The first rule of milking a cow is to make sure it is not a bull.

Mark

754. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Les Alverson <docfester@mindspring.com>
Message-ID: <01bc2468$674057c0$6bfb0b26@junior>
Source record: 19706
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

BULLSHIT!!
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or numbered" - The Prisoner

Burt Fisher <burtfisher@geocities.com> wrote in article <330A6B3E.6279@geocities.com>...
> AL7OQ wrote:
>
> > Ask FEMA (Federal Emergency Management Agency), who has opposed the
> > Little LEOS proposal on the ground that hams provide invaluable
> > emergency communications services on 2 meters.
> >
> > Burt: be honest! Why are you supporting this industry band grab?
>
> Because I am public service minded person.
> --
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

755. Satellite info

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: James <n1vbn@tiac.net>
Message-ID: <01bc2467$34b156c0$8bae3ccf@n1vbn.metro2000.net>
Source record: 19707

Greetings to one and all Hams. I have been browsing on the net looking for a list I once found and lost when the cat walked on the keyboard and erased my bookmark list!! The list had every satellite up there, the uplink and downlink, name of the sat. etc.. Anybody know where I might look?? Any and all help will be appreciated.

73 de James Shanks n1vbn@tiac.net

(P.S. I now backup my bookmark list.)

756. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Les Alverson <docfester@mindspring.com>
Message-ID: <01bc2469$61d44ac0$6bfb0b26@junior>
Source record: 19708
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Pied Piper Like oh lets say the ARRL, Mao's China, Stalin's USSR, Nazi Germany.... Do I need to clarify any further?
PS Look at the Constitution and the Bill of Right and the The Amendments.
I do.
Thank God for the Freedom of Speech.
Of course, Congress is trying to stop that to for "Politcal Speeches"
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or numbered" - The Prisoner

Burt Fisher <burtfisher@geocities.com> wrote in article <3308DF7C.3F5E@geocities.com>...
> Barney wrote:
> >
> > WHY do you ONLY want to give away 2 meters, Burtie?
>
> Actually you are correct. Hams need nothing except to SERVE THEMSELVES.
>
> > Why not get all the hams to write the FCC and recommend that they give
> > away ALL of our spectrum?
>
> Great!
>
> > I am sure the readers of this newsgroup are already dashing off letters
> > by the DOZEN to the FCC in response to your great message, since we all
> > follow you like the pied piper!
>
> Actually you all follow each other like the Pied Piper. Listen to a
> contest.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

757. Re: Satellite info

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: ken coleman <acoleman@access.eve.net>
Message-ID: <33153AF0.2E3E@access.eve.net>
Source record: 19709

James wrote:
>
> Greetings to one and all Hams. I have been browsing on the net looking for
> a list I once found and lost when the cat walked on the keyboard and erased
> my bookmark list!! The list had every satellite up there, the uplink and
> downlink, name of the sat. etc.. Anybody know where I might look?? Any and
> all help will be appreciated.
>
> 73 de James Shanks n1vbn@tiac.net
>
> (P.S. I now backup my bookmark list.)

try www.amsat.org/ under the link for "Spacecraft Information"

758. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: magne@radar.no
Message-ID: <5f3gge$1dc_006@magne.radar.no>
Source record: 19710
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <E67y49.FAy@nonexistent.com>, "niels" <niels@blast.net> wrote:
>That is what makes the United States of America GREAT!

Yeah - contrary to the rest of the world?

Blah!

--Magne

759. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331565A0.40C5@geocities.com>
Source record: 19711
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.,rec.radio.amateur.misc,rec.radio.amateur.space

gary wrote:
>
> BURT, I sorta hate to burst your bubble, but your steady flow of BS has
> been steadily rejected on the packet network - what makes you think your
> presence one either Internet or the ham bands is likely to be any more
> successful? Do you often trip over your own ego and hurt yourself?

Hams are so brave with insults, from a distance.
I receive many packet messages of support, would you like to see some?
I figured hams could not think fast enough to engage me in a live
discussion,
so far after years on here I have been unable to get on on the air with
one to do so.

I will easily win any discussion because I have the facts and I engage
students saily, they are far more challenging than most any ham could
be.
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

760. Re: FO-29 analog mode

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: boyer@rd.bbc.co.uk
Message-ID: <5f4ahj$bun@bbcnews.rd.bbc.co.uk>
Source record: 19712

Jeff Griffin (kb2wqm@amsat.org) wrote:
: Has anyone heard FO-29 in analog mode? If so is there some kind of
: schedule that they follow to turn it on. Let us know.
:
: 73 Jeff

If in analogue mode you mean the digipeater, then the answer is yes. Once.
When it was newly up.
J.

761. Receiver- kit for Weather Sat's (2)

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: abom@iaehv.nl
Message-ID: <3315dc23.1115691@news.iaehv.nl>
Source record: 19713

Receiver- kit for Weather Sat's (2)

Dear weathersatellite- fan,

A few weeks ago I announced a weathersatellite receiver- kit.
The necessary zip- file for building the receiver can be found on the
url of the technical university of Eindhoven in the Netherlands. The
URL- address is:
ftp://ftp.esrac.ele.tue.nl/pub/ham/wefaxreceiver-kit.
The VHF2_10.zip -file of about 125kb contains the next files:

VHF2.plt The complete schematic of the receiver in HPGL- format
VHF2.par The complete partslist of the receiver in ASCI- format
VHF2t.tif The topside of the PCB in TIF- format
VHF2b.tif The bottomside of the PCB in TIF-format
VHF2c.tif The componentlayer of the PCB in TIF- format
README.txt Some background information.

In about 4- 6 weeks a nice glass epoxy print with silkscreen lettering
will be available.
If you want to make the PCB yourself, you can start immediately with
copying the top and bottom layers to transparent sheets.
On this moment the assembly- instructionsheet is being prepared and
will be send as an attached .txt- file to those who are going to
build the receiver.
For changes that are essential for the design, I will direct- mail the
WX- receiver builders.

Important design changes will result in a new VHF2_X0.zip file.
Small design changes will result in a new VHF2_1X. zip file.

Remarks before building your own Wefax- receiver:

Keep in mind that building a receiver is not just a matter of placing
the right components in the right holes. The receiver should be
adjusted for optimum results.

After that I designed last year the Wefax- receiver it's now for me a
challenge to help others in building the receiver via the internet-
possibility and to help them in getting good results with "normal"
components and limited measurement- means. Further I hope to receive
sufficient feedback for possible new receiverextensions , like PC-
operation, synthesizer and scan-possibility, this could lead to a
new and more advanced design.

For more details, questions or problems during assembling your
receiver, you can contact me via E-mail : abom@iaehv.nl or

pa0axb@amsat.org.

Succes in building your own Wefax- receiver!!!!
Alex Bom
Veldhoven/ the Netherlands
tel: +31 40 2539851
email: abom@iaehv.nl
email: pa0axb@amsat.org

762. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: gary <tech@thereporter.com>
Message-ID: <5f4itr$e89@lori.zippo.com>
Source record: 19714
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.,rec.radio.amateur.misc,rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:
>gary wrote:
>>

>I will easily win any discussion because I have the facts and I engage
>students saily, they are far more challenging than most any ham could
>be.

A popular quote used on the ham bands when faced with malicious QRM and vocal vandals, is "don't feed the animals". With that view in mind, this will be my last post on THIS subject. I really don't expect to see any logical debate flowing from the likes of burt, who could EASILY sail around the world in his own wind powered sailboat - but regardless of my own personal failings, I have YET felt the lonliness and need to advertise on Internet in an effort to find someone who will talk to me on the radio. Party on, Burt dude....
--
Gary... KJ6Q...I am the NRA...
(that NRA bit REALLY tics off the gun haters...:-)
==========
INTERNET NEWSGROUPS:
A world wide time wasting garage sale, where
the inmates constantly attempt to unload their mentally
defective baggage and lawn furniture on the gullible and
unwary - Shoppers beware, you'll NEVER find a bargain here!
ALSO, be warned that many of the yapping mongrels infesting
this area are not housebroken, watch where you step!
==========

763. Test Message - Don't Read

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: swave@bridge.mara.org
Message-ID: <5f3p3r$ehn@switch.bridgewater.mara.org>
Source record: 19715

```
You read it!!!!

Sorry for the test...
```

764. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <331dfee2.8263707@news.cyberhighway.net>
Source record: 19716
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

kh2d@kuentos.guam.net (Jim Kehler) wrote:

>glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>>You are technically correct, but ethically wrong wet. If you set up
>>to provide a public service as a BBS, you have a moral obligation to
>>forward all legal mail, or at least not to limit forwarding based on
>>personal considerations such as who is saying what. SysOps who censor
>>mail are a big problem on the ham BBS network, and responsible SysOps
>>should and will route around them.
>
>Sounds like you have the U.S. Post Office and ham radio confused.

Well, no, I don't.

>>If you're not part of an open network, you're just cluttering up
>>valuable space on the bands, and are giving jerks like Burt more
>>ammunition.
>
>I think you have that backwards, too. I don't know who the first
>two hams were who hooked up TNC's and BBS software, but I

I imagine you could find at least one of them right here in this
newsgroup, or at least one or more of the first small group.

>imagine that the intent of the first link of the 'packet network' was
>to forward information, not garbage. Keeping the network free of
>garbage reserves valuable space for valid information to be passed.

Nonsense. One man's trash is another man's treasure. Who appointed
you arbiter of what's garbage and what's not?

>The amateur packet radio network already forwards, by design, an
>incredible amount of garbage in the form of message headers. I

At one time, those were mandatory. They still contain an amazing
amount of information essential to maintaining and troubleshooting a
network. Yes, they could be streamlined. So could a lot of other
things.

>that garbage a totally unnecessary ASCII drawing at the end of
>every message, a few lines of advertising from the guy who wrote
>the whiz bang terminal program used to generate the message, and

Yes, those are wasteful. But that's a separate issue, unless you
decide that you aren't going to forward anything by anyone who uses
ASCII in his signature.

>network does a wonderful job of diseminating garbage, but unfortunaly
>falls flat on it's face when it comes to delivering mail from one ham to
>another ham.

That's why we have the Post Office and the telephone. Of course, if
sysops were doing their job instead of worrying about censorship and
power trips, it'd work a lot better. In fact, it DID work better
several years ago than it does now.

>I agree one hundred percent with Steve. I supplied the two computers,
>three radios, three TNC's, assorted power supplies, cables, antennas,
>etc. that are used to run my packet BBS and DX cluster. I pay the

Don't teach your grandmother to suck eggs. I've done all that stuff,
and more.

>electric bill every month. When the little red transmit light on one of
>my packet radios turns on, I decided what gets transmitted, and it damn
>sure won't be Bubble Head's Bible Quotes or daily birthday lists from
>the Happy Club. Steve chooses to keep certain people off his system.
>I choose to keep certain garbage off my system. We are both doing
>what we are supposed to be doing, monitoring and eliminating garbage.

You're both part of the problem, not part of the solution. You have
no business setting yourselves up as arbiters of what's garbage and
what isn't. If everybody did that, there'd BE no packet network. If
you want a closed net, be my guest. Forward to *each other*, sans
"garbage." But don't pretend to be part of an open, global BBS
network, because that is NOT in the spirit of Amateur Radio.

>My packet equipment isn't a 'public service'. It's a service provided for
>hams to use in relation to ham radio. Bible banging and birthday lists

No, it's an ego trip that allows you to force your decisions of what's
"right" or "wrong" on your fellow hams.

>have nothing to do with ham radio, so I make the decision to keep that
>junk off my system, and not contribute to the confusion by sending it
>to other systems.

You're a disgrace to good sysops everywhere.

>When you, TAPR, or the ARRL decide you would like to reimburse me for
>the cost of my equipment and start sending me a paycheck, I will be
>happy to revert to your system of not excluding anything from my BBS.

When folks like Burt get their way, thanks in large part to attitudes
like yours, I hope you'll be very happy with your commercial station.
Of course, if you had to compete with commercial stations, you'd be
out of business in a week, since the real world has little tolerance
for censorship and ego trips.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

765. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <331effc9.8495015@news.cyberhighway.net>
Source record: 19717
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

"Raj Singh, VE6RAJ" <singhraj@cadvision.com> wrote:

>I use Netscape and it's newsreader. Is there anyway that I can filter
>out certain subjects/individuals from having them show up in my reader.
>If not can you reccomend a news reader that has this facility.

Download Forte Free Agent. If you like it, you can purchase Agent for
$29, and it will do all you ask and more.

Here's Forte's URL:

http://www.forteinc.com.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

766. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331612D8.7E34@geocities.com>
Source record: 19718
Cross-posted to: rec.radio.amateur.digital.misc,rec.,rec.radio.amateur.misc,rec.radio.amateur.space

gary wrote:
>I have YET felt the lonliness and need to
> advertise on Internet in an effort to find someone who will talk to me on
> the radio. Party on, Burt dude....

Any idiot can find someone to talk to on the ham bands.
Contests are proof of that.
I want to exchange more that 59 qsl via buro (the depth of the typical
ham contact).

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

767. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <33164CB5.FA6@cadvision.com>
Source record: 19719
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glen Quarnstrom wrote:
>
>
> Download Forte Free Agent. If you like it, you can purchase Agent for
> $29, and it will do all you ask and more.
>

Thanks very much Glen. I appreciate it.

73
Raj VE6RAJ

768. Re: DON'T Support Little Burt instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: Wilhelm Tomaschik <W_Tom@msn.com>
Message-ID: <01bc250e$8081eea0$c23e2399@wtomaschik>
Source record: 19720
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

You wanna know what? Are you a ham? Or is that a FAKE call, because this doesn't sound like an amateur's proposal! And you are idiots!!! This is our spectrum, they have enough!!! WE provide emergency communictions, to save your ass when a disaster strikes!!!

Barney <barney@google.com> wrote in article
<5ea6e0$ljg@news1.mnsinc.com>...
> WHY do you ONLY want to give away 2 meters, Burtie?
>
> Why not get all the hams to write the FCC and recommend that they give
> away ALL of our spectrum?
>
> I am sure the readers of this newsgroup are already dashing off letters
> by the DOZEN to the FCC in response to your great message, since we all
> follow you like the pied piper!
>
> Burt Fisher <burtfisher@geocities.com> whistled a happy tune like:
>
> |>Anyone wishing to register opposition for the ARRL/AMSAT submission
> |>should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> |>should say "Reference No. ISP-96-005 IWG-2A." A simple statement to
this
> |>effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> |>allocation proposal," will be included in the public record and will
> |>help to drive home the point that there is broad-based approval to well
> |>conceived 2 metere sharing proposals. It ought to be clear to the FCC
> |>the public good is poorly served by allowing hams exclusive use of
these
> |>valuable
> |>frequencies.
>
> |>Please note! The proposals the League opposes are not FCC proposals,
nor
> |>are
> |>they endorsed by any other branch of the government. They are industry
> |>proposals. The League's objective is to falsely demonstrate there is
> |>broad citizen opposition to the industry proposals.
>
> |>Additional arguments or evidence also is welcome. Important! Comments
> |>should
> |>reach the FCC no later than March 4, 1997!
> |>#================#===#
> |>| Burt Fisher | Teacher of idiocy, broadcasting and electronics |

```
> |>| Amateur call | South Dennis, Ma. (Cape Cod) |
> |>| K1OIK | http://www.geocities.com/WallStreet/5169 |
> |>#================#=====================================================#
> |>|Visit my WWW site, it stinks like no other k1oik@bozonet.com |
> |>#=================================================================#
>
>
>
```

769. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.space
Date: 1997-02-27 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f5p45$fad@lehi.kuentos.guam.net>
Source record: 19721
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>kh2d@kuentos.guam.net (Jim Kehler) wrote:

>>network does a wonderful job of diseminating garbage, but unfortunaly
>>falls flat on it's face when it comes to delivering mail from one ham to
>>another ham.

>That's why we have the Post Office and the telephone. Of course, if
>sysops were doing their job instead of worrying about censorship and
>power trips, it'd work a lot better. In fact, it DID work better
>several years ago than it does now.

O. I C. The packet 'network' isn't for forwarding mail from one ham to another.
It's a digital soapbox for Bible Bangers and Birthday Clubs. Thanks for letting
me in on that secret. Next time I see someone put NTS traffic or a personal
message on the BBS here, I'll kill it and tell them to use the telephone.

You appear to be of the 'forward it anywhere and my job is done' mentality.
No wonder you'd rather forward bulletins than personal mail. ANYPLACE
is the right place to forward a bulletin. Personal mail requires a bit of
work .....

>Don't teach your grandmother to suck eggs. I've done all that stuff,
>and more.

Well, since you have already taught your grandmother to suck eggs,
I guess we can have her teach mine, but if you want your grandmother
to teach my grandmother to do anything, tell her to bring a shovel, cuz
she's gonna have to dig my grandmother up before she can start class.

>You're both part of the problem, not part of the solution. You have
>no business setting yourselves up as arbiters of what's garbage and
>what isn't. If everybody did that, there'd BE no packet network. If
>you want a closed net, be my guest. Forward to *each other*, sans
>"garbage." But don't pretend to be part of an open, global BBS
>network, because that is NOT in the spirit of Amateur Radio.

There is no such thing as a global Amateur Radio BBS network. There
never has been, and there never will be. Unless, perhaps, if you define
'global' as a hundred miles in any direction of your house. Most of us
who don't live in the United States Of Drug Dealers use the word
'global' to mean the ENTIRE world, not just the little part that you live
in. If you have fooled yourself into thinking there is a 'global' packet
network, send me a packet message with your phone number in it and I'll call you
when it gets here: KH2D@KH2D.GUAM.USA.OC

Don't bother staying up late waiting for me to call.....

>>My packet equipment isn't a 'public service'. It's a service provided for
>>hams to use in relation to ham radio.

>No, it's an ego trip that allows you to force your decisions of what's
>"right" or "wrong" on your fellow hams.

Now I'm on an ego trip. OK. Didn't you just tell me "Don't teach your
grandmother to suck eggs. I've done all that stuff, and more. "

>When folks like Burt get their way, thanks in large part to attitudes
>like yours, I hope you'll be very happy with your commercial station.
>Of course, if you had to compete with commercial stations, you'd be
>out of business in a week, since the real world has little tolerance
>for censorship and ego trips.

You lost me a bit here, I'm not sure what 'Burt's Way' is, I thought this
discussion originated because you were upset with the fact that Burt's
mail was being kept off Steve's system. I'm not here to compete with
commercial stations. I'm here to enjoy ham radio. But you're right.
Nobody gets fired when the operator of an Amatuer Packet Radio BBS
runs around patting himself on the back yelling 'I'm a SYSOP ! I'm a SYSOP !"

while the mail is getting forwarded to La La Land. And judging from
the amount of mail that goes to La La Land, it's a good thing, because
a lot of 'sysops' would be out of a job.

73, Jim KH2D

770. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: mbrinkho@inetnebr.com
Message-ID: <5f5jbn$lm7@owl.inetnebr.com>
Source record: 19624

Roberto Franceschetti (roberto@netwide.net) wrote:
: My answer might be *slightly* biased since we produce it :-) but the best
: tracking software is LogSat Professional for Windows. You can preview it at
: http://www.logsat.com.

I can second this, and I don't even work for 'em! <grin>

Seriously, though - Logsat is the BEST tracking program around, bar none.

--
Matt C. Brinkhoff, KB0RXC
mbrinkho@inetnebr.com
http://incolor.inetnebr.com/mbrinkho
Lincoln, Nebraska [EN10]

771. For Sale HTX-212 2 meter mobil

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: kb7lgd@juno.com
Message-ID: <5f63jm$d8e@sjx-ixn8.ix.netcom.com>
Source record: 19625
Cross-posted to: eug.forsale,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.space

I haveRadio Shack two HTX 212 meater mobil for sale. With mike and box
and manual all accories . The radio is in great shape. 180.00 and I
will ship it to you as long as you are in the USA. 73s Don

772. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970228125843_515664.456256_IHO48-5@CompuServe.COM>
Source record: 19626

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #70

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
dub-img-7.compuserve.com (8.6.10/5.950515)
id HAA00841; Fri, 28 Feb 1997 07:58:37 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA10705 for <ham-space-list@mailbox.ucsd.edu>; Fri, 28 Feb
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA00381
sendmail 8.8.5/UCSD8.3
Fri, 28 Feb 1997 04:31:20 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA00358
sendmail 8.8.5/UCSD8.3
Fri, 28 Feb 1997 04:31:17 -0800 (PST)
Message-Id: <199702281231.EAA00358@noc.ucsd.edu>
Date: Fri, 28 Feb 97 04:31:16 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #70
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 28 Feb 97 Volume 97 : Issue 70

Today's Topics:
FO-29 analog mode
Receiver- kit for Weather Sat's (2)
Sat. Tracking program.
Satellite info
Support Little Leo instructions
Test Message - Don't Read
Who did I hear on 130.165 MHz? (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 27 Feb 1997 15:51:15 GMT
From: boyer@rd.bbc.co.uk (John Boyer)
Subject: FO-29 analog mode

Jeff Griffin (kb2wqm@amsat.org) wrote:
: Has anyone heard FO-29 in analog mode? If so is there some kind of
: schedule that they follow to turn it on. Let us know.
:
: 73 Jeff

If in analogue mode you mean the digipeater, then the answer is yes. Once.
When it was newly up.
J.

Date: Thu, 27 Feb 1997 19:28:09 GMT
From: abom@iaehv.nl (Alex Bom)
Subject: Receiver- kit for Weather Sat's (2)

Receiver- kit for Weather Sat's (2)

Dear weathersatellite- fan,

A few weeks ago I announced a weathersatellite receiver- kit.
The necessary zip- file for building the receiver can be found on the
url of the technical university of Eindhoven in the Netherlands. The
URL- address is:
ftp://ftp.esrac.ele.tue.nl/pub/ham/wefaxreceiver-kit.
The VHF2_10.zip -file of about 125kb contains the next files:

VHF2.plt The complete schematic of the receiver in HPGL- format
VHF2.par The complete partslist of the receiver in ASCI- format
VHF2t.tif The topside of the PCB in TIF- format
VHF2b.tif The bottomside of the PCB in TIF-format
VHF2c.tif The componentlayer of the PCB in TIF- format
README.txt Some background information.

In about 4- 6 weeks a nice glass epoxy print with silkscreen lettering
will be available.
If you want to make the PCB yourself, you can start immediately with
copying the top and bottom layers to transparent sheets.
On this moment the assembly- instructionsheet is being prepared and
will be send as an attached .txt- file to those who are going to

build the receiver.
For changes that are essential for the design, I will direct- mail the
WX- receiver builders.

Important design changes will result in a new VHF2_X0.zip file.
Small design changes will result in a new VHF2_1X. zip file.

Remarks before building your own Wefax- receiver:

Keep in mind that building a receiver is not just a matter of placing
the right components in the right holes. The receiver should be
adjusted for optimum results.

After that I designed last year the Wefax- receiver its now for me a
challenge to help others in building the receiver via the internet-
possibility and to help them in getting good results with normal
components and limited measurement- means. Further I hope to receive
sufficient feedback for possible new receiverextensions , like PC-
operation, synthesizer and scan-possibility, this could lead to a
new and more advanced design.

For more details, questions or problems during assembling your
receiver, you can contact me via E-mail : abom@iaehv.nl or
pa0axb@amsat.org.

Succes in building your own Wefax- receiver!!!!
Alex Bom
Veldhoven/ the Netherlands
tel: +31 40 2539851
email: abom@iaehv.nl
email: pa0axb@amsat.org

Date: 28 Feb 1997 03:27:51 GMT
From: mbrinkho@inetnebr.com (Matt C. Brinkhoff)
Subject: Sat. Tracking program.

Roberto Franceschetti (roberto@netwide.net) wrote:
: My answer might be *slightly* biased since we produce it :-) but the best
: tracking software is LogSat Professional for Windows. You can preview it at
: http://www.logsat.com.

I can second this, and I don't even work for 'em! <grin>

Seriously, though - Logsat is the BEST tracking program around, bar none.

--
Matt C. Brinkhoff, KB0RXC
mbrinkho@inetnebr.com
http://incolor.inetnebr.com/mbrinkho
Lincoln, Nebraska [EN10]

Date: 27 Feb 1997 04:32:08 GMT
From: "James" <n1vbn@tiac.net>
Subject: Satellite info

Greetings to one and all Hams. I have been browsing on the net looking for a list I once found and lost when the cat walked on the keyboard and erased my bookmark list!! The list had every satellite up there, the uplink and downlink, name of the sat. etc.. Anybody know where I might look?? Any and all help will be appreciated.

73 de James Shanks n1vbn@tiac.net

(P.S. I now backup my bookmark list.)

Date: 26 Feb 1997 05:21:09 -0800
From: wb4yuc@ihnp4.ucsd.edu
Subject: Support Little Leo instructions

This is the oddest conversation about the Little LEO Industry I have ever seen....

I'm beginning to think that noone is really serious about who they are and what they represent.

73,
WB4YUC

In article <3312C982.7B54@geocities.com>, Burt says...
>
>> Burt, you're making a fool of yourself.
>
>To be thought a fool by fools is what?
>
>--
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

Date: 27 Feb 1997 10:53:47 GMT
From: swave@bridge.mara.org (Steve Meuse)
Subject: Test Message - Don't Read

You read it!!!!

Sorry for the test...

Date: Wed, 26 Feb 1997 20:35:14 +0000
From: John Charles <jaycee@midmarsh.demon.co.uk>
Subject: Who did I hear on 130.165 MHz?

For the first time I picked up some voice traffic on 130.165 MHz this afternoon, best reception here being 130.1625 MHz presumably due to the Doppler shift.

It sounded like an American accent and he was talking about how it felt to be wearing a mask overnight. It certainly wasn't the usual voice I've heard on 145.800 MHz in the past.

I'm wondering who I heard and to whom he could have been talking on that frequency as my listings show it as Shuttle to Mir traffic. I could only pick up one side of the conversation. Mir was passing over at the time.

BW John
--
John Charles

Date: Wed, 26 Feb 1997 15:31:03 -0600
From: Greg Boren <symntlab@netxpress.com>
Subject: Who did I hear on 130.165 MHz?

It was the American on board making reference to having to wear a oxegen mask because of the fire on MIR.

End of Ham-Space Digest V97 #70
****

773. HELP Satellite/CW/Fax via Soundcard

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: david_bate_lodgeware_gryn_org@lodgeware.gryn.org
Message-ID: <068_9702280958@tor250.org>
Source record: 19627

Hi All!

Can someone tell me the name of the program that you can grab the APT signal from the NOAA birds and convert it to the pic via the soundcard inputs?

Is there a program that will do the same for FAX and CW ect. from the Shortwave?

Can you pass on the location where I can grab them or if there is a nice person out there that can UUECODE them to my address if possible. I'd appreciate the help. Thanks..

Dave...
david.bate@lodgeware.gryn.org

774. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: orion@capital.net**
Message-ID: <33183f22.30126463@news.capital.net>
Source record: 19628
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 26 Feb 1997 20:46:52 -0500, The Bakers <mbaker@monmouth.com>
wrote:

>> Gary... KJ6Q...I am the NRA...
>> (that NRA bit REALLY tics off the gun haters...:-)
>> ==
>> INTERNET NEWSGROUPS:
>> A world wide time wasting garage sale, where
>> the inmates constantly attempt to unload their mentally
>> defective baggage and lawn furniture on the gullible and
>> unwary - Shoppers beware, you'll NEVER find a bargain here!
>> ALSO, be warned that many of the yapping mongrels infesting
>> this area are not housebroken, watch where you step!
>> ==
>
>So Gary, what brings *you* here ??

Comic Relief, possibly?

--
73,
Butch N2YMJ
To send mail, delete
the two stars at the
end of my address.

775. WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: Rafael Garcia <rgarcia@sat.cide.upm.es>
Message-ID: <331720E2.5072FC07@sat.cide.upm.es>
Source record: 19629

Hi all,

I'm in the process to setup a station capable of WEFAX APT image receiving, at the 137 MHz band. But I have a doubt about what is the right receiver choice. I know that APT transmision is in FM mode, with the FAX signal AM modulated. The problem is if with a simple modified transceiver (TS-790, IC-821) for that band will be enough. In fact, the question: is it enough FM narrow (5 kHz voice channel) to get the data?

I've got a DSP-2232 multi-mode controller and IC-821. The software is something called "wefax256" by AEA. I have had unsuccesful results with that software, and I'm thinking in JVFAX or the like, with serial input.

I'll appreciate any input about this.
Thanks in advance,

--
Rafael,
Madrid (Spain)

776. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: hershman <hershman@ix.netcom.com>
Message-ID: <33175296.6DC9@ix.netcom.com>
Source record: 19630
Cross-posted to: rec.radio.amateur.digital.misc,rec.,rec.radio.amateur.misc,rec.radio.amateur.space

Burt Fisher wrote:
>
> gary wrote:
> >I have YET felt the lonliness and need to
> > advertise on Internet in an effort to find someone who will talk to me on
> > the radio. Party on, Burt dude....
>
> Any idiot can find someone to talk to on the ham bands.
> Contests are proof of that.
> I want to exchange more that 59 qsl via buro (the depth of the typical
> ham contact).
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
ALL the Hams on the BOSTON area enjoy you postings. We had an hour
long discustion about you great sense of humor on the Boston 2 mtr
repeater. I personally look forward to reading your postings.

777. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: pokf4jrg@cheta.net
Message-ID: <33176792.2759359@news2>
Source record: 19631

On 28 Feb 1997 03:27:51 GMT, mbrinkho@inetnebr.com (Matt C. Brinkhoff)
wrote:

>>>Roberto Franceschetti (roberto@netwide.net) wrote:
>>>: My answer might be *slightly* biased since we produce it :-) but the best
>>>: tracking software is LogSat Professional for Windows. You can preview it at
>>>: http://www.logsat.com.
>>>
>>>I can second this, and I don't even work for 'em! <grin>
>>>
>>>Seriously, though - Logsat is the BEST tracking program around, bar none.
>>>
>>>--
>>>Matt C. Brinkhoff, KB0RXC
>>>mbrinkho@inetnebr.com
>>>http://incolor.inetnebr.com/mbrinkho
>>>Lincoln, Nebraska [EN10]

Let me third that and I don't work for them either :)

Burton kf4jrg

778. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: Andy Moss <andmoss@ibm.net>
Message-ID: <33179982.56A2@ibm.net>
Source record: 19632
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> You are welcome as is anyone to contact my students (dormouse1@juno.com
> or my daughter at aurora24@rocketmail.com) and ask them for your self.
> Foul language? I used ass, report me. You no doubt have seen the vile
> profanity used against me? When compared to the public at large I am
> indeed an ass but when compared to hams I am far superior than MOST.

Burt,

It's my opinion that you go looking for trouble. You know what they say
about looking for trouble? You find it every time!! Hee hee!

As far as feeling superior to most Amateurs. That's really nice!
I'm glad you feel that way.

I remember getting into it with you over on the Relaynet years ago. You
were giving me the gears for sending out a general message of thanks to
all that replied to one of my polls. At the time I didn't realize that
it meant so much to you. I still don't understand why!

I don't know what you are trying to prove. Your message isn't clear.
Who was it that said Communication without intelligence is pointless?

Cheers!

--
Andy Moss
"I often fantasize about my inability to daydream....."

779. ARLS004 AMSAT scrambling to close funding gap

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls004.1997@arrl.org>
Source record: 19633
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS004
ARLS004 AMSAT scrambling to close funding gap

ZCZC AS04
QST de W1AW
Space Bulletin 004 ARLS004
From ARRL Headquarters
Newington, CT February 28, 1997
To all radio amateurs

SB SPACE ARL ARLS004
ARLS004 AMSAT scrambling to close funding gap

The AMSAT-NA Phase 3D fund-raising campaign is at minus 150,000 dollar(s) and
counting--and that's assuming the launch goes off on schedule this
summer. At the end of 1996, AMSAT-NA figured it needed another
200,000 dollar(s) to finish the project. The latest AMSAT-NA fund campaign
has, so far, netted an additional 50,000, dollar(s) according to AMSAT-NA
Executive Vice President Keith Baker, KB1SF. ''Barring unforeseen
problems from now until launch, and assuming the early July launch
date holds, that puts us still short of funds by about 150,000,''
Baker dollar(s) said this week. ''We're still not out of the woods yet, but
we're getting close.''

But the AMSAT-NA shortfall is only part of the total Phase 3D
funding picture. Baker also says that AMSAT-DL (Germany)--which, so
far, has invested nearly 2 dollar(s) million in Phase 3D compared to nearly
1 dollar(s).4 million for AMSAT-NA--reports it still needs in the vicinity of
100,000 dollar(s) to complete its share of the Phase 3D effort.

Baker said AMSAT is on target to meet the July 8 or July 9 schedule,
which is still the official European Space Agency launch date for
the Ariane 502 rocket.

Baker said work on the satellite is moving along swiftly, and most
of the remaining electronic modules, antennas and other pieces of
the satellite are now at the Phase 3D Integration Lab in Orlando,
Florida. ''This week, a number of our Japanese and European builders
will also be in Orlando, along with several of their American
counterparts, to begin the 'final-final' installation and test of
antennas as well as integration into the satellite and testing of RF
and the remaining equipment modules,'' he said. ''They'll roll up
their shirtsleeves to get the work done.'' That phase of the job

will continue through March. Environmental testing of the satellite is slated to begin in mid-April.

The schedule is a tight one, right up until launch time. AMSAT anticipates the satellite will be shipped to Kourou, French Guyana, sometime in early May for final checkout, followed by integration with the Ariane 5 rocket in mid to late June.

''Needless to say, it is a very busy (and exciting) time for all of us.'' Baker said.

A series of pictures of Phase 3D work in progress is available via the AMSAT-NA Web site at http://www.amsat.org. Depending on its workload, the integration team hopes to be able to update these photos as work progresses.
NNNN
/EX

780. ARLS005 School contacts a go in wake of Mir fire

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls005.1997@arrl.org>
Source record: 19634
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS005
ARLS005 School contacts a go in wake of Mir fire

ZCZC AS05
QST de W1AW
Space Bulletin 005 ARLS005
From ARRL Headquarters
Newington, CT February 28, 1997
To all radio amateurs

SB SPACE ARL ARLS005
ARLS005 School contacts a go in wake of Mir fire

A ham radio contact between ham-Astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space station, and pupils at an elementary school in Michigan went off on schedule February 27, unaffected by a fire aboard Mir a few days earlier. Linenger, a physician, reported no injuries and all crew members in good health following the incident on February 24. A problem with an oxygen-generating device on Mir set off fire alarms and caused minor damage from excessive heat rather than from open flame.

The Mir fire was a popular topic as pupils at Charlevoix Elementary School in Michigan, spoke with Linenger Thursday morning. A crowd of 320, including reporters from four television stations and three newspapers, was on hand as 15 Charlevoix pupils spent ten minutes talking with Mir. The operator was Craig Stewart, KB8KPV. Regarding onboard emergencies, Linenger told the pupils that there is a crew return vehicle on each end of Mir, if something goes wrong, and he assured the youngsters that everything is fine now. He also mentioned that he misses pretzels and now eats about one-half Russian and one-half American food. ''The students were all very excited and really enjoyed their contact,'' said Frank Bauer, KA3HDO, AMSAT vice president for manned space flight. Three schools in Texas hope to have a chance to talk with Linenger over the next few weeks.

The fire last Monday burned for about 90 seconds. The crew was exposed to heavy smoke for five to seven minutes and donned masks in response. Medical personnel directed the crew to wear goggles and masks until an analysis of the Mir atmosphere could be completed.

Lithium perchlorate candles are burned to generate supplemental oxygen when more than three people are on board the space station. The oxygen-generating candles usually burn for up to 20 minutes.

Russian officials believe the problem began when a crack in the oxygen generator's shell allowed the contents of the cartridge to leak into the hardware in which it was located. Crew members extinguished the fire with foam from three fire extinguishers.

The heat destroyed the hardware in which the candle was burning, as well as the panel covering the device. The crew also reported that the outer insulation layers on various cables were melted by the heat. Russian flight controllers say that all Mir systems continue to operate normally, however.

Other schools hoping to speak with Linenger via ham radio include Perryton High School, Perryton, Texas, on March 4, United South High School, Laredo, Texas, on March 11, Booker T. Washington High School, Houston, Texas, on March 17.

In addition to Linenger, the Mir crew members include Mir 22 cosmonauts Valery Korzun and Alexander Kaleri, Mir 23 cosmonauts Vasily Tsibliev and Alexander Lazutkin, and German researcher Reinhold Ewald, DL2MIR, representing the German space agency, DARA. Korzun, Kaleri and Ewald are scheduled to return to Earth on Sunday, March 2, wrapping up a six-month mission for Korzun and Kaleri and three weeks of scientific experiments for Ewald. Linenger will remain aboard Mir with Tsibliev and Lazutkin until mid-May.

Officials are evaluating possible impacts of the fire to the mission and its science activities, as technical experts at the Russian Mission Control Center investigate the incident. The burned panel and other materials may be returned to Earth with Korzun, Kaleri and Ewald on Sunday for further analysis.
NNNN
/EX

781. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: ed livingston <eddie@mailhost.cyberramp.net>
Message-ID: <3317B288.4573@mailhost.cyberramp.net>
Source record: 19635

http://www.cyberramp.net/~eddie

782. MIR on the air?

Newsgroup: rec.radio.amateur.space
Date: 1997-02-28 00:00:00 UTC
From: "John D. Wilkins" <jwilkins@bucknell.edu>
Message-ID: <33170B45.66F2@bucknell.edu>
Source record: 19636

After a long hiatus from packet radio, I've been trying to
monitor MIR again. I read in March QST that the downlink
is at 145.800...but I haven't heard a peep. Is R0MIR/R0MIR-1 active?

John D. Wilkins, KC4SYX

783. Satellite/beacon index?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: nungeste@sdd.hp.com
Message-ID: <5f86re$b9m@news.sdd.hp.com>
Source record: 19637

I want to listen to low-orbiting satellites as they pass overhead, and have a satellite tracking program and access to NASA orbital elements. What is my best source of information regarding what satellites have continuous radio beacons, frequencies, transmission mode, and content?

784. Re: your LISTSERV request "help satellite/cw/fax via soundcard"

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: Listserv@ucsd
Message-ID: <199703011231.EAA25218@noc.ucsd.edu>
Source record: 19638

```
The mailing list "satellite/cw/fax" could not be found.
You may use the INDEX command to get a listing
of available mailing lists.
```

785. Russians in space before Yuri????

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: chet4lee@aol.com
Message-ID: <19970301143001.JAA24415@ladder02.news.aol.com>
Source record: 19639

I've just found an article from 1962 that documents Russian launches that ended in the death of their cosmonauts. It states that men were in space before the official time for Yuri and that the original 'first' woman into space died when her craft left the orbit. Does anybody know where I can find out more? Any conformations?

thanks

p
h
i
l

786. Re: Russians in space before Yuri????

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970301085032.23818A-100000@spacelink>
Source record: 19640

On 1 Mar 1997, Chet4Lee wrote:

> I've just found an article from 1962 that documents Russian launches that
> ended in the death of their cosmonauts. It states that men were in space
> before the official time for Yuri and that the original 'first' woman into
> space died when her craft left the orbit. Does anybody know where I can
> find out more? Any conformations?

Read "Soviet Disasters", by James Oberg. This is a very authoritative
text of well researched Russian and Soviet history. There was at least
one Cosmonaut death in training prior to Gagarin's flight, but no human
was launched into space prior to Yuri Gagarin.

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

787. ARLK017 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk017.1997@arrl.org>
Source record: 19641
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK017
ARLK017 Keplerian data

ZCZC SK17
QST de W1AW
Keplerian Bulletin 17 ARLK017
From ARRL Headquarters
Newington, CT March 1, 1997
To all radio amateurs

SB KEP ARL ARLK017
ARLK017 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97059.10213007 .00000054 00000-0 42058-4 0 03298
2 18129 82.9270 319.3737 0011398 156.9959 203.1710 13.72375027485277
UO-11
1 14781U 84021B 97058.95412119 .00000082 00000-0 21667-4 0 09678
2 14781 97.8221 44.6253 0011911 358.2953 1.8207 14.69527401695214
RS-12/13
1 21089U 91007A 97059.13883842 .00000021 00000-0 67643-5 0 09741
2 21089 82.9190 359.5144 0027369 242.0012 117.8377 13.74077159304184
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
RS-15
1 23439U 94085A 97059.24607721 -.00000039 00000-0 10000-3 0 2019
2 23439 64.8180 329.0050 0151931 152.7704 208.1288 11.27525534 89657
AO-16
1 20439U 90005D 97059.17020917 -.00000006 00000-0 14277-4 0 00509
2 20439 98.5435 145.8754 0011224 166.2222 193.9272 14.29999485370653
DO-17
1 20440U 90005E 97059.16701199 .00000010 00000-0 20466-4 0 00554
2 20440 98.5426 146.6528 0011372 164.8683 195.2844 14.30142026370688
```

```
WO-18
1 20441U 90005F 97059.16242454 .00000019 00000-0 23914-4 0 00559
2 20441 98.5478 146.5679 0011809 166.0482 194.1030 14.30110100370681
LO-19
1 20442U 90005G 97059.13841648 .00000070 00000-0 43863-4 0 00504
2 20442 98.5482 147.1521 0011936 165.3784 194.7794 14.30223759370709
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
AO-21
1 21087U 91006A 97059.16008652 .00000094 00000-0 82657-4 0 08154
2 21087 82.9429 132.2797 0034136 210.8747 149.0402 13.74578059305176
UO-22
1 21575U 91050B 97059.14102060 .00000059 00000-0 34030-4 0 07568
2 21575 98.3168 123.4618 0006765 217.2952 142.7766 14.37058963294828
KO-23
1 22077U 92052B 97059.36099722 -.00000037 00000-0 10000-3 0 6446
2 22077 66.0857 13.0952 0013890 240.3821 119.5814 12.86300997213755
KO-25
1 22828U 93061F 97059.12430524 .00000010 00000-0 21218-4 0 05177
2 22828 98.5495 136.0162 0009755 182.2414 177.8728 14.28169129146645
IO-26
1 22826U 93061D 97059.13395423 .00000006 00000-0 19742-4 0 05482
2 22826 98.5548 135.9534 0008394 199.4037 160.6828 14.27827585178521
AO-27
1 22825U 93061C 97059.15716048 .00000025 00000-0 27599-4 0 05551
2 22825 98.5528 135.7534 0008002 195.5192 164.5748 14.27718914178519
FO-29
1 24278U 96046B 97059.18468737 -.00000027 00000-0 50522-5 0 00756
2 24278 98.5568 115.2169 0352048 108.5870 255.3839 13.52628736026389
Mir
1 16609U 86017A 97059.52748769 .00013719 00000-0 16818-3 0 889
2 16609 51.6502 272.1260 0011444 122.9987 237.2104 15.60596947630061

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

788. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: "John M. Yellenic" <yellenic@epix.net>
Message-ID: <3318A165.18BB@epix.net>
Source record: 19642

Matt C. Brinkhoff wrote:
>
> Roberto Franceschetti (roberto@netwide.net) wrote:
> : My answer might be *slightly* biased since we produce it :-) but the best
> : tracking software is LogSat Professional for Windows. You can preview it at
> : http://www.logsat.com.
>
> I can second this, and I don't even work for 'em! <grin>
>
> Seriously, though - Logsat is the BEST tracking program around, bar none.
>
> --
> Matt C. Brinkhoff, KB0RXC
> mbrinkho@inetnebr.com
> http://incolor.inetnebr.com/mbrinkho
> Lincoln, Nebraska [EN10]

Hate to go against the grain on this thread... but... the current evaluation copy of LogSat will not allow you set your QTH!!!

IMHO, this is a very poor way of crippling an otherwise good program, in an effort to force a purchase. With this "crippleware", you can look at the pretty displays... but a TRUE evaluation is near impossible. (Unless you happen to have a station in the middle of the Atlantic ocean, where the coordinates are preset!)

My mention to this fact via email to LogSat Corporation brought a "that's the way it is, buy it if you want to set your QTH... the full version works real well" response. Instead... I'm looking for alternatives. Again... IMHO!

John - N3YPR

789. WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-01 00:00:00 UTC
From: ron.hauger@sourcebbs.com
Message-ID: <8D32427.03910005F4.uuout@sourcebbs.com>
Source record: 19643

On 02/28/97 RAFAEL GARCIA wrote to ALL...

RG> question: is it enough FM narrow (5 kHz voice channel) to get the
RG> I've got a DSP-2232 multi-mode controller and IC-821. The software is
RG> something called "wefax256" by AEA. I have had unsuccesful results
RG> with
RG> that software, and I'm thinking in JVFAX or the like, with serial
RG> input.
RG> I'll appreciate any input about this.
RG> Thanks in advance,
RG> Rafael,
RG> Madrid (Spain)

Your bandwidth should be FM WIDE for this. Think 75 khz.

RON.HAUGER@WARPDRV.COM*KC4KNA*VBARC*AMSAT*RTTY*PACKET*SWL*ATV
HF+VHF WEFAX*TVRO*SCPC*FM2*EXTRATERRESTRIAL*WATCHEROFTHESKIES

---
* OFFLINE 1.58

790. Re: ARLK017 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5fb4e8$c2q@newsread.onramp.net>
Source record: 19644

```
SB KEP @ ARL $ARLK017
ARLK017 Keplerian data

ZCZC SK17
QST de W1AW
Keplerian Bulletin 17 ARLK017
From ARRL Headquarters
Newington, CT March 1, 1997
To all radio amateurs

SB KEP ARL ARLK017
ARLK017 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97059.10213007 .00000054 00000-0 42058-4 0 03298
2 18129 82.9270 319.3737 0011398 156.9959 203.1710 13.72375027485277
UO-11
1 14781U 84021B 97058.95412119 .00000082 00000-0 21667-4 0 09678
2 14781 97.8221 44.6253 0011911 358.2953 1.8207 14.69527401695214
RS-12/13
1 21089U 91007A 97059.13883842 .00000021 00000-0 67643-5 0 09741
2 21089 82.9190 359.5144 0027369 242.0012 117.8377 13.74077159304184
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
RS-15
1 23439U 94085A 97059.24607721 -.00000039 00000-0 10000-3 0 2019
2 23439 64.8180 329.0050 0151931 152.7704 208.1288 11.27525534 89657
AO-16
1 20439U 90005D 97059.17020917 -.00000006 00000-0 14277-4 0 00509
2 20439 98.5435 145.8754 0011224 166.2222 193.9272 14.29999485370653
DO-17
1 20440U 90005E 97059.16701199 .00000010 00000-0 20466-4 0 00554
2 20440 98.5426 146.6528 0011372 164.8683 195.2844 14.30142026370688
WO-18
```

```
1 20441U 90005F 97059.16242454 .00000019 00000-0 23914-4 0 00559
2 20441 98.5478 146.5679 0011809 166.0482 194.1030 14.30110100370681
LO-19
1 20442U 90005G 97059.13841648 .00000070 00000-0 43863-4 0 00504
2 20442 98.5482 147.1521 0011936 165.3784 194.7794 14.30223759370709
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
AO-21
1 21087U 91006A 97059.16008652 .00000094 00000-0 82657-4 0 08154
2 21087 82.9429 132.2797 0034136 210.8747 149.0402 13.74578059305176
UO-22
1 21575U 91050B 97059.14102060 .00000059 00000-0 34030-4 0 07568
2 21575 98.3168 123.4618 0006765 217.2952 142.7766 14.37058963294828
KO-23
1 22077U 92052B 97059.36099722 -.00000037 00000-0 10000-3 0 6446
2 22077 66.0857 13.0952 0013890 240.3821 119.5814 12.86300997213755
KO-25
1 22828U 93061F 97059.12430524 .00000010 00000-0 21218-4 0 05177
2 22828 98.5495 136.0162 0009755 182.2414 177.8728 14.28169129146645
IO-26
1 22826U 93061D 97059.13395423 .00000006 00000-0 19742-4 0 05482
2 22826 98.5548 135.9534 0008394 199.4037 160.6828 14.27827585178521
AO-27
1 22825U 93061C 97059.15716048 .00000025 00000-0 27599-4 0 05551
2 22825 98.5528 135.7534 0008002 195.5192 164.5748 14.27718914178519
FO-29
1 24278U 96046B 97059.18468737 -.00000027 00000-0 50522-5 0 00756
2 24278 98.5568 115.2169 0352048 108.5870 255.3839 13.52628736026389
Mir
1 16609U 86017A 97059.52748769 .00013719 00000-0 16818-3 0 889
2 16609 51.6502 272.1260 0011444 122.9987 237.2104 15.60596947630061

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

791. Re: Russians in space before Yuri????

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <E6EJyp.BA2@cix.compulink.co.uk>
Source record: 19645

You've seen too many X-Files and 'Dark-Skies'

Steve Walters: G7VFY: 0956-544202

792. Re: FO-29 analog mode

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: HB9VAF <mancastroppam@bluewin.ch>
Message-ID: <01bc26f1$def80020$06a0bd8a@app-mam>
Source record: 19646

HI !

On this WEB site you have the schedule about the FO-29 :

http://www.kt.rim.or.jp/~jr1nvu/eindex.html

best 73,
Marco - HB9VAF

Jeff Griffin <kb2wqm@amsat.org> a &#65533;crit dans l'article
<331210DA.6C1C@amsat.org>...
> Has anyone heard FO-29 in analog mode? If so is there some kind of
> schedule that they follow to turn it on. Let us know.
>
> 73 Jeff
>

793. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970302125333_515664.456256_JHO34-29@CompuServe.COM>
Source record: 19647

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #72

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-4.compuserve.com (8.6.10/5.950515)
id HAA13246; Sun, 2 Mar 1997 07:53:27 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA24873 for <ham-space-list@mailbox.ucsd.edu>; Sun, 2 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA23232
sendmail 8.8.5/UCSD8.3
Sun, 2 Mar 1997 04:30:59 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA23219
sendmail 8.8.5/UCSD8.3
Sun, 2 Mar 1997 04:30:57 -0800 (PST)
Message-Id: <199703021230.EAA23219@noc.ucsd.edu>
Date: Sun, 2 Mar 97 04:30:56 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #72
To: Ham-Space@ucsd.edu

Ham-Space Digest Sun, 2 Mar 97 Volume 97 : Issue 72

Today's Topics:
ARLK017 Keplerian data
Ham Site
Russians in space before Yuri???? (3 msgs)
Satellite info
Why I am the way I am.
your LISTSERV request "help satellite/cw/fax via soundcard"

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Mar 1997 05:50:00 GMT
From: Bob Winingham <kc5ejk@onramp.net>
Subject: ARLK017 Keplerian data

SB KEP @ ARL $ARLK017
ARLK017 Keplerian data

ZCZC SK17
QST de W1AW
Keplerian Bulletin 17 ARLK017

Date: Fri, 28 Feb 1997 20:37:28 -0800
From: ed livingston <eddie@mailhost.cyberramp.net>
Subject: Ham Site

http://www.cyberramp.net/~eddie

Date: 1 Mar 1997 14:51:59 GMT
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Subject: Russians in space before Yuri????

On 1 Mar 1997, Chet4Lee wrote:

> I've just found an article from 1962 that documents Russian launches that
> ended in the death of their cosmonauts. It states that men were in space
> before the official time for Yuri and that the original 'first' woman into
> space died when her craft left the orbit. Does anybody know where I can
> find out more? Any conformations?

Read "Soviet Disasters", by James Oberg. This is a very authoritative
text of well researched Russian and Soviet history. There was at least
one Cosmonaut death in training prior to Gagarin's flight, but no human
was launched into space prior to Yuri Gagarin.

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

Date: 1 Mar 1997 14:30:27 GMT
From: chet4lee@aol.com (Chet4Lee)
Subject: Russians in space before Yuri????

I've just found an article from 1962 that documents Russian launches that
ended in the death of their cosmonauts. It states that men were in space
before the official time for Yuri and that the original 'first' woman into
space died when her craft left the orbit. Does anybody know where I can
find out more? Any conformations?

thanks

p
h
i
l

Date: Sun, 2 Mar 1997 06:13:36 GMT
From: oddjob@cix.compulink.co.uk ("Stephen Walters")
Subject: Russians in space before Yuri????

You've seen too many X-Files and 'Dark-Skies'

Steve Walters: G7VFY: 0956-544202

Date: Thu, 27 Feb 1997 02:42:40 -0500
From: ken coleman <acoleman@access.eve.net>
Subject: Satellite info

James wrote:
>
> Greetings to one and all Hams. I have been browsing on the net looking for
> a list I once found and lost when the cat walked on the keyboard and erased
> my bookmark list!! The list had every satellite up there, the uplink and
> downlink, name of the sat. etc.. Anybody know where I might look?? Any and
> all help will be appreciated.
>
> 73 de James Shanks n1vbn@tiac.net
>
> (P.S. I now backup my bookmark list.)

try www.amsat.org/ under the link for "Spacecraft Information"

Date: 26 Feb 1997 23:57:55 GMT
From: w9sz@prairienet.org (Zack Widup)
Subject: Why I am the way I am.

In a previous article, john@wd1v.mv.com (John D. Seney) says:

>com> <330DFD45.72D7@flash.net> <330EF9C8.FC2@geocities.com> <330D719C.7C75@cornell.edu>
<5epn0u$hob@news1.mnsinc.com> <3310B1E9.7BF1@geocities.com>
<01bc221e$e19605c0$5ba19ecd@expressp5.insighttec.com>
>X-Nntp-Posting-Host: wd1v.mv.com
>Date: Wed, 26 Feb 1997 08:47:25 GMT

>Lines: 23
>Xref: vixen.cso.uiuc.edu alt.support.divorce:56261 rec.radio.amateur.digital.misc:22608
rec.radio.amateur.homebrew:25504 rec.radio.amateur.misc:126915
rec.radio.amateur.space:10191
>
>
>> Burt Fisher <burtfisher@geocities.com> wrote in article
>> <3310B1E9.7BF1@geocities.com>...
>> > I am the way I am because as a teen I was an active ham radio operator.
>> > I used "the mike" to not face real people thus missing my teen years the
>> > way real people experience it. It is not ham radio's fault of course,
>> > the fault is entirely mine. However I am not that person now and I
>> > despise in others what I despised in myself. I am much like a reformed
>> > smoker (they tend to be fanatics against smoking).
>
>Good insights but why still play the role of a victim? To be liberated
>from your past, you have to LET IT GO. Ten years from now, you'll hate
>who you are today. There is no peace or healing going on when you
>despise anything, past, present, or future. Its all INSIDE you - what
>isn't there to love?
>
>Peace and healing come with acceptance and forgiveness. Then you can love
>instead of hate. Much better use of energy. In fact, the sensation is
>that it takes no energy. What we resist (the pain of not loving) persists.
>
>73,
>
>John/WD1V
>

Why post these things on rec.radio.amateur.space? I came here to read
messages about amateur satellite.

Zack W9SZ

--

Date: 1 Mar 97 12:31:43 GMT
From: Listserv@ucsd.edu (Mailing List Processor)
Subject: your LISTSERV request "help satellite/cw/fax via soundcard"

The mailing list "satellite/cw/fax" could not be found.
You may use the INDEX command to get a listing
of available mailing lists.

Date: (null)
From: (null)

SB KEP ARL ARLK017
ARLK017 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97059.10213007 .00000054 00000-0 42058-4 0 03298
2 18129 82.9270 319.3737 0011398 156.9959 203.1710 13.72375027485277
UO-11
1 14781U 84021B 97058.95412119 .00000082 00000-0 21667-4 0 09678
2 14781 97.8221 44.6253 0011911 358.2953 1.8207 14.69527401695214
RS-12/13
1 21089U 91007A 97059.13883842 .00000021 00000-0 67643-5 0 09741
2 21089 82.9190 359.5144 0027369 242.0012 117.8377 13.74077159304184
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
RS-15
1 23439U 94085A 97059.24607721 -.00000039 00000-0 10000-3 0 2019
2 23439 64.8180 329.0050 0151931 152.7704 208.1288 11.27525534 89657
AO-16
1 20439U 90005D 97059.17020917 -.00000006 00000-0 14277-4 0 00509
2 20439 98.5435 145.8754 0011224 166.2222 193.9272 14.29999485370653
DO-17
1 20440U 90005E 97059.16701199 .00000010 00000-0 20466-4 0 00554
2 20440 98.5426 146.6528 0011372 164.8683 195.2844 14.30142026370688
WO-18
1 20441U 90005F 97059.16242454 .00000019 00000-0 23914-4 0 00559
2 20441 98.5478 146.5679 0011809 166.0482 194.1030 14.30110100370681
LO-19
1 20442U 90005G 97059.13841648 .00000070 00000-0 43863-4 0 00504
2 20442 98.5482 147.1521 0011936 165.3784 194.7794 14.30223759370709
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
AO-21
1 21087U 91006A 97059.16008652 .00000094 00000-0 82657-4 0 08154
2 21087 82.9429 132.2797 0034136 210.8747 149.0402 13.74578059305176
UO-22
1 21575U 91050B 97059.14102060 .00000059 00000-0 34030-4 0 07568
2 21575 98.3168 123.4618 0006765 217.2952 142.7766 14.37058963294828
KO-23
1 22077U 92052B 97059.36099722 -.00000037 00000-0 10000-3 0 6446

```
2 22077 66.0857 13.0952 0013890 240.3821 119.5814 12.86300997213755
KO-25
1 22828U 93061F 97059.12430524 .00000010 00000-0 21218-4 0 05177
2 22828 98.5495 136.0162 0009755 182.2414 177.8728 14.28169129146645
IO-26
1 22826U 93061D 97059.13395423 .00000006 00000-0 19742-4 0 05482
2 22826 98.5548 135.9534 0008394 199.4037 160.6828 14.27827585178521
AO-27
1 22825U 93061C 97059.15716048 .00000025 00000-0 27599-4 0 05551
2 22825 98.5528 135.7534 0008002 195.5192 164.5748 14.27718914178519
FO-29
1 24278U 96046B 97059.18468737 -.00000027 00000-0 50522-5 0 00756
2 24278 98.5568 115.2169 0352048 108.5870 255.3839 13.52628736026389
Mir
1 16609U 86017A 97059.52748769 .00013719 00000-0 16818-3 0 889
2 16609 51.6502 272.1260 0011444 122.9987 237.2104 15.60596947630061

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

------------------------------

End of Ham-Space Digest V97 #72
******************************
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794. Keplerian Elements for U.S. Military satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: salumbides@earthlink.net
Message-ID: <33198d4e.531090@news.alt.net>
Source record: 19648

Does anyone know where I can the two-line element sets for
U.S. Military satellites ?? Any help will be appreciated.

795. Re: Keplerian Elements for U.S. Military satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaE6FDE5.L5q@netcom.com>
Source record: 19649

In article <33198d4e.531090@news.alt.net> salumbides@earthlink.net (Manuel Salumbides) writes:
>
>
>Does anyone know where I can the two-line element sets for
>U.S. Military satellites ?? Any help will be appreciated.
>

ftp://kilroy.jpl.nasa.gov/pub/space/elements/molczan/new_molc.Z

You'll need gzip.exe, available at the same site, to uncompress the file.

796. NEW 10-10-INTERNATIONAL CHAPTER

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: rcnoll@ix.netcom.com
Message-ID: <5fcg2m$fra@dfw-ixnews10.ix.netcom.com>
Source record: 19650

Join in the New CHANNEL ISLANDS CHAPTER 10-10 INTERNATIONAL NET
INCORPATED. Net Meets every Wednesday on 28.400 MHz: 1800-2000 &
0200-0400 U. T. C. Join in any WEDNESDAY. Info-rcnoll@ix.netcom.com.
--
Ralph C. Noll | Retired | KD6BYI

797. Re: Keplerian Elements for U.S. Military satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: Roberto Franceschetti <roberto@netwide.net>
Message-ID: <01bc273b$76b10e40$068bd4d0@miseno.netwide.net>
Source record: 19651

Try downloading the kep file from our site at
http://www.logsat.com/pub/Superkep.zip It has keps for a few thousands
satellites, including some military ones. You'll have to know what you're
looking for though, because a lot of them are identified only by numbers.
--
Roberto Franceschetti

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

Manuel Salumbides <salumbides@earthlink.net> wrote in article
<33198d4e.531090@news.alt.net>...
>
>
> Does anyone know where I can the two-line element sets for
> U.S. Military satellites ?? Any help will be appreciated.
>
>
>
>

798. Q: R0MIR vs R0MIR-1 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: brkille@mindspring.com
Message-ID: <5fctr0$2u@camel4.mindspring.com>
Source record: 19652

I have been listening to Mir again and have made voice and packet
contacts with the station several times in the past, but an old
question I have had has come up again. In packet mode I know
they usually have the PBBS running which is R0MIR-1, but I have
also seen connects to R0MIR. Today I connected to Mir using the
R0MIR call and got a greeting "Hello from the Mir crew", but lost
contact before I could tell if anything else was going to happen.
Is R0MIR just like my home packet call, which if someone connects
to me they just get a connect message and nothing else unless I
am at the keys? This would seem to make sence, but I just would
like this confirmed. Due to the short duration of the passes and the
QRM, both from other stations trying to work Mir and regular packet
traffic, it seems very hard at best to use the PBBS, most of the time
all I get is R0MIR-1 busy. I know there has been increased voice
activity lately but, I havent been listening at the right times I
guess. The next shuttle mission will be a SAREX mission so maybe
I will get lucky and make yet another shuttle contact. Thanks for
any comments or information on the Mir packet configuration.
73, Bruce WA4JAV

799. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: robert@kd3bj.ampr.org
Message-ID: <robert.857318876@kd3bj.ampr.org>
Source record: 19653

"John M. Yellenic" <yellenic@epix.net> writes:

>Matt C. Brinkhoff wrote:
>>
>> Roberto Franceschetti (roberto@netwide.net) wrote:
>> : My answer might be *slightly* biased since we produce it :-) but the best
>> : tracking software is LogSat Professional for Windows. You can preview it at
>> : http://www.logsat.com.
>>
>> I can second this, and I don't even work for 'em! <grin>
>>
>> Seriously, though - Logsat is the BEST tracking program around, bar none.
>>
>> --
>> Matt C. Brinkhoff, KB0RXC
>> mbrinkho@inetnebr.com
>> http://incolor.inetnebr.com/mbrinkho
>> Lincoln, Nebraska [EN10]

>Hate to go against the grain on this thread... but... the current
>evaluation copy of LogSat will not allow you set your QTH!!!

>IMHO, this is a very poor way of crippling an otherwise good program, in
>an effort to force a purchase. With this "crippleware", you can look at
>the pretty displays... but a TRUE evaluation is near impossible. (Unless
>you happen to have a station in the middle of the Atlantic ocean, where
>the coordinates are preset!)

>My mention to this fact via email to LogSat Corporation brought a
>"that's the way it is, buy it if you want to set your QTH... the full
>version works real well" response. Instead... I'm looking for
>alternatives. Again... IMHO!

>John - N3YPR

Thanks for the heads up John. I'll think twice, maybe thrice before
wasting time downloading the "demo".

--
Robert Garland NX3S @ N3ACL.PA.USA.NOAM
Hilltown Township Bucks County robert@kd3bj.ampr.org
Pennsylvania USA Grid FN20ii
"Ham Radio is a calling"

800. Re: FO-29 analog mode

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: pklein@handel.seattleu.edu
Message-ID: <5fd6pv$t8g@handel.seattleu.edu>
Source record: 19654

Marco - HB9VAF said:

>On this WEB site you have the schedule about the FO-29 :
>http://www.kt.rim.or.jp/~jr1nvu/eindex.html

>Jeff Griffin <kb2wqm@amsat.org> asked:

>> Has anyone heard FO-29 in analog mode? If so is there some kind of
>> schedule that they follow to turn it on. Let us know.

I looked at the schedule a month ago. FO-29 has been changing modes every Friday between 0000 or 0100 UTC. That's Thursday afternoon/evening in the U.S. The general rotation is Analog (JA), 1200 bps PSK, 9600 bps PSK, and then back to Analog.

It will next be in analog mode for one week starting on 14 March 97. There is also a test of the digi-talker scheduled for 28 March 97 at 10:45 UTC going through 1 April 97 at 00:30, when it switches to 9600. I don't have the schedule after that, so I don't know if the Friday UTC rotation will continue.

You'll find FO-29 much like FO-20, but with a stronger and more consistent signal.

73,
Peter - KD7MW

--
Peter A. Klein (pklein@seattleu.edu) : ------==3== --- ---
Network Administrator, LAN/WAN/Novell : | | | | | | | |
Seattle University, 296-5569 : @| @| @| @| @| @| @| @|

801. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: Steve <kd6fyk@wco.com>
Message-ID: <331A3569.7897@wco.com>
Source record: 19655

Robert E. Garland wrote:
>
> "John M. Yellenic" <yellenic@epix.net> writes:
>
> >Matt C. Brinkhoff wrote:
> >>
> >> Roberto Franceschetti (roberto@netwide.net) wrote:
> >> : My answer might be *slightly* biased since we produce it :-) but the best
> >> : tracking software is LogSat Professional for Windows. You can preview it at
> >> : http://www.logsat.com.
> >>
> >> I can second this, and I don't even work for 'em! <grin>
> >>
> >> Seriously, though - Logsat is the BEST tracking program around, bar none.
> >>
> >> --
> >> Matt C. Brinkhoff, KB0RXC
> >> mbrinkho@inetnebr.com
> >> http://incolor.inetnebr.com/mbrinkho
> >> Lincoln, Nebraska [EN10]
>
> >Hate to go against the grain on this thread... but... the current
> >evaluation copy of LogSat will not allow you set your QTH!!!
>
> >IMHO, this is a very poor way of crippling an otherwise good program, in
> >an effort to force a purchase. With this "crippleware", you can look at
> >the pretty displays... but a TRUE evaluation is near impossible. (Unless
> >you happen to have a station in the middle of the Atlantic ocean, where
> >the coordinates are preset!)
>
> >My mention to this fact via email to LogSat Corporation brought a
> >"that's the way it is, buy it if you want to set your QTH... the full
> >version works real well" response. Instead... I'm looking for
> >alternatives. Again... IMHO!
>
> >John - N3YPR
>
> Thanks for the heads up John. I'll think twice, maybe thrice before
> wasting time downloading the "demo".
>
> --
> Robert Garland NX3S @ N3ACL.PA.USA.NOAM
> Hilltown Township Bucks County robert@kd3bj.ampr.org
> Pennsylvania USA Grid FN20ii

> "Ham Radio is a calling"

buy it,youll like it

73 steve

802. Career Opportunity

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: "Maha Communications. Inc." <williamc@maha-comm.com>
Message-ID: <5fdm4q$a4k@bolivia.earthlink.net>
Source record: 19656

Dear Friends,

Maha Communications is a rapid growing company, and we are looking for
sales specialist!

1. Sales Specialist
Speak Fluent English
Some technical background of two-way/ham radio
Willing to take the challenge
Speak/Write Spanish (OPTIONAL)

Our company production lines include: Battery Pack,
Speaker/microphone,
R.F. Amplifier, Antenna, and accessories. Please visit
http://www.maha-comm.com/ for detail information on our products.

We are located at Brea, Southern California, in Orange County. If you
are interested in this job, please send e-mail to sales@maha-comm.com

803. Re: Russians in space before Yuri????

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <33197252.49AC@cyberportal.net>
Source record: 19657

Chet4Lee wrote:
>
> I've just found an article from 1962 that documents Russian launches that
> ended in the death of their cosmonauts. It states that men were in space
> before the official time for Yuri and that the original 'first' woman into
> space died when her craft left the orbit. Does anybody know where I > can find out more?
Any conformations?

Those stories resurface periodically (particularly on the internet!),
and appear to be just that - stories. There doesn't seem to be any
credible evidence of a pre-Gagarin manned flight, nor is there any of a
"first female" flight ending in disaster. The Soviets did launch living
things into space before manned capsules were lofted. Some of the
"payloads" did have names (as did US chimp-o-nauts), which may have led
to speculation about crews. Things so often get lost in translation!

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

804. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <3319732D.2E99@cyberportal.net>
Source record: 19658

<snip>

> I'm looking for alternatives. Again... IMHO!

Try "Wisp", a great Windows (both 16 and 32 bit available) package
available for trial from AMSAT (ftp.amsat.org). The demo version is
fully functional and does a great job all-around (it's especially handy
for microsat ops). For a nominal fee (which supports AMSAT directly),
you can register and get rid of a small nag screen on start-up.

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

805. ARLK017 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-02 00:00:00 UTC
From: "Albert Alvareztorres, Jr." <albert@snet.net>
Message-ID: <01bc26bd$57381960$5311accf@albert>
Source record: 19659

```
SB KEP @ ARL $ARLK017
ARLK017 Keplerian data

ZCZC SK17
QST de W1AW
Keplerian Bulletin 17 ARLK017
From ARRL Headquarters
Newington, CT March 1, 1997
To all radio amateurs

SB KEP ARL ARLK017
ARLK017 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97059.10213007 .00000054 00000-0 42058-4 0 03298
2 18129 82.9270 319.3737 0011398 156.9959 203.1710 13.72375027485277
UO-11
1 14781U 84021B 97058.95412119 .00000082 00000-0 21667-4 0 09678
2 14781 97.8221 44.6253 0011911 358.2953 1.8207 14.69527401695214
RS-12/13
1 21089U 91007A 97059.13883842 .00000021 00000-0 67643-5 0 09741
2 21089 82.9190 359.5144 0027369 242.0012 117.8377 13.74077159304184
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
RS-15
1 23439U 94085A 97059.24607721 -.00000039 00000-0 10000-3 0 2019
2 23439 64.8180 329.0050 0151931 152.7704 208.1288 11.27525534 89657
AO-16
1 20439U 90005D 97059.17020917 -.00000006 00000-0 14277-4 0 00509
2 20439 98.5435 145.8754 0011224 166.2222 193.9272 14.29999485370653
DO-17
1 20440U 90005E 97059.16701199 .00000010 00000-0 20466-4 0 00554
2 20440 98.5426 146.6528 0011372 164.8683 195.2844 14.30142026370688
WO-18
```

```
1 20441U 90005F 97059.16242454 .00000019 00000-0 23914-4 0 00559
2 20441 98.5478 146.5679 0011809 166.0482 194.1030 14.30110100370681
LO-19
1 20442U 90005G 97059.13841648 .00000070 00000-0 43863-4 0 00504
2 20442 98.5482 147.1521 0011936 165.3784 194.7794 14.30223759370709
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
AO-21
1 21087U 91006A 97059.16008652 .00000094 00000-0 82657-4 0 08154
2 21087 82.9429 132.2797 0034136 210.8747 149.0402 13.74578059305176
UO-22
1 21575U 91050B 97059.14102060 .00000059 00000-0 34030-4 0 07568
2 21575 98.3168 123.4618 0006765 217.2952 142.7766 14.37058963294828
KO-23
1 22077U 92052B 97059.36099722 -.00000037 00000-0 10000-3 0 6446
2 22077 66.0857 13.0952 0013890 240.3821 119.5814 12.86300997213755
KO-25
1 22828U 93061F 97059.12430524 .00000010 00000-0 21218-4 0 05177
2 22828 98.5495 136.0162 0009755 182.2414 177.8728 14.28169129146645
IO-26
1 22826U 93061D 97059.13395423 .00000006 00000-0 19742-4 0 05482
2 22826 98.5548 135.9534 0008394 199.4037 160.6828 14.27827585178521
AO-27
1 22825U 93061C 97059.15716048 .00000025 00000-0 27599-4 0 05551
2 22825 98.5528 135.7534 0008002 195.5192 164.5748 14.27718914178519
FO-29
1 24278U 96046B 97059.18468737 -.00000027 00000-0 50522-5 0 00756
2 24278 98.5568 115.2169 0352048 108.5870 255.3839 13.52628736026389
Mir
1 16609U 86017A 97059.52748769 .00013719 00000-0 16818-3 0 889
2 16609 51.6502 272.1260 0011444 122.9987 237.2104 15.60596947630061

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

806. Re: which VHF ant for RS-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: "Larry Ledlow, Jr." <ledlow@codem.com>
Message-ID: <331B3E12.3F3E@codem.com>
Source record: 19572

Aristides Kaponides wrote:
>
> Can anyone suggest to me which type of VHF antennas are suitable for
> operating Sat RS-15 and also which power is min requirement?

Low- to medium-gain vertical omni works quite well. I have even used a
discone with 35W output. Better not to have too much gain on the omni,
as it reduces effectiveness at higher elevation passes.

73 Larry
--

Larry Ledlow N1TX ARRL Technical Specialist
ex-NA5E, G0CQW AMSAT #10356
FN42bx n1tx@amsat.org
Packet mailbox: WA1WOK.FN43FE.NH.USA.NOAM

807. Re: WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <331B7569.6A31@one.net>
Source record: 19573

Rafael Garcia wrote:
>
> Hi all,
>
> I'm in the process to setup a station capable of WEFAX APT image
> receiving, at the 137 MHz band. But I have a doubt about what is the
> right receiver choice. I know that APT transmision is in FM mode, with
> the FAX signal AM modulated. The problem is if with a simple modified
> transceiver (TS-790, IC-821) for that band will be enough. In fact, the
> question: is it enough FM narrow (5 kHz voice channel) to get the data?

5kHz is not nearly wide enough. You need 50kHz, though some people claim the 40 kHz works OK for them. Most APT users seem to have special wxsat receivers made by Quorum, Spectrum (Timestep), etc. I use a Timestep receiver, demodulator board, and software.

>
> I've got a DSP-2232 multi-mode controller and IC-821. The software is
> something called "wefax256" by AEA. I have had unsuccesful results with
> that software, and I'm thinking in JVFAX or the like, with serial input.

WEFAX generally refers to the fax images sent on HF frequencies. Here in the U.S., geostationary satellite images are rebroadcast on 8080 kHz (for example). I think that is what your AEA software is designed for. I use JVFAX myself with a Hamcomm interface to receive those images.

You can use JVFAX for the the 137-MHz satellite transmissions, but you'll need a more sophisticated demodulator than the Hamcomm circuit.

>
> I'll appreciate any input about this.
> Thanks in advance,
>
> --
> Rafael,
> Madrid (Spain)

I strongly recommend that you get a good book on the subject or find someone who is already experienced with APT if you want to get into receiving images directly from the satellites. A good book (in English) is the "Weather Satellite Handbook" by Ralph Taggart.

Good luck.

Rich

808. Re: Amateur space station

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: Mark Wilkinson <markw@sdds0.es.hac.com>
Message-ID: <331B0BC6.7189@sdds0.es.hac.com>
Source record: 19574

William Nolle wrote:
>
> Does anybody know the latest FCC rules on Amatuer Space Stations?.
...
> Bill WA8INZ

Bill:

I'm afraid I cannot help, but I would appreciate it if you
would email me what you learn.

Thanks,
Mark
--

Mark Wilkinson
Hughes Space and Comm., EO/E1/D112
2000 E. El Segundo Blvd.
El Segundo, CA 90245 markw@sdds0.es.hac.com
---

809. Our new Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: face@calweb.COM
Message-ID: <3.0.32.19970302210219.00691df8@pop.calweb.com>
Source record: 19660
Body handling: HTML body converted to readable text

FACE 0000,0000,ffffIntel

Former And Current Employees of Intel

You have the opportunity to find out "What Intel does not want the world to know"

Please accept our invitation to visit FACE Intel's new Web Site at:

http://www.igc.apc.org/faceintel

Thank you for your support,

FACE Intel

P.S.:

Please add our site to your links, Thanks.

810. NASA

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: psewell@netcomuk.co.uk
Message-ID: <33297f86.4333499@nntp.netcomuk.co.uk>
Source record: 19661

COME AND TRY THE JUMPGATE, GREAT LINKS NASA BABYLON 5 QUAKE F1GP2
JUDGE DREDD WINDOWS 95 FILES 1000`S OF SHAREWARE FILES PLUS SOME
POWEWRFUL SHAREWARE SEARCH ENGINES......THE QUAKE PAGE HAS BEEN
UPDATED......NEW LINKS TO DEMOS QUAKE CONSOLE,PLUS MUCH MORE.....
PLEASE SIGN MY GUEST BOOK AND GET YOUR WEB SITE LINKED FROM MY SITE.
http://www.netcomuk.co.uk/~psewell/jumpgate.html

811. Q: visible objects ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.244.0008D69C@hugo.rz.fh-ulm.de>
Source record: 19662

Hi folks,
on saturday (1st March) at approx. 18.00 utc I saw a bright object, moving very fast from sw to ne. It was nearly an overhead pass and while moving to northeast it became weaker and weaker. No sound of a plane and no flash-lights. First I thought it was the MIR space station which I saw many times before. But when I looked at sts- plus I noticed that the MIR passes over Germany had been in the afternoon. Of course there are lots of satellites in space but I have no idea which one is big enough to be visible from the earth.
73, Roman (DL2SFE)

812. Re: Q: R0MIR vs R0MIR-1 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5feumcknu1@news.mhv.net>
Source record: 19663

In article <5fctr0$2u@camel4.mindspring.com>, brkille@mindspring.com wrote:
>I have been listening to Mir again and have made voice and packet
>contacts with the station several times in the past, but an old
>question I have had has come up again. In packet mode I know
>they usually have the PBBS running which is R0MIR-1, but I have
>also seen connects to R0MIR. Today I connected to Mir using the
>R0MIR call and got a greeting "Hello from the Mir crew", but lost
>contact before I could tell if anything else was going to happen.
>Is R0MIR just like my home packet call, which if someone connects
>to me they just get a connect message and nothing else unless I
>am at the keys? This would seem to make sence, but I just would
>like this confirmed. Due to the short duration of the passes and the
>QRM, both from other stations trying to work Mir and regular packet
>traffic, it seems very hard at best to use the PBBS, most of the time
>all I get is R0MIR-1 busy. I know there has been increased voice
>activity lately but, I havent been listening at the right times I
>guess. The next shuttle mission will be a SAREX mission so maybe
>I will get lucky and make yet another shuttle contact. Thanks for
>any comments or information on the Mir packet configuration.
>73, Bruce WA4JAV

R0MIR is the live keyboard. I have yet to see a live QSO over the Mir
keyboard though. Most of what's typed to it no doubt scrolls off the screen
pretty fast due to the PBBS usage.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

813. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970303125351_515664.456256_IHB30-19@CompuServe.COM>
Source record: 19664
Body handling: HTML body converted to readable text

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #74

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-7.compuserve.com (8.6.10/5.950515)
id HAA26339; Mon, 3 Mar 1997 07:53:37 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA03691 for ; Mon, 3 Mar 1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA18182
sendmail 8.8.5/UCSD8.3
Mon, 3 Mar 1997 04:30:56 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA18159
sendmail 8.8.5/UCSD8.3
Mon, 3 Mar 1997 04:30:53 -0800 (PST)
Message-Id: <199703031230.EAA18159@noc.ucsd.edu>
Date: Mon, 3 Mar 97 04:30:51 PST
From: Ham-Space Mailing List and Newsgroup
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #74
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 3 Mar 97 Volume 97 : Issue 74

Today's Topics:
Our new Web Site
Russians in space before Yuri????
Sat. Tracking program.

Send Replies or notes for publication to:
Send subscription requests to:
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 3 Mar 97 05:05:00 GMT
From: face@calweb.COM (FACE Intel)
Subject: Our new Web Site

FACE 0000,0000,ffffIntel

Former And Current Employees of Intel

You have the opportunity to find out "What Intel does not want the world
to know"

Please accept our invitation to visit FACE Intel's new Web Site at:

http://www.igc.apc.org/faceintel

Thank you for your support,

FACE Intel

P.S.:

Please add our site to your links, Thanks.

Date: Sun, 02 Mar 1997 07:28:02 -0500
From: "George J. Molnar"
Subject: Russians in space before Yuri????

Chet4Lee wrote:
>
> I've just found an article from 1962 that documents Russian launches that
> ended in the death of their cosmonauts. It states that men were in space
> before the official time for Yuri and that the original 'first' woman into
> space died when her craft left the orbit. Does anybody know where I > can find out more?
Any conformations?

Those stories resurface periodically (particularly on the internet!),
and appear to be just that - stories. There doesn't seem to be any
credible evidence of a pre-Gagarin manned flight, nor is there any of a
"first female" flight ending in disaster. The Soviets did launch living
things into space before manned capsules were lofted. Some of the
"payloads" did have names (as did US chimp-o-nauts), which may have led
to speculation about crews. Things so often get lost in translation!

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

Date: Sun, 02 Mar 1997 07:31:42 -0500
From: "George J. Molnar"
Subject: Sat. Tracking program.

> I'm looking for alternatives. Again... IMHO!

Try "Wisp", a great Windows (both 16 and 32 bit available) package
available for trial from AMSAT (ftp.amsat.org). The demo version is
fully functional and does a great job all-around (it's especially handy
for microsat ops). For a nominal fee (which supports AMSAT directly),
you can register and get rid of a small nag screen on start-up.

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

End of Ham-Space Digest V97 #74
****

814. which VHF ant for RS-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <3.0.1.32.19970303181429.0069849c@nautilus.spidernet.net>
Source record: 19665

Can anyone suggest to me which type of VHF antennas are suitable for
operating Sat RS-15 and also which power is min requirement?
Thanks in advance
de Aris-5B4JE.
Aristides Kaponides
mailto:arisk@spidernet.com.cy
<http://www.angelfire.com/ca/cyprusham>

815. Re: Satellite info

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: Mark Wilkinson <markw@sdds0.es.hac.com>
Message-ID: <331B0C4A.7095@sdds0.es.hac.com>
Source record: 19666

James wrote:
>
> The list had every satellite up there, the uplink and
> downlink, name of the sat. etc.. Anybody know where I might look??

EVERY satellite? No. I've found www.amsat.org has the
amateur satellites.

Mark
--

Mark Wilkinson
Hughes Space and Comm., EO/E1/D112
2000 E. El Segundo Blvd.
El Segundo, CA 90245 markw@sdds0.es.hac.com
---

816. Some of the SEXIEST women alive!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: brianb@ei-bay.net
Message-ID: <5ff1ih$aul@chile.earthlink.net>
Source record: 19667

-(10,000 pictures of beautiful hot sexy Celebrities CD-ROM - ME#3)-
Questions? CALL US! The number is listed on our website:
http://www.nude-celebs.com

Just SOME of the features-ME3 CDROM:

600+ pictures of Cindy Crawford
400+ pics of Pamela Anderson
250+ pics of Elle Macpherson
200+ pics of Christina Applegate
200+ pics of Alicia Silverstone -==< 10,000 CELEBRITIES!! >==-
200+ pics of Mariah Carey
200+ pics of Sandra Bullock
150+ pics of Liv Tyler, young star
130+ pics of Niki Taylor
130+ pics of Kate Moss!!! For a list of ALL files on the CD
100+ pics of Madchen Amick goto www.nude-celebs.com
100+ pics of Racquel Darrian - *WOW*
80+ pics of hot model Jenny McCarthy! (Nudity!)
80+ pics of Paulina Poriskova, sexy supermodel!
70+ pics of Bridget Hall, supermodel!
50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
50+ pics of Daisy Fuentes, hot spanish VJ
50+ pics of Salma Hayek, sexy latina actress! ORDER LINE!
50+ pics of Teri Hatcher 1-757-484-7538
* 4000+ pics of other NUDE stars
* 4000+ pics of PG-13 rated celebrity poses
* 10,000+ pictures total, thats TEN thousand!
* Graphics viewing software for Windows3.1/DOS/Win95
* CD is BBS ready, with descriptions of files! And its Mac readable!
* Many more features and pictures of stars!
* NO AMATURE MODELS! - ONLY Celebs!

This CD represents high quality work. Here is the pricing:
$$$ $34 each (plus $2 shipping, $5 shipping outside USA) $$$

(For MORE information on content goto http://www.nude-celebs.com/
or call 757-484-7538 in USA to order via phone!
EMAIL: nudecelebs@nude-celebs.com

Other information:
* Packed in white shipper: No signs of nudity (Wife protection plan!)
* There are over 10,000, that's TEN THOUSAND FILES, on ME#3 alone!
* All pictures are high quality at least 640x480!
* Directories on disc are arranged for ease of use!
* Graphics viewing software for Windows/DOS/Win95

* CD is ISO-9660 and Macintosh readable in POWERMACs only
* It's truly BBS-ready with detailed descriptions of all files!
* ME#3 will save you -ALOT- of download/searching TIME & MONEY!
* Sysops! - Has a files.bbs conversion program for different formats!

This CD represents high quality work. Here is the pricing:
$$$ $34 each (plus $2 shipping, $5 shipping outside USA) $$$

(*) For FAST, reliable results goto http://www.nude-celebs
And fill out a order there. We take all methods of payment.

(*) AOL USERS: You must use AOL 3.0 Web Browser or HIGHER to order at our automated web site, otherwise request an order form via email.

(*) Or call 757-484-7538 to order via credit card over the phone!

(*) Or if your into free cheerleader pictures visit our Naughty Cheerleaders site at http://www.nude-celebs.com/redhot/cheer.html

(*) If you can not access the World Wide Web and would like an ORDER FORM sent to you by email, reply to this message at:
nudecelebs@nude-celebs.com
If you have any further questions feel free to email us!

Qualifications: You must be OVER 18 & live somewhere in this UNIVERSE!
Please remember, Foreign orders are $5 for shipping instead of $2

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ T.H.E. Software ~'..

817. Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: "Billy@NYI" <nyip@mail.idt.net>
Message-ID: <331B45D1.1AF2@mail.idt.net>
Source record: 19668

What's the best way to photograph Comet Hale-Bopp without
a telescope? What type of camera is best? What film should
you use? Lens? Aperture? Shutter speed? If you would like
to take some beautiful pictures of this "Comet of the Century"
with your camera, you'll find all the answers in the "Topic
of the Month" section of the New York Institute of
Photography (NYI) web site - free. It's just one of the
many fascinating photographic subjects you'll find there.
If you're interested, visit us at <www.nyip.com> - selected
by Yahoo Magazine as the Number-One web site in photography.

--
Billy Stone
NY Institute of Photography
nyip@mail.idt.net

NYI's web site at http://www.nyip.com features tips to help you
take better photos,answers to photo questions, contests you can
enter, information on our training videos and home-study courses.

818. Martelec MSR50 Help

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: g1gsw@titanic.u-net.com
Message-ID: <331b35ef.4397172@news.u-net.com>
Source record: 19669

I have bought the above at a local radio rally but with no software or destructions! can anyone help ie Tel no of Martelec, software and pinout for the port and witing to a pc etc? Mant thanks in advance.

www.u-net.com/~titanic
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

819. Re: WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: g1gsw@titanic.u-net.com
Message-ID: <331d3723.4705396@news.u-net.com>
Source record: 19670

On Fri, 28 Feb 1997 19:24:01 +0100, Rafael Garcia
<rgarcia@sat.cide.upm.es> wrote:

>Hi all,
>
> I'm in the process to setup a station capable of WEFAX APT image
>receiving, at the 137 MHz band. But I have a doubt about what is the
>right receiver choice. I know that APT transmision is in FM mode, with
>the FAX signal AM modulated. The problem is if with a simple modified
>transceiver (TS-790, IC-821) for that band will be enough. In fact, the
>question: is it enough FM narrow (5 kHz voice channel) to get the data?
>
> I've got a DSP-2232 multi-mode controller and IC-821. The software is
>something called "wefax256" by AEA. I have had unsuccesful results with
>that software, and I'm thinking in JVFAX or the like, with serial input.
>
> I'll appreciate any input about this.
> Thanks in advance,
>
>
>--
>Rafael,
>Madrid (Spain)
>

Bandwith needs to be 50khz so a dedicated rx is best but I have
received them sucessfully with 17khz on my WiNRADiO card but I would
think 5 khz is to narrow. Try WXSat from my site for decoding wefax
and apt. www.titanic.u-net.com

www.u-net.com/~titanic
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

820. Re: FO-29 analog mode

Newsgroup: rec.radio.amateur.space
Date: 1997-03-03 00:00:00 UTC
From: "Larry Ledlow, Jr." <ledlow@codem.com>
Message-ID: <331B3CAE.1104@codem.com>
Source record: 19671

> It will next be in analog mode for one week starting on 14 March 97.
> There is also a test of the digi-talker scheduled for 28 March 97 at
> 10:45 UTC going through 1 April 97 at 00:30, when it switches to 9600.

Current FO-29 schedule as follows:
Date Time(UTC) MODE
2/28 01:35 JD 1200bps PSK
3/ 7 00:30 JD 9600bps FSK
3/14 01:05 JA
3/21 00:00 JD 1200bps PSK
3/28 10:45 Digi-Talker
4/ 1 00:30 JD 9600bps FSK

73 Larry

N1TX ARRL Technical Specialist
ex-NA5E, G0CQW AMSAT #10356
FN42bx n1tx@amsat.org
Packet mailbox: WA1WOK.FN43FE.NH.USA.NOAM

821. Re: which VHF ant for RS-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc2846$bc884440$04c56cce@default>
Source record: 19575

Aristides,

I am using a SQLOOP omni antenna and 80-100 watts. It seems to work well
during the entire pass.
It is well worth having a preamplifier for the 10 meter receiver since the
signals are rather weak.

73 de VE7MDL ....Erik.

Aristides Kaponides <arisk@spidernet.COM.cy> wrote in article
<3.0.1.32.19970303181429.0069849c@nautilus.spidernet.net>...
> Can anyone suggest to me which type of VHF antennas are suitable for
> operating Sat RS-15 and also which power is min requirement?
> Thanks in advance
> de Aris-5B4JE.
> Aristides Kaponides
> mailto:arisk@spidernet.com.cy
> <http://www.angelfire.com/ca/cyprusham>
>
>
>
>
>
>
>

822. Re: Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: cochrane@netcom.com
Message-ID: <cochraneE6IC0s.yn@netcom.com>
Source record: 19576

I have some nice amateur photos of HB on the Redwood City Public Seismic
Network home page at http://psn.quake.net

Regards,
Larry Cochrane
Redwood City, PSN

Billy@NYI (nyip@mail.idt.net) wrote:
: What's the best way to photograph Comet Hale-Bopp without
: a telescope? What type of camera is best? What film should
: you use? Lens? Aperture? Shutter speed? If you would like
: to take some beautiful pictures of this "Comet of the Century"
: with your camera, you'll find all the answers in the "Topic
: of the Month" section of the New York Institute of
: Photography (NYI) web site - free. It's just one of the
: many fascinating photographic subjects you'll find there.
: If you're interested, visit us at <www.nyip.com> - selected
: by Yahoo Magazine as the Number-One web site in photography.

: --
: Billy Stone
: NY Institute of Photography
: nyip@mail.idt.net

: --
: NYI's web site at http://www.nyip.com features tips to help you
: take better photos,answers to photo questions, contests you can
: enter, information on our training videos and home-study courses.

823. RS-16?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: dbcntcas@teleport.com
Message-ID: <dbcntcas-0403971132490001@ip-pdx07-15.teleport.com>
Source record: 19577

Just heard the beacon from RS-16 this morning (~1915Z) a couple khz below
RS12's beacon. Very strong signal. Guess I missed the postings on this
new bird. I'll be looking for Kep's & freqs.
de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

824. NORAD Two-Line Orbital Element Sets (TLE955)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5fi796$oo2@blackbird.afit.af.mil>
Source record: 19578

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #955 -
Alouette 1
1 00424U 62049A 97061.20141524 .00000024 00000-0 17747-4 0 2712
2 00424 80.4635 29.1560 0024458 89.0949 271.2997 13.67888081717612
ATS 1
1 02608U 66110A 97056.09551378 -.00000121 00000-0 10000-3 0 41
2 02608 14.5516 350.1236 0006756 100.1368 259.9581 1.00287401 27408
ATS 3
1 03029U 67111A 97063.20590622 -.00000117 00000-0 10000-3 0 6262
2 03029 14.9068 356.9878 0012010 269.5746 224.3463 1.00273462107370
Starlette
1 07646U 75010A 97059.56641880 -.00000119 00000-0 19690-4 0 378
2 07646 49.8298 216.9981 0205906 357.1912 2.7811 13.82192732114420
LAGEOS
1 08820U 76039A 97061.60612892 .00000020 00000-0 00000+0 0 2680
2 08820 109.8342 114.5616 0043700 72.4420 288.1139 6.38664601230337
ETS-2
1 09852U 77014A 97053.25332272 -.00000288 00000-0 10000-3 0 1000
2 09852 13.5287 30.0925 0004829 153.8690 206.2140 1.00022465 20148
GOES 2
1 10061U 77048A 97 62.13250291 .00000000 00000-0 10000-3 0 8095
2 10061 12.6842 34.2343 0010310 139.6594 220.4249 1.00251398 17048
IUE
1 10637U 78012A 97062.44563046 .00000036 00000-0 10000-3 0 3673
2 10637 35.8852 79.4188 1348696 64.6064 2.3544 1.00080509 22533
GOES 3
1 10953U 78062A 97063.21634887 -.00000105 00000-0 10000-3 0 7860
2 10953 11.7132 37.1286 0003036 242.8612 213.6723 1.00265117 21661

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SeaSat 1
1 10967U 78064A 97060.38191377 -.00000017 00000-0 38977-4 0 5565
2 10967 107.9978 346.9387 0002840 277.7731 82.3087 14.38153479978427
Nimbus 7
1 11080U 78098A 97063.15909308 -.00000017 00000-0 21811-4 0 6535
2 11080 98.9132 278.2857 0009466 351.5663 8.5332 13.83686455927128
GOES 5
1 12472U 81049A 97053.08028703 .00000053 00000-0 10000-3 0 9846
2 12472 8.5953 47.7040 0005765 108.1145 252.0220 1.00314630 15606
Cosmos 1383
1 13301U 82066A 97061.20415702 .00000014 00000-0 -18208-6 0 5698
2 13301 82.9331 304.6203 0025942 249.0097 110.8279 13.68080317732655
LandSat 4
1 13367U 82072A 97061.69429523 .00000010 00000-0 11976-4 0 509
2 13367 98.0379 110.2417 0008205 56.9864 303.2122 14.57195250778180
DMSP B5D2-1
1 13736U 82118A 97061.54268758 .00000000 00000-0 18374-4 0 1874
2 13736 98.6222 251.7531 0009237 359.5884 0.5286 14.25820050737889
IRAS
1 13777U 83004A 97063.14052405 -.00000128 00000-0 -58532-4 0 5969
2 13777 98.9687 249.1600 0013474 98.7215 261.5469 13.99260903389721
Cosmos 1447
1 13916U 83021A 97061.88781069 .00000009 00000-0 -65452-5 0 6617
2 13916 82.9454 359.6895 0037710 148.7680 211.5723 13.74351705699271
TDRS 1
1 13969U 83026B 97062.17963448 -.00000299 00000-0 00000+0 0 7148
2 13969 9.3542 41.1813 0004084 285.6993 209.9277 1.00274717 23986
GOES 6
1 14050U 83041A 97062.28087078 -.00000009 00000-0 10000-3 0 6272
2 14050 7.4545 51.2052 0001542 41.8683 49.6616 1.00224831108792
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97061.56368770 .00000005 00000-0 11316-4 0 5942
2 14780 98.3003 124.8950 0001598 188.3517 171.7652 14.57068766691588
UO-11
1 14781U 84021B 97060.99682519 .00000097 00000-0 24266-4 0 9548
2 14781 97.8225 46.5834 0011830 352.0504 8.0511 14.69527990695511
Cosmos 1574
1 15055U 84062A 97062.92740101 .00000029 00000-0 14640-4 0 8612
2 15055 82.9532 54.3801 0027960 341.9062 18.1094 13.73645328636647
Cosmos 1602
1 15331U 84105A 97061.49527308 .00000256 00000-0 27145-4 0 5433
2 15331 82.5310 230.9975 0019570 169.7837 190.3773 14.84846178671300
ERBS
1 15354U 84108B 97062.10922201 -.00000190 00000-0 42953-5 0 2598
2 15354 56.9959 63.4576 0003869 53.0656 307.0725 14.95019893675567
NOAA 9
1 15427U 84123A 97063.14738810 .00000097 00000-0 74560-4 0 582
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2 15427 98.9150 133.7876 0014294 299.9574 60.0180 14.13841127630368
Mir
1 16609U 86017A 97 62.60122370 -.00002565 00000-0 00000+0 0 965
2 16609 51.6515 256.6561 0011243 140.0803 220.1677 15.60573453630547
SPOT 1
1 16613U 86019A 97060.40568357 -.00000044 00000-0 00000+0 0 394
2 16613 98.8010 133.5588 0000522 157.7572 202.3651 14.19990547256811
Cosmos 1766
1 16881U 86055A 97060.12710651 .00000256 00000-0 27900-4 0 4577
2 16881 82.5193 289.9223 0017651 205.8155 154.2183 14.83818683571945
EGP
1 16908U 86061A 97060.17569219 -.00000083 00000-0 10000-3 0 1579
2 16908 50.0137 286.9147 0011383 307.9491 52.0314 12.44415982148400
NOAA 10
1 16969U 86073A 97063.13623637 .00000006 00000-0 20696-4 0 9871
2 16969 98.5383 58.9374 0012850 320.6108 39.4137 14.25020906543627
MOS-1
1 17527U 87018A 97063.21788536 -.00000043 00000-0 00000+0 0 5208
2 17527 98.8999 125.0668 0019992 329.6024 30.3979 14.00419312511384
GOES 7
1 17561U 87022A 97063.23196003 -.00000173 00000-0 10000-3 0 3066
2 17561 3.5731 67.5888 0005285 321.0253 122.6310 1.00267855 19918
Kvant-1
1 17845U 87030A 97059.91170272 -.00002321 00000-0 -21150-4 0 9131
2 17845 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514564236
DMSP B5D2-3
1 18123U 87053A 97063.08576581 -.00000016 00000-0 14129-4 0 8250
2 18123 98.7652 255.0613 0013452 232.3923 127.6029 14.15467053501262
RS-10/11
1 18129U 87054A 97060.19574155 .00000052 00000-0 40271-4 0 3296
2 18129 82.9270 318.5652 0011462 154.0313 206.1421 13.72375102485422
Meteor 2-16
1 18312U 87068A 97062.19279602 .00000067 00000-0 46452-4 0 5471
2 18312 82.5589 146.6559 0011243 208.2582 151.7974 13.84092398482003
Meteor 2-17
1 18820U 88005A 97062.87097921 .00000025 00000-0 89176-5 0 1936
2 18820 82.5408 200.5123 0015635 279.7107 80.2291 13.84769546459467
DMSP B5D2-4
1 18822U 88006A 97063.02915985 .00000020 00000-0 26996-4 0 4743
2 18822 98.3808 248.6761 0006187 333.6502 26.4364 14.23218239471537
Glonass 34
1 19163U 88043A 97059.27337900 .00000031 00000-0 10000-3 0 1589
2 19163 65.3616 77.2114 0010729 147.2629 212.8320 2.13102346 67699
Glonass 36
1 19165U 88043C 97059.33066024 .00000032 00000-0 10000-3 0 5679
2 19165 65.3442 77.1598 0004390 325.6958 34.3233 2.13101860 68317
METEOSAT 3
1 19215U 88051A 97057.30187694 -.00000163 00000-0 00000+0 0 3068
2 19215 3.7807 66.4670 0004145 162.1118 198.1125 0.96948709 19647
OKEAN 1
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1 19274U 88056A 97063.24143126 .00000317 00000-0 36322-4 0 1586
2 19274 82.5113 28.1541 0020642 354.1648 5.9334 14.82585681467909
Meteor 3-2
1 19336U 88064A 97061.84595829 .00000051 00000-0 10000-3 0 5548
2 19336 82.5404 343.3893 0016101 314.0373 45.9373 13.16980637413520
Glonass 39
1 19503U 88085C 97 62.64634742 .00000018 00000-0 10000-3 0 4535
2 19503 65.5032 315.9745 0006998 162.3975 197.6636 2.13101990 65870
NOAA 11
1 19531U 88089A 97063.08761744 -.00000014 00000-0 17341-4 0 8764
2 19531 99.1671 93.6992 0010988 229.9406 130.0802 14.13122901435156
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97054.23688566 .00000022 00000-0 10000-3 0 6622
2 19749 65.3155 76.8865 0007078 257.0712 102.9115 2.13101550 63201
Glonass 41
1 19750U 89001B 97 62.26907928 -.00000048 00000-0 10000-3 0 5721
2 19750 65.3111 76.6977 0009250 247.7841 112.1544 2.13101695 63399
GPS BII-01
1 19802U 89013A 97 62.40809133 .00000132 00000-0 10000-3 0 3672
2 19802 55.4490 100.3395 0018302 188.7445 171.2573 2.00567124 58917
Akebono
1 19822U 89016A 97 62.77642462 .00010538 00000-0 57339-3 0 8792
2 19822 75.1021 332.5886 3720622 269.5414 48.8502 7.96478704187306
Meteor 2-18
1 19851U 89018A 97060.13884667 .00000058 00000-0 38691-4 0 5456
2 19851 82.5170 76.2041 0014161 342.1648 17.9013 13.84427303404385
MOP-1
1 19876U 89020B 97055.77239048 -.00000145 00000-0 00000+0 0 2483
2 19876 2.4924 70.7823 0017745 281.3985 78.9203 0.97110556 9070
TDRS 4
1 19883U 89021B 97 57.91732910 .00000000 00000-0 10000-3 0 3098
2 19883 0.3938 86.0013 0003217 227.1471 132.8290 1.00268762201661
GPS BII-02
1 20061U 89044A 97060.75259359 .00000033 00000-0 00000+0 0 3608
2 20061 54.0172 275.7568 0165223 222.0148 136.7545 2.00562978 56627
Nadezhda 1
1 20103U 89050A 97063.06205747 .00000043 00000-0 29175-4 0 899
2 20103 82.9580 277.0152 0039082 50.3397 310.1198 13.73874858384364
GPS BII-03
1 20185U 89064A 97060.45202617 .00000008 00000-0 00000+0 0 3993
2 20185 55.2421 100.7926 0017170 337.6088 22.4200 2.00554452 55190
GMS 4
1 20217U 89070A 97061.41473958 -.00000375 00000-0 10000-3 0 5288
2 20217 2.3156 73.8699 0000528 338.8563 16.1308 1.00255488 28006
INTERCOSMOS 24
1 20261U 89080A 97063.20600956 .00000106 00000-0 26048-4 0 5705
2 20261 82.5928 104.6527 1242371 170.3247 192.4392 12.47390637338327
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GPS BII-04
1 20302U 89085A 97062.61115717 .00000040 00000-0 10000-3 0 3789
2 20302 53.1853 215.3917 0028924 187.2553 172.7090 2.00572160 54039
Meteor 3-3
1 20305U 89086A 97062.22748129 .00000044 00000-0 10000-3 0 7664
2 20305 82.5565 305.5054 0007373 48.8865 311.2888 13.04437426351974
COBE
1 20322U 89089A 97060.52747069 .00000326 00000-0 23575-3 0 2860
2 20322 98.9328 77.3066 0009632 42.1159 318.0743 14.03466767373026
Kvant-2
1 20335U 89093A 97059.91170272 -.00002321 00000-0 -21150-4 0 8319
2 20335 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514413248
GPS BII-05
1 20361U 89097A 97062.13424628 -.00000011 00000-0 00000+0 0 1858
2 20361 56.1526 43.0463 0088157 140.8468 219.8115 2.00566551 43508
COSMOS 2054 (Altair-1)
1 20391U 89101A 97063.19797096 -.00000144 00000-0 00000+0 0 5183
2 20391 4.3343 61.8595 0001776 240.9532 274.6120 1.00271420 26607
SPOT 2
1 20436U 90005A 97062.92897850 -.00000044 00000-0 00000+0 0 1946
2 20436 98.7357 139.0516 0000914 49.7087 310.4169 14.20024029368702
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
AO-16
1 20439U 90005D 97063.22847846 .00000006 00000-0 19116-4 0 492
2 20439 98.5429 149.8563 0011343 154.0469 206.1282 14.29999907371230
DO-17
1 20440U 90005E 97062.24539286 -.00000007 00000-0 14089-4 0 509
2 20440 98.5428 149.6753 0011319 156.1288 204.0424 14.30142140371129
WO-18
1 20441U 90005F 97063.22038113 -.00000013 00000-0 11866-4 0 532
2 20441 98.5466 150.5488 0011855 154.2857 205.8926 14.30110281371266
LO-19
1 20442U 90005G 97063.19605185 -.00000013 00000-0 11554-4 0 509
2 20442 98.5481 151.1372 0012245 153.4973 206.6842 14.30223383371283
GPS BII-06
1 20452U 90008A 97056.54955606 .00000008 00000-0 10000-3 0 2813
2 20452 54.0543 156.4448 0065071 93.1817 267.5865 2.00556322 51893
MOS-1B
1 20478U 90013A 97061.23965241 .00000024 00000-0 51669-4 0 290
2 20478 99.1026 133.2096 0004733 267.4364 92.6251 13.93972811280507
DEBUT
1 20479U 90013B 97059.52180389 -.00000017 00000-0 41729-4 0 471
2 20479 99.0275 41.8606 0539760 262.8886 91.0570 12.83349466330780
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
MOS-1B R/B
1 20491U 90013D 97060.67839929 .00000574 00000-0 11395-2 0 3232
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2 20491 99.0487 115.7991 0470661 51.4053 312.8253 13.02998861335394
LACE
1 20496U 90015A 97061.51444867 .00001948 00000-0 61617-4 0 7331
2 20496 43.1009 167.9287 0012496 296.1561 63.8005 15.36444281393557
Nadezhda 2
1 20508U 90017A 97063.11616019 .00000030 00000-0 16399-4 0 886
2 20508 82.9508 51.4322 0045216 4.5675 355.5876 13.73518408351571
OKEAN 2
1 20510U 90018A 97062.83205772 .00000189 00000-0 22609-4 0 5665
2 20510 82.5251 344.5651 0017984 183.1927 176.9177 14.78671338378049
GPS BII-07
1 20533U 90025A 96353.12701437 -.00000065 00000-0 00000+0 0 2950
2 20533 54.4343 279.6053 0040336 77.6117 282.8589 2.00570188 49270
PegSat
1 20546U 90028A 97062.73003634 .00009477 00000-0 15578-3 0 375
2 20546 94.1200 140.7089 0056705 78.6006 282.1609 15.50543957385170
HST
1 20580U 90037B 97060.92090857 .00000455 00000-0 33835-4 0 9367
2 20580 28.4687 2.3041 0014689 159.1365 200.9822 14.86419794177078
MACSAT 2
1 20608U 90043B 97061.34725367 .00000205 00000-0 32811-4 0 2519
2 20608 89.9288 171.1624 0103130 233.0364 126.1375 14.64979538364085
Glonass 44
1 20619U 90045A 97062.58112979 -.00000013 00000-0 10000-3 0 3748
2 20619 65.0742 315.0582 0031324 204.5408 155.4185 2.13102401 52835
Glonass 45
1 20620U 90045B 97061.76133971 -.00000016 00000-0 10000-3 0 3512
2 20620 65.0688 315.0798 0008760 40.9195 319.2086 2.13102519 52850
Glonass 46
1 20621U 90045C 97060.89033065 -.00000018 00000-0 10000-3 0 9663
2 20621 65.0930 315.1674 0010882 194.6743 165.3527 2.13102656 52839
Kristall
1 20635U 90048A 97059.91170272 -.00002321 00000-0 -21150-4 0 6233
2 20635 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514384079
ROSAT
1 20638U 90049A 97059.88117194 .00000237 00000-0 34212-4 0 6377
2 20638 52.9917 222.9470 0012781 178.9905 181.1115 15.07558985371033
Meteor 2-19
1 20670U 90057A 97063.21491350 .00000038 00000-0 20887-4 0 2258
2 20670 82.5477 141.3585 0014333 244.6303 115.3371 13.84125393337714
CRRES
1 20712U 90065A 97057.24239495 .00000123 00000-0 32966-3 0 3986
2 20712 17.7463 146.6125 7180271 209.7563 75.8803 2.35845277 49114
GPS BII-08
1 20724U 90068A 97062.25770018 .00000018 00000-0 00000+0 0 1824
2 20724 55.0927 98.2437 0140004 189.6830 170.1153 2.00563936 46644
Feng Yun1-2
1 20788U 90081A 97062.91035754 .00000109 00000-0 10000-3 0 2640
2 20788 98.8189 65.4822 0014343 129.7658 230.4771 14.01413479332477
Meteor 2-20
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1 20826U 90086A 97059.33755494 .00000070 00000-0 50013-4 0 565
2 20826 82.5246 80.5116 0013686 154.4286 205.7627 13.83647440324268
GPS BII-09
1 20830U 90088A 97058.32203774 -.00000026 00000-0 00000+0 0 1490
2 20830 56.0821 41.1226 0064975 93.5011 267.2525 2.00571347 47204
GPS BIIA-10
1 20959U 90103A 97062.21781393 .00000017 00000-0 00000+0 0 1524
2 20959 55.2790 100.3728 0113998 240.7644 118.1589 2.00570925 45871
DMSP B5D2-5
1 20978U 90105A 97063.10834070 .00000132 00000-0 62125-4 0 9827
2 20978 98.5691 137.7391 0079975 122.4880 238.4069 14.32725908326935
Glonass 47
1 21006U 90110A 97 62.32143888 -.00000020 00000-0 10000-3 0 9291
2 21006 65.2756 75.9475 0056994 190.7669 169.1474 2.13102846 48539
Glonass 48
1 21007U 90110B 97062.04518286 .00000049 00000-0 10000-3 0 593
2 21007 65.3217 76.0449 0033192 175.7991 184.2642 2.13101093 48518
Glonass 49
1 21008U 90110C 97 62.41199852 -.00000023 00000-0 10000-3 0 3292
2 21008 65.2781 75.9673 0010350 269.1494 90.7686 2.13099084 48513
AO-21
1 21087U 91006A 97062.87242235 .00000094 00000-0 82657-4 0 7938
2 21087 82.9414 129.5292 0034265 199.9106 160.0715 13.74578328305683
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2 21152 82.9258 313.2933 0042333 341.9221 18.0426 13.73543916299427
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2 21217 64.8326 314.6676 0012100 230.8246 129.1044 2.13101722 45971
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2 21218 64.8015 314.5584 0008534 331.8147 28.2120 2.13102553 46004
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2 21655 82.5550 139.4603 0012375 253.1734 106.8035 13.16851178266407
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Glonass 53
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2 21853 65.2505 75.6426 0007024 210.1069 149.9007 2.13102261 39613
Glonass 54
1 21854U 92005B 97060.20212625 .00000037 00000-0 00000+0 0 4183
2 21854 65.2537 75.6545 0016099 9.7466 350.3320 2.13104762 39586
Glonass 55
1 21855U 92005C 97063.08793102 .00000054 00000-0 00000+0 0 3916
2 21855 65.2515 75.5608 0007937 207.1666 152.8451 2.13102064 39638
JERS-1
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2 21890 53.7216 215.9603 0063751 200.9877 158.7827 2.00553783 36850
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2 22012 81.6704 208.5579 0118963 54.2110 307.0094 14.91869004253445
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2 22014 54.8254 158.1465 0200016 323.8083 34.8627 2.00563446 27622
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Glonass 58
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TOPEX
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Glonass 59
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Glonass 60
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Glonass 61
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2 22514 65.2845 75.5787 0010358 200.5346 159.4766 2.13102129 31331
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UFO F1
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Meteor 2-21
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UFO F2
1 22787U 93056A 97056.16030174 -.00000078 00000-0 00000+0 0 7081
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SPOT 3
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TUBSAT-B
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1 23027U 94016A 97061.02614936 -.00000061 00000-0 00000+0 0 4978
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Glonass 63
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Glonass 64
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MSTI 2
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STRV-1B
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Nadezhda 4
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RESURS 1-3
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1996010E
1 23824U 96010E 97059.52643957 .00092928 00000-0 19067-1 0 1790
2 23824 47.4058 176.6360 6870130 98.1878 338.5398 2.81614842 8669
GPS BIIA-25
1 23833U 96019A 97061.16201363 -.00000061 00000-0 00000+0 0 1538
2 23833 54.6336 337.4855 0026815 142.7675 217.4397 2.00565550 6857
Priroda
1 23848U 96023A 97059.91170272 -.00002321 00000-0 -21150-4 0 2732
2 23848 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514 48648
MSX
1 23851U 96024A 97062.91544962 -.00000837 00000-0 -56253-3 0 2003
2 23851 99.4083 53.9583 0007287 158.7595 201.4023 13.97388239 43777
SAX
1 23857U 96027A 97054.17028323 .00001119 00000-0 35293-4 0 540
2 23857 3.9558 81.9871 0014469 36.4642 323.9668 14.91735573 44684
MSTI 3
1 23868U 96031A 97061.55078558 .00002361 00000-0 48940-4 0 1197
2 23868 97.1152 253.5262 0009294 318.3389 41.7153 15.46700518 44745
TOMS-EP
1 23940U 96037A 97062.88131599 .00002953 00000-0 13199-3 0 919
2 23940 97.4257 331.1347 0012428 147.9948 212.2049 15.22053710 37124
GPS BIIA-26
1 23953U 96041A 97062.07679513 .00000017 00000-0 00000+0 0 1162
2 23953 55.1280 97.9033 0015844 21.3616 338.7347 2.00552967 4664
ADEOS
1 24277U 96046A 97060.25165599 -.00000044 00000-0 00000+0 0 1474
```

```
2 24277 98.6065 139.4712 0001864 94.1136 266.0258 14.27643259 27964
FO-29
1 24278U 96046B 97060.73806057 -.00000028 00000-0 45758-5 0 611
2 24278 98.5560 116.5592 0352071 104.5848 259.4589 13.52628847 26595
Soyuz TM-24
1 24280U 96047A 97059.91170272 -.00002321 00000-0 -21150-4 0 1772
2 24280 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514 30549
FAST
1 24285U 96049A 97060.48877499 .00001868 00000-0 18327-3 0 670
2 24285 82.9843 89.1098 2208143 183.1061 175.3962 10.81845652 20771
1996049B
1 24286U 96049B 97063.20064713 .00002078 00000-0 20148-3 0 792
2 24286 83.0014 87.9673 2207155 177.9897 183.2118 10.82265545 21061
Microsat
1 24291U 96050A 97063.21709812 .00040854 63807-5 28856-3 0 1492
2 24291 62.7952 124.8423 0574249 134.3985 230.5515 14.74460273 27412
MO-30
1 24305U 96052B 97061.54014310 .00000204 00000-0 20364-3 0 778
2 24305 82.9285 73.3917 0029835 139.0812 221.2586 13.73090648 24420
GPS BIIA-27
1 24320U 96056A 97058.94492152 .00000020 00000-0 00000+0 0 657
2 24320 54.6426 278.0750 0048781 93.7378 266.8945 2.00572062 3269
SAC-B/HETE
1 24645U 96061A 97061.56009901 .00000777 00000-0 46352-4 0 497
2 24645 37.9740 139.4634 0046694 161.2077 199.0423 15.14887009 17881
Progress M-33
1 24663U 96066A 97063.30562615 .00723532 00000-0 73130-2 0 1092
2 24663 51.6526 253.1104 0017434 144.7474 215.5734 15.62303020 16314
GE 2
1 24713U 97002A 97058.60000000 -.00000204 00000-0 00000+0 0 324
2 24713 0.0340 240.2950 0006579 280.3090 129.6210 1.00123195 291
NAHUEL 1A
1 24714U 97002B 97060.55376009 -.00000269 00000-0 00000+0 0 418
2 24714 0.0627 257.5188 0002400 148.3657 240.8327 1.00270787 313
1997002C
1 24715U 97002C 97062.41438237 .00003369 00000-0 10018-2 0 267
2 24715 7.3567 260.0791 7295657 209.2315 74.3187 2.26297734 717
1997002D
1 24716U 97002D 97053.72318099 .00044447 00000-0 54720-2 0 209
2 24716 6.9485 267.8484 7276808 198.0124 106.3431 2.30502781 529
Soyuz TM-25
1 24717U 97003A 97062.53717893 -.00000132 00000-0 47417-5 0 94
2 24717 51.6512 256.9703 0011271 136.4558 223.7387 15.60582276630530
1997003B
1 24718U 97003B 97044.09270681 .22144272 12761-4 19081-3 0 244
2 24718 51.6110 348.9966 0007906 69.9357 290.4334 16.51368987 418
Haruka
1 24720U 97005A 97059.46406327 -.00000075 00000-0 -20803-3 0 102
2 24720 31.3271 242.2879 5997265 117.3034 314.9693 3.79358156 620
1997005B
```

```
1 24721U 97005B 97058.52877378 .00020773 00000-0 18264-2 0 121
2 24721 31.3124 242.3718 6156889 116.7691 317.6100 3.84576234 597
Cosmos 2337
1 24725U 97006A 97060.21457812 .00000011 00000-0 00000+0 0 143
2 24725 82.5964 218.4374 0006643 184.1658 175.9371 12.61216429 1892
Cosmos 2338
1 24726U 97006B 97060.22286215 .00000011 00000-0 00000+0 0 120
2 24726 82.6068 218.4611 0010302 190.6915 169.3955 12.60520781 1891
Cosmos 2339
1 24727U 97006C 97060.51360483 .00000011 00000-0 00000+0 0 112
2 24727 82.5946 218.2183 0003224 41.5245 318.6091 12.62723927 1948
Gonets-D1 4
1 24728U 97006D 97062.87754526 .00000011 00000-0 00000+0 0 142
2 24728 82.6024 216.7015 0007152 13.2537 346.8742 12.63656919 2201
Gonets-D1 5
1 24729U 97006E 97062.89825124 .00000011 00000-0 00000+0 0 148
2 24729 82.6031 216.7203 0001676 193.5474 166.5573 12.62177325 2203
Gonets-D1 6
1 24730U 97006F 97059.96497614 .00000011 00000-0 00000+0 0 97
2 24730 82.6051 218.5881 0002007 117.8233 242.3061 12.62210191 1832
1997006G
1 24731U 97006G 97059.48960141 .00000010 00000-0 00000+0 0 128
2 24731 82.5964 218.9927 0041603 203.8247 156.0908 12.55181521 1776
JCSAT 4
1 24732U 97007A 97062.70957572 -.00000452 00000-0 00000+0 0 90
2 24732 0.3621 6.7350 6596307 167.2411 72.1872 0.86527869 87
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97062.78431434 -.00000227 00000-0 00000+0 0 174
2 24742 3.4236 356.9277 5354079 173.7578 36.7005 1.93449754 62
1997009B
1 24743U 97009B 97060.29949170 .00341263 -41902-6 16998-1 0 41
2 24743 6.8731 353.4140 7361745 177.3752 191.7744 2.21465814 08
ZEYA
1 24744U 97010A 97063.20671038 .00694762 00000-0 15897-1 0 20
2 24744 97.2762 330.3211 0031346 254.8354 104.9424 15.40069703 17
1997010B
1 24745U 97010B 97063.27281624 -.00000074 00000-0 00000+0 0 11
2 24745 97.2770 330.3106 0008496 103.6778 256.5408 15.31122317 30
1997010C
1 24746U 97010C 97063.27285650 -.00000074 00000-0 00000+0 0 15
2 24746 97.2739 330.2997 0010214 105.6644 254.5810 15.30811998 21
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

825. rs-16?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc28ea$85ce9d60$5e427fce@default>
Source record: 19579

Howdy from Helena, Montana (Bill KA7YA0) and I copied the following today
on 29.408 four different passes:

rs-16 p167 o206 n50 m12 l17 k92 j0 e1 h2 g0 f164 e9 d14 c6 b9 a9 rs-16

Could sure use some keps for this new bird.

Bill

826. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5fi7d5$oog@blackbird.afit.af.mil>
Source record: 19580

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

827. ARLK018 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk018.1997@arrl.org>
Source record: 19581
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK018
ARLK018 Keplerian data

ZCZC SK18
QST de W1AW
Keplerian Bulletin 18 ARLK018
From ARRL Headquarters
Newington, CT March 4, 1997
To all radio amateurs

SB KEP ARL ARLK018
ARLK018 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97063.11203868 .00000039 00000-0 25723-4 0 03471
2 18129 82.9271 316.4104 0011573 146.1671 214.0227 13.72375165485829
UO-11
1 14781U 84021B 97062.97143845 .00000088 00000-0 22680-4 0 09674
2 14781 97.8230 48.4768 0011838 345.6577 14.4288 14.69528412695804
RS-12/13
1 21089U 91007A 97062.99815043 .00000017 00000-0 19989-5 0 09742
2 21089 82.9214 356.6561 0027314 231.1718 128.7004 13.74077359304713
UO-14
1 20437U 90005B 97063.14021787 -.00000013 00000-0 11822-4 0 02733
2 20437 98.5253 147.0597 0011024 152.5866 207.5901 14.29950621371200
RS-15
1 23439U 94085A 97063.14860758 -.00000039 00000-0 10000-3 0 02227
2 23439 64.8184 322.6951 0152054 152.0814 208.8372 11.27525589090093
AO-16
1 20439U 90005D 97063.22847846 .00000006 00000-0 19116-4 0 492
2 20439 98.5429 149.8563 0011343 154.0469 206.1282 14.29999907371230
DO-17
1 20440U 90005E 97063.08495103 -.00000011 00000-0 12651-4 0 00543
2 20440 98.5430 150.4997 0011413 153.5065 206.6695 14.30142148371240
```

```
WO-18
1 20441U 90005F 97063.22038113 -.00000013 00000-0 11866-4 0 532
2 20441 98.5466 150.5488 0011855 154.2857 205.8926 14.30110281371266
LO-19
1 20442U 90005G 97063.19605185 -.00000013 00000-0 11554-4 0 509
2 20442 98.5481 151.1372 0012245 153.4973 206.6842 14.30223383371283
FO-20
1 20480U 90013C 97063.01059378 -.00000087 00000-0 -11513-3 0 09761
2 20480 99.0278 44.4406 0539822 255.5806 98.4823 12.83236367331218
AO-21
1 21087U 91006A 97063.16358571 .00000094 00000-0 82657-4 0 07965
2 21087 82.9414 129.3135 0034308 199.0357 160.9519 13.74578370305727
UO-22
1 21575U 91050B 97063.17938342 .00000008 00000-0 16944-4 0 7553
2 21575 98.3170 127.3657 0006967 202.0789 158.0098 14.37058934295402
KO-23
1 22077U 92052B 97062.93750422 -.00000037 00000-0 10000-3 0 06703
2 22077 66.0856 5.6063 0013777 238.9061 121.0601 12.86301001214218
KO-25
1 22828U 93061F 97063.18777151 -.00000008 00000-0 14162-4 0 5176
2 22828 98.5490 139.9954 0010273 169.0308 191.1122 14.28169325147223
IO-26
1 22826U 93061D 97063.19838984 -.00000002 00000-0 16459-4 0 05486
2 22826 98.5547 139.9338 0008860 185.6994 174.4086 14.27827849179100
AO-27
1 22825U 93061C 97063.15182455 .00000011 00000-0 21921-4 0 05597
2 22825 98.5525 139.6631 0008146 183.8834 176.2287 14.27719144179086
FO-29
1 24278U 96046B 97063.17906799 -.00000030 00000-0 27991-5 0 00764
2 24278 98.5559 118.6717 0352110 98.2523 265.8683 13.52628914026926
MO-30
1 24305U 96052B 97063.07040714 .00000204 00000-0 20364-3 0 00832
2 24305 82.9277 72.2590 0030177 134.5872 225.7719 13.73090892024634
Mir
1 16609U 86017A 97063.62578292 .00002550 00000-0 36443-4 0 986
2 16609 51.6509 251.4984 0011632 139.0835 221.0939 15.60589401630706

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
March 8, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

828. Re: Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970304103022.14812A-100000@oso.slonet.org>
Source record: 19582

This website does not even suggest a proper exposure for Hale-Bopp. It is an advertisement. Can someone suggest an exposure/ASA for the comet? All we need is something to get started! Cliff Buttschardt K7RR

On Tue, 4 Mar 1997, Larry Cochrane wrote:

> I have some nice amateur photos of HB on the Redwood City Public Seismic
> Network home page at http://psn.quake.net
>
> Regards,
> Larry Cochrane
> Redwood City, PSN
>
> Billy@NYI (nyip@mail.idt.net) wrote:
> : What's the best way to photograph Comet Hale-Bopp without
> : a telescope? What type of camera is best? What film should
> : you use? Lens? Aperture? Shutter speed? If you would like
> : to take some beautiful pictures of this "Comet of the Century"
> : with your camera, you'll find all the answers in the "Topic
> : of the Month" section of the New York Institute of
> : Photography (NYI) web site - free. It's just one of the
> : many fascinating photographic subjects you'll find there.
> : If you're interested, visit us at <www.nyip.com> - selected
> : by Yahoo Magazine as the Number-One web site in photography.
>
> : --
> : Billy Stone
> : NY Institute of Photography
> : nyip@mail.idt.net
>
> : --
> : NYI's web site at http://www.nyip.com features tips to help you
> : take better photos,answers to photo questions, contests you can
> : enter, information on our training videos and home-study courses.
>
>

829. Amateur Radio Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <331D04B1.1BAD@cyberramp.net>
Source record: 19583

http://www.geocities.com/colosseum/7859

830. Re: laser moon bounce

Newsgroup: rec.radio.amateur.space
Date: 1997-03-04 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970304174714.8714G-100000@oso.slonet.org>
Source record: 19584

There recently was a group of experimenters attempting to bounce laser signals off the moon. I lost track of the names or ham calls of this group. Can anyone refresh my memory! Cliff Buttschardt K7RR

831. rs-16 Preliminary Keps

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc2905$b10e2200$5e427fce@default>
Source record: 19585

```
RS-16
1 24744U 97010A 97063.14171552 -.00000087 00000-0 00000+0 0 18
2 24744 97.2755 330.2555 0029311 258.2979 101.3435 15.40033613 02
```

These were passed to me from Amast for the Zeya orbit with the rs-16 bird on the same launcher. They are preliminary as Amast will update when they firm things up.

Bill (KA7YAO)

832. Re: Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: cochrane@netcom.com
Message-ID: <cochraneE6JvDy.9Mn@netcom.com>
Source record: 19586

Not true on both accounts. If you would have look there is a link
called Details which as the following info.

Photo #1

Comet Hale-Bopp taken 2/18/97, 4:55am PST in Ben Lomond, CA.
200mm f4.0 lens, Nikon F2 camera,
15 minute exposure on ASA 400 color print film (Kodak Gold 400).
The camera was piggybacked on a small Celestron telescope which
has a motorized equatorial mount. I tracked on the nucleus.

Photo #2

Comet Hale-Bopp taken 2/18/97, 5:20am PST in Ben Lomond, CA.
50mm f1.4 lens, Nikon F2 camera,
1 minute exposure on ASA 400 color print film (Kodak Gold 400).

I did not take the photos, a friend did.

The orginal post was an advertisment, not mine.

Regards,
Larry Cochrane
Redwood City Public Seismic Network
(a group of amateur seismologists, not a company that does advertizing)

Clifford Buttschardt (cbuttsch@slonet.org) wrote:
: This website does not even suggest a proper exposure for Hale-Bopp. It is
: an advertisement. Can someone suggest an exposure/ASA for the comet? All
: we need is something to get started! Cliff Buttschardt K7RR

: On Tue, 4 Mar 1997, Larry Cochrane wrote:

: > I have some nice amateur photos of HB on the Redwood City Public Seismic
: > Network home page at http://psn.quake.net
: >
: > Regards,
: > Larry Cochrane
: > Redwood City, PSN
: >

833. Re: MIR on the air?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: fertree@pacbell.net
Message-ID: <5fist2$d50@news3.snfc21.pacbell.net>
Source record: 19587

"John D. Wilkins" <jwilkins@bucknell.edu> wrote:

>After a long hiatus from packet radio, I've been trying to
>monitor MIR again. I read in March QST that the downlink
>is at 145.800...but I haven't heard a peep. Is R0MIR/R0MIR-1 active?

>---
>John D. Wilkins, KC4SYX
Yes..I heard it on 145.8 over the weekend.

834. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970305062510_515664.456256_IHO78-17@CompuServe.COM>
Source record: 19588

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #76

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-3.compuserve.com (8.6.10/5.950515)
id BAA16415; Wed, 5 Mar 1997 01:24:55 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id WAA16956 for <ham-space-list@mailbox.ucsd.edu>; Tue, 4 Mar
1997 22:22:17 -0800 (PST)
Received: by noc.ucsd.edu; id RAA12181
sendmail 8.8.5/UCSD8.3
Tue, 4 Mar 1997 17:11:33 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id PAA07227
sendmail 8.8.5/UCSD8.3
Tue, 4 Mar 1997 15:12:39 -0800 (PST)
Message-Id: <199703042312.PAA07227@noc.ucsd.edu>
Date: Tue, 4 Mar 97 15:12:27 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #76
To: Ham-Space@ucsd.edu

Ham-Space Digest Tue, 4 Mar 97 Volume 97 : Issue 76

Today's Topics:
NORAD Two-Line Orbital Element Sets (TLE955)
RS-16? (2 msgs)
WeFAX APT

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Mar 1997 22:21:26 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE955)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system.

Element sets (also updated daily) and some documentation and software are
available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the
directory pub/space.

As a service to the satellite user community, the most current of these
elements are uploaded weekly to sci.space.news and rec.radio.amateur.space.
This week's elements are provided below.

****

- Current Two-Line Element Sets #955 -
Alouette 1
1 00424U 62049A 97061.20141524 .00000024 00000-0 17747-4 0 2712
2 00424 80.4635 29.1560 0024458 89.0949 271.2997 13.67888081717612
ATS 1
1 02608U 66110A 97056.09551378 -.00000121 00000-0 10000-3 0 41
2 02608 14.5516 350.1236 0006756 100.1368 259.9581 1.00287401 27408
ATS 3
1 03029U 67111A 97063.20590622 -.00000117 00000-0 10000-3 0 6262
2 03029 14.9068 356.9878 0012010 269.5746 224.3463 1.00273462107370
Starlette
1 07646U 75010A 97059.56641880 -.00000119 00000-0 19690-4 0 378
2 07646 49.8298 216.9981 0205906 357.1912 2.7811 13.82192732114420
LAGEOS
1 08820U 76039A 97061.60612892 .00000020 00000-0 00000+0 0 2680
2 08820 109.8342 114.5616 0043700 72.4420 288.1139 6.38664601230337
ETS-2
1 09852U 77014A 97053.25332272 -.00000288 00000-0 10000-3 0 1000
2 09852 13.5287 30.0925 0004829 153.8690 206.2140 1.00022465 20148
GOES 2
1 10061U 77048A 97 62.13250291 .00000000 00000-0 10000-3 0 8095
2 10061 12.6842 34.2343 0010310 139.6594 220.4249 1.00251398 17048
IUE
1 10637U 78012A 97062.44563046 .00000036 00000-0 10000-3 0 3673
2 10637 35.8852 79.4188 1348696 64.6064 2.3544 1.00080509 22533
GOES 3
1 10953U 78062A 97063.21634887 -.00000105 00000-0 10000-3 0 7860

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2 10953 11.7132 37.1286 0003036 242.8612 213.6723 1.00265117 21661
SeaSat 1
1 10967U 78064A 97060.38191377 -.00000017 00000-0 38977-4 0 5565
2 10967 107.9978 346.9387 0002840 277.7731 82.3087 14.38153479978427
Nimbus 7
1 11080U 78098A 97063.15909308 -.00000017 00000-0 21811-4 0 6535
2 11080 98.9132 278.2857 0009466 351.5663 8.5332 13.83686455927128
GOES 5
1 12472U 81049A 97053.08028703 .00000053 00000-0 10000-3 0 9846
2 12472 8.5953 47.7040 0005765 108.1145 252.0220 1.00314630 15606
Cosmos 1383
1 13301U 82066A 97061.20415702 .00000014 00000-0 -18208-6 0 5698
2 13301 82.9331 304.6203 0025942 249.0097 110.8279 13.68080317732655
LandSat 4
1 13367U 82072A 97061.69429523 .00000010 00000-0 11976-4 0 509
2 13367 98.0379 110.2417 0008205 56.9864 303.2122 14.57195250778180
DMSP B5D2-1
1 13736U 82118A 97061.54268758 .00000000 00000-0 18374-4 0 1874
2 13736 98.6222 251.7531 0009237 359.5884 0.5286 14.25820050737889
IRAS
1 13777U 83004A 97063.14052405 -.00000128 00000-0 -58532-4 0 5969
2 13777 98.9687 249.1600 0013474 98.7215 261.5469 13.99260903389721
Cosmos 1447
1 13916U 83021A 97061.88781069 .00000009 00000-0 -65452-5 0 6617
2 13916 82.9454 359.6895 0037710 148.7680 211.5723 13.74351705699271
TDRS 1
1 13969U 83026B 97062.17963448 -.00000299 00000-0 00000+0 0 7148
2 13969 9.3542 41.1813 0004084 285.6993 209.9277 1.00274717 23986
GOES 6
1 14050U 83041A 97062.28087078 -.00000009 00000-0 10000-3 0 6272
2 14050 7.4545 51.2052 0001542 41.8683 49.6616 1.00224831108792
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97061.56368770 .00000005 00000-0 11316-4 0 5942
2 14780 98.3003 124.8950 0001598 188.3517 171.7652 14.57068766691588
UO-11
1 14781U 84021B 97060.99682519 .00000097 00000-0 24266-4 0 9548
2 14781 97.8225 46.5834 0011830 352.0504 8.0511 14.69527990695511
Cosmos 1574
1 15055U 84062A 97062.92740101 .00000029 00000-0 14640-4 0 8612
2 15055 82.9532 54.3801 0027960 341.9062 18.1094 13.73645328636647
Cosmos 1602
1 15331U 84105A 97061.49527308 .00000256 00000-0 27145-4 0 5433
2 15331 82.5310 230.9975 0019570 169.7837 190.3773 14.84846178671300
ERBS
1 15354U 84108B 97062.10922201 -.00000190 00000-0 42953-5 0 2598
2 15354 56.9959 63.4576 0003869 53.0656 307.0725 14.95019893675567
NOAA 9
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1 15427U 84123A 97063.14738810 .00000097 00000-0 74560-4 0 582
2 15427 98.9150 133.7876 0014294 299.9574 60.0180 14.13841127630368
Mir
1 16609U 86017A 97 62.60122370 -.00002565 00000-0 00000+0 0 965
2 16609 51.6515 256.6561 0011243 140.0803 220.1677 15.60573453630547
SPOT 1
1 16613U 86019A 97060.40568357 -.00000044 00000-0 00000+0 0 394
2 16613 98.8010 133.5588 0000522 157.7572 202.3651 14.19990547256811
Cosmos 1766
1 16881U 86055A 97060.12710651 .00000256 00000-0 27900-4 0 4577
2 16881 82.5193 289.9223 0017651 205.8155 154.2183 14.83818683571945
EGP
1 16908U 86061A 97060.17569219 -.00000083 00000-0 10000-3 0 1579
2 16908 50.0137 286.9147 0011383 307.9491 52.0314 12.44415982148400
NOAA 10
1 16969U 86073A 97063.13623637 .00000006 00000-0 20696-4 0 9871
2 16969 98.5383 58.9374 0012850 320.6108 39.4137 14.25020906543627
MOS-1
1 17527U 87018A 97063.21788536 -.00000043 00000-0 00000+0 0 5208
2 17527 98.8999 125.0668 0019992 329.6024 30.3979 14.00419312511384
GOES 7
1 17561U 87022A 97063.23196003 -.00000173 00000-0 10000-3 0 3066
2 17561 3.5731 67.5888 0005285 321.0253 122.6310 1.00267855 19918
Kvant-1
1 17845U 87030A 97059.91170272 -.00002321 00000-0 -21150-4 0 9131
2 17845 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514564236
DMSP B5D2-3
1 18123U 87053A 97063.08576581 -.00000016 00000-0 14129-4 0 8250
2 18123 98.7652 255.0613 0013452 232.3923 127.6029 14.15467053501262
RS-10/11
1 18129U 87054A 97060.19574155 .00000052 00000-0 40271-4 0 3296
2 18129 82.9270 318.5652 0011462 154.0313 206.1421 13.72375102485422
Meteor 2-16
1 18312U 87068A 97062.19279602 .00000067 00000-0 46452-4 0 5471
2 18312 82.5589 146.6559 0011243 208.2582 151.7974 13.84092398482003
Meteor 2-17
1 18820U 88005A 97062.87097921 .00000025 00000-0 89176-5 0 1936
2 18820 82.5408 200.5123 0015635 279.7107 80.2291 13.84769546459467
DMSP B5D2-4
1 18822U 88006A 97063.02915985 .00000020 00000-0 26996-4 0 4743
2 18822 98.3808 248.6761 0006187 333.6502 26.4364 14.23218239471537
Glonass 34
1 19163U 88043A 97059.27337900 .00000031 00000-0 10000-3 0 1589
2 19163 65.3616 77.2114 0010729 147.2629 212.8320 2.13102346 67699
Glonass 36
1 19165U 88043C 97059.33066024 .00000032 00000-0 10000-3 0 5679
2 19165 65.3442 77.1598 0004390 325.6958 34.3233 2.13101860 68317
METEOSAT 3
1 19215U 88051A 97057.30187694 -.00000163 00000-0 00000+0 0 3068
2 19215 3.7807 66.4670 0004145 162.1118 198.1125 0.96948709 19647
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1 19274U 88056A 97063.24143126 .00000317 00000-0 36322-4 0 1586
2 19274 82.5113 28.1541 0020642 354.1648 5.9334 14.82585681467909
Meteor 3-2
1 19336U 88064A 97061.84595829 .00000051 00000-0 10000-3 0 5548
2 19336 82.5404 343.3893 0016101 314.0373 45.9373 13.16980637413520
Glonass 39
1 19503U 88085C 97 62.64634742 .00000018 00000-0 10000-3 0 4535
2 19503 65.5032 315.9745 0006998 162.3975 197.6636 2.13101990 65870
NOAA 11
1 19531U 88089A 97063.08761744 -.00000014 00000-0 17341-4 0 8764
2 19531 99.1671 93.6992 0010988 229.9406 130.0802 14.13122901435156
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97054.23688566 .00000022 00000-0 10000-3 0 6622
2 19749 65.3155 76.8865 0007078 257.0712 102.9115 2.13101550 63201
Glonass 41
1 19750U 89001B 97 62.26907928 -.00000048 00000-0 10000-3 0 5721
2 19750 65.3111 76.6977 0009250 247.7841 112.1544 2.13101695 63399
GPS BII-01
1 19802U 89013A 97 62.40809133 .00000132 00000-0 10000-3 0 3672
2 19802 55.4490 100.3395 0018302 188.7445 171.2573 2.00567124 58917
Akebono
1 19822U 89016A 97 62.77642462 .00010538 00000-0 57339-3 0 8792
2 19822 75.1021 332.5886 3720622 269.5414 48.8502 7.96478704187306
Meteor 2-18
1 19851U 89018A 97060.13884667 .00000058 00000-0 38691-4 0 5456
2 19851 82.5170 76.2041 0014161 342.1648 17.9013 13.84427303404385
MOP-1
1 19876U 89020B 97055.77239048 -.00000145 00000-0 00000+0 0 2483
2 19876 2.4924 70.7823 0017745 281.3985 78.9203 0.97110556 9070
TDRS 4
1 19883U 89021B 97 57.91732910 .00000000 00000-0 10000-3 0 3098
2 19883 0.3938 86.0013 0003217 227.1471 132.8290 1.00268762201661
GPS BII-02
1 20061U 89044A 97060.75259359 .00000033 00000-0 00000+0 0 3608
2 20061 54.0172 275.7568 0165223 222.0148 136.7545 2.00562978 56627
Nadezhda 1
1 20103U 89050A 97063.06205747 .00000043 00000-0 29175-4 0 899
2 20103 82.9580 277.0152 0039082 50.3397 310.1198 13.73874858384364
GPS BII-03
1 20185U 89064A 97060.45202617 .00000008 00000-0 00000+0 0 3993
2 20185 55.2421 100.7926 0017170 337.6088 22.4200 2.00554452 55190
GMS 4
1 20217U 89070A 97061.41473958 -.00000375 00000-0 10000-3 0 5288
2 20217 2.3156 73.8699 0000528 338.8563 16.1308 1.00255488 28006
INTERCOSMOS 24
1 20261U 89080A 97063.20600956 .00000106 00000-0 26048-4 0 5705
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2 20261 82.5928 104.6527 1242371 170.3247 192.4392 12.47390637338327
GPS BII-04
1 20302U 89085A 97062.61115717 .00000040 00000-0 10000-3 0 3789
2 20302 53.1853 215.3917 0028924 187.2553 172.7090 2.00572160 54039
Meteor 3-3
1 20305U 89086A 97062.22748129 .00000044 00000-0 10000-3 0 7664
2 20305 82.5565 305.5054 0007373 48.8865 311.2888 13.04437426351974
COBE
1 20322U 89089A 97060.52747069 .00000326 00000-0 23575-3 0 2860
2 20322 98.9328 77.3066 0009632 42.1159 318.0743 14.03466767373026
Kvant-2
1 20335U 89093A 97059.91170272 -.00002321 00000-0 -21150-4 0 8319
2 20335 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514413248
GPS BII-05
1 20361U 89097A 97062.13424628 -.00000011 00000-0 00000+0 0 1858
2 20361 56.1526 43.0463 0088157 140.8468 219.8115 2.00566551 43508
COSMOS 2054 (Altair-1)
1 20391U 89101A 97063.19797096 -.00000144 00000-0 00000+0 0 5183
2 20391 4.3343 61.8595 0001776 240.9532 274.6120 1.00271420 26607
SPOT 2
1 20436U 90005A 97062.92897850 -.00000044 00000-0 00000+0 0 1946
2 20436 98.7357 139.0516 0000914 49.7087 310.4169 14.20024029368702
UO-14
1 20437U 90005B 97059.29172566 .00000017 00000-0 23257-4 0 2509
2 20437 98.5247 143.2899 0010898 164.2469 195.9054 14.29950612370650
AO-16
1 20439U 90005D 97063.22847846 .00000006 00000-0 19116-4 0 492
2 20439 98.5429 149.8563 0011343 154.0469 206.1282 14.29999907371230
DO-17
1 20440U 90005E 97062.24539286 -.00000007 00000-0 14089-4 0 509
2 20440 98.5428 149.6753 0011319 156.1288 204.0424 14.30142140371129
WO-18
1 20441U 90005F 97063.22038113 -.00000013 00000-0 11866-4 0 532
2 20441 98.5466 150.5488 0011855 154.2857 205.8926 14.30110281371266
LO-19
1 20442U 90005G 97063.19605185 -.00000013 00000-0 11554-4 0 509
2 20442 98.5481 151.1372 0012245 153.4973 206.6842 14.30223383371283
GPS BII-06
1 20452U 90008A 97056.54955606 .00000008 00000-0 10000-3 0 2813
2 20452 54.0543 156.4448 0065071 93.1817 267.5865 2.00556322 51893
MOS-1B
1 20478U 90013A 97061.23965241 .00000024 00000-0 51669-4 0 290
2 20478 99.1026 133.2096 0004733 267.4364 92.6251 13.93972811280507
DEBUT
1 20479U 90013B 97059.52180389 -.00000017 00000-0 41729-4 0 471
2 20479 99.0275 41.8606 0539760 262.8886 91.0570 12.83349466330780
FO-20
1 20480U 90013C 97059.50208834 -.00000107 00000-0 -15905-3 0 9484
2 20480 99.0254 41.5954 0539556 263.5165 90.4199 12.83236647330767
MOS-1B R/B
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1 20491U 90013D 97060.67839929 .00000574 00000-0 11395-2 0 3232
2 20491 99.0487 115.7991 0470661 51.4053 312.8253 13.02998861335394
LACE
1 20496U 90015A 97061.51444867 .00001948 00000-0 61617-4 0 7331
2 20496 43.1009 167.9287 0012496 296.1561 63.8005 15.36444281393557
Nadezhda 2
1 20508U 90017A 97063.11616019 .00000030 00000-0 16399-4 0 886
2 20508 82.9508 51.4322 0045216 4.5675 355.5876 13.73518408351571
OKEAN 2
1 20510U 90018A 97062.83205772 .00000189 00000-0 22609-4 0 5665
2 20510 82.5251 344.5651 0017984 183.1927 176.9177 14.78671338378049
GPS BII-07
1 20533U 90025A 96353.12701437 -.00000065 00000-0 00000+0 0 2950
2 20533 54.4343 279.6053 0040336 77.6117 282.8589 2.00570188 49270
PegSat
1 20546U 90028A 97062.73003634 .00009477 00000-0 15578-3 0 375
2 20546 94.1200 140.7089 0056705 78.6006 282.1609 15.50543957385170
HST
1 20580U 90037B 97060.92090857 .00000455 00000-0 33835-4 0 9367
2 20580 28.4687 2.3041 0014689 159.1365 200.9822 14.86419794177078
MACSAT 2
1 20608U 90043B 97061.34725367 .00000205 00000-0 32811-4 0 2519
2 20608 89.9288 171.1624 0103130 233.0364 126.1375 14.64979538364085
Glonass 44
1 20619U 90045A 97062.58112979 -.00000013 00000-0 10000-3 0 3748
2 20619 65.0742 315.0582 0031324 204.5408 155.4185 2.13102401 52835
Glonass 45
1 20620U 90045B 97061.76133971 -.00000016 00000-0 10000-3 0 3512
2 20620 65.0688 315.0798 0008760 40.9195 319.2086 2.13102519 52850
Glonass 46
1 20621U 90045C 97060.89033065 -.00000018 00000-0 10000-3 0 9663
2 20621 65.0930 315.1674 0010882 194.6743 165.3527 2.13102656 52839
Kristall
1 20635U 90048A 97059.91170272 -.00002321 00000-0 -21150-4 0 6233
2 20635 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514384079
ROSAT
1 20638U 90049A 97059.88117194 .00000237 00000-0 34212-4 0 6377
2 20638 52.9917 222.9470 0012781 178.9905 181.1115 15.07558985371033
Meteor 2-19
1 20670U 90057A 97063.21491350 .00000038 00000-0 20887-4 0 2258
2 20670 82.5477 141.3585 0014333 244.6303 115.3371 13.84125393337714
CRRES
1 20712U 90065A 97057.24239495 .00000123 00000-0 32966-3 0 3986
2 20712 17.7463 146.6125 7180271 209.7563 75.8803 2.35845277 49114
GPS BII-08
1 20724U 90068A 97062.25770018 .00000018 00000-0 00000+0 0 1824
2 20724 55.0927 98.2437 0140004 189.6830 170.1153 2.00563936 46644
Feng Yun1-2
1 20788U 90081A 97062.91035754 .00000109 00000-0 10000-3 0 2640
2 20788 98.8189 65.4822 0014343 129.7658 230.4771 14.01413479332477
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Meteor 2-20
1 20826U 90086A 97059.33755494 .00000070 00000-0 50013-4 0 565
2 20826 82.5246 80.5116 0013686 154.4286 205.7627 13.83647440324268
GPS BII-09
1 20830U 90088A 97058.32203774 -.00000026 00000-0 00000+0 0 1490
2 20830 56.0821 41.1226 0064975 93.5011 267.2525 2.00571347 47204
GPS BIIA-10
1 20959U 90103A 97062.21781393 .00000017 00000-0 00000+0 0 1524
2 20959 55.2790 100.3728 0113998 240.7644 118.1589 2.00570925 45871
DMSP B5D2-5
1 20978U 90105A 97063.10834070 .00000132 00000-0 62125-4 0 9827
2 20978 98.5691 137.7391 0079975 122.4880 238.4069 14.32725908326935
Glonass 47
1 21006U 90110A 97 62.32143888 -.00000020 00000-0 10000-3 0 9291
2 21006 65.2756 75.9475 0056994 190.7669 169.1474 2.13102846 48539
Glonass 48
1 21007U 90110B 97062.04518286 .00000049 00000-0 10000-3 0 593
2 21007 65.3217 76.0449 0033192 175.7991 184.2642 2.13101093 48518
Glonass 49
1 21008U 90110C 97 62.41199852 -.00000023 00000-0 10000-3 0 3292
2 21008 65.2781 75.9673 0010350 269.1494 90.7686 2.13099084 48513
AO-21
1 21087U 91006A 97062.87242235 .00000094 00000-0 82657-4 0 7938
2 21087 82.9414 129.5292 0034265 199.9106 160.0715 13.74578328305683
RS-12/13
1 21089U 91007A 97061.90589165 -.00000000 00000-0 -16125-4 0 9602
2 21089 82.9210 357.4651 0027328 234.0291 125.8297 13.74077153304568
MOP-2
1 21140U 91015B 97057.01050943 -.00000002 00000-0 00000+0 0 3237
2 21140 1.0575 79.0761 0001223 213.4737 228.1453 1.00284034 24152
Nadezhda 3
1 21152U 91019A 97063.07460088 .00000050 00000-0 37901-4 0 7750
2 21152 82.9258 313.2933 0042333 341.9221 18.0426 13.73543916299427
Glonass 50
1 21216U 91025A 97 58.58532679 -.00000007 00000-0 10000-3 0 5812
2 21216 64.8464 314.6764 0007578 210.5423 149.4500 2.13102715 45960
Glonass 51
1 21217U 91025B 97 58.65801465 .00000027 00000-0 10000-3 0 9896
2 21217 64.8326 314.6676 0012100 230.8246 129.1044 2.13101722 45971
Glonass 52
1 21218U 91025C 97060.64462921 -.00000018 00000-0 10000-3 0 4604
2 21218 64.8015 314.5584 0008534 331.8147 28.2120 2.13102553 46004
GRO
1 21225U 91027B 97062.54744109 .00002911 00000-0 54242-4 0 4369
2 21225 28.4583 174.4104 0002503 271.7170 88.3143 15.44989969210071
Meteor 3-4
1 21232U 91030A 97061.24475763 .00000050 00000-0 10000-3 0 9612
2 21232 82.5383 190.3359 0012059 240.1017 119.8930 13.16474501281490
NOAA 12
1 21263U 91032A 97063.15087224 .00000021 00000-0 28322-4 0 2945
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2 21263 98.5429 80.6057 0011796 237.8580 122.1452 14.22692259301425
OKEAN 3
1 21397U 91039A 97059.54941171 .00000182 00000-0 22793-4 0 2582
2 21397 82.5243 262.6881 0021246 282.4986 77.3856 14.76552592309199
GPS BIIA-11
1 21552U 91047A 97062.98824850 -.00000018 00000-0 10000-6 0 1005
2 21552 56.3681 38.8353 0082160 273.3862 85.6522 2.00571478 41483
ERS-1
1 21574U 91050A 97060.55390774 -.00000044 00000-0 00000+0 0 4203
2 21574 98.5497 136.8912 0001196 80.8286 279.3034 14.32245361294286
UO-22
1 21575U 91050B 97063.17938342 .00000008 00000-0 16944-4 0 7553
2 21575 98.3170 127.3657 0006967 202.0789 158.0098 14.37058934295402
ORBCOMM-X
1 21576U 91050C 97061.22404418 .00000004 00000-0 15594-4 0 8502
2 21576 98.3150 123.0723 0002860 218.4309 141.6674 14.36476078294998
TUBSAT-A
1 21577U 91050D 97062.22940444 .00000025 00000-0 22748-4 0 7509
2 21577 98.3114 124.6699 0005479 212.5814 147.5033 14.36542271295177
SARA
1 21578U 91050E 97059.77000413 .00000216 00000-0 83391-4 0 9515
2 21578 98.3545 132.4964 0004246 208.3141 151.7817 14.39330755295245
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2 21639 0.0426 96.7310 0002743 199.4188 160.5706 1.00269029 20441
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1 21655U 91056A 97059.48446406 .00000051 00000-0 10000-3 0 9592
2 21655 82.5550 139.4603 0012375 253.1734 106.8035 13.16851178266407
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2 21701 56.9855 153.8298 0005307 100.0808 260.0824 14.96573928299061
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1 21798U 91082A 97063.14961334 .00000053 00000-0 51517-4 0 6508
2 21798 98.9300 86.4117 0012077 210.2111 149.8364 14.14024050271668
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1 21853U 92005A 97060.85665738 .00000041 00000-0 10000-4 0 1616
2 21853 65.2505 75.6426 0007024 210.1069 149.9007 2.13102261 39613
Glonass 54
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2 21854 65.2537 75.6545 0016099 9.7466 350.3320 2.13104762 39586
Glonass 55
1 21855U 92005C 97063.08793102 .00000054 00000-0 00000+0 0 3916
2 21855 65.2515 75.5608 0007937 207.1666 152.8451 2.13102064 39638
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2 21867 97.6646 142.4820 0001678 58.3528 301.7811 14.98686506276805
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1 22012U 92038A 97059.49781856 .00000301 00000-0 23553-4 0 7867
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1 22014U 92039A 97063.19217725 -.00000015 00000-0 00000+0 0 8682
2 22014 54.8254 158.1465 0200016 323.8083 34.8627 2.00563446 27622
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2 22057 64.6695 314.5311 0008636 328.5056 31.4978 2.13102628 35694
Glonass 58
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2 22058 64.6640 314.5377 0009405 292.4302 67.5377 2.13102732 35740
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2 22108 53.9490 216.8768 0119874 169.6578 190.6246 2.00549069 32801
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2 22161 62.9789 304.9823 0861952 39.4793 326.5865 13.21964279212600
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2 22513 65.2631 75.5113 0006977 215.3707 144.6328 2.13102654 31370
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2 22581 55.1319 337.5822 0066476 36.0357 324.4506 2.00570260 28799
GPS BIIA-20
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2 22657 55.1822 337.4153 0086730 227.7715 131.5231 2.00560133 24156
RADCAL
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GPS BIIA-21
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NOAA 13
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GPS BIIA-22
1 22779U 93054A 97060.89948235 .00000033 00000-0 10000-3 0 7143
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Meteor 2-21
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2 22782 82.5509 143.3204 0021105 344.6552 15.3798 13.83066721176685
UFO F2
1 22787U 93056A 97056.16030174 -.00000078 00000-0 00000+0 0 7081
2 22787 3.8719 328.5087 0004471 358.4568 318.6037 1.00268492 11365
SPOT 3
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2 22823 98.7280 137.8367 0016854 18.6734 341.5061 14.16988789177962
STELLA
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AO-27
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2 22828 98.5490 139.9954 0010273 169.0308 191.1122 14.28169325147223
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METEOSAT 6
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Meteor 3-6
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Glonass 62
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Glonass 63
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Glonass 64
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MSTI 2
1 23101U 94028A 97062.07077260 .00009150 00000-0 12881-3 0 4143
2 23101 97.0710 258.9046 0011831 78.2773 281.9807 15.56787492159537
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Nadezhda 4
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2 23317 82.5446 181.4794 0025896 324.7519 35.1977 14.74078917128575
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RESURS 1-3
1 23342U 94074A 97062.30550848 .00000069 00000-0 19455-4 0 6928
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Glonass 68
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LUCH (Altair-2)
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RS-15
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Helios 1A
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TDRS 7
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Glonass 74
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Glonass 77
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XTE
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GPS BIIA-25
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FO-29
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Soyuz TM-24
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2 24280 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514 30549
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Microsat
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SAC-B/HETE
1 24645U 96061A 97061.56009901 .00000777 00000-0 46352-4 0 497
2 24645 37.9740 139.4634 0046694 161.2077 199.0423 15.14887009 17881
Progress M-33
1 24663U 96066A 97063.30562615 .00723532 00000-0 73130-2 0 1092
2 24663 51.6526 253.1104 0017434 144.7474 215.5734 15.62303020 16314
GE 2
1 24713U 97002A 97058.60000000 -.00000204 00000-0 00000+0 0 324
2 24713 0.0340 240.2950 0006579 280.3090 129.6210 1.00123195 291
NAHUEL 1A
1 24714U 97002B 97060.55376009 -.00000269 00000-0 00000+0 0 418
2 24714 0.0627 257.5188 0002400 148.3657 240.8327 1.00270787 313
1997002C
1 24715U 97002C 97062.41438237 .00003369 00000-0 10018-2 0 267
2 24715 7.3567 260.0791 7295657 209.2315 74.3187 2.26297734 717
1997002D
1 24716U 97002D 97053.72318099 .00044447 00000-0 54720-2 0 209
2 24716 6.9485 267.8484 7276808 198.0124 106.3431 2.30502781 529
Soyuz TM-25
1 24717U 97003A 97062.53717893 -.00000132 00000-0 47417-5 0 94
2 24717 51.6512 256.9703 0011271 136.4558 223.7387 15.60582276630530
1997003B
1 24718U 97003B 97044.09270681 .22144272 12761-4 19081-3 0 244
2 24718 51.6110 348.9966 0007906 69.9357 290.4334 16.51368987 418
Haruka
1 24720U 97005A 97059.46406327 -.00000075 00000-0 -20803-3 0 102
2 24720 31.3271 242.2879 5997265 117.3034 314.9693 3.79358156 620
```

```
1997005B
1 24721U 97005B 97058.52877378 .00020773 00000-0 18264-2 0 121
2 24721 31.3124 242.3718 6156889 116.7691 317.6100 3.84576234 597
Cosmos 2337
1 24725U 97006A 97060.21457812 .00000011 00000-0 00000+0 0 143
2 24725 82.5964 218.4374 0006643 184.1658 175.9371 12.61216429 1892
Cosmos 2338
1 24726U 97006B 97060.22286215 .00000011 00000-0 00000+0 0 120
2 24726 82.6068 218.4611 0010302 190.6915 169.3955 12.60520781 1891
Cosmos 2339
1 24727U 97006C 97060.51360483 .00000011 00000-0 00000+0 0 112
2 24727 82.5946 218.2183 0003224 41.5245 318.6091 12.62723927 1948
Gonets-D1 4
1 24728U 97006D 97062.87754526 .00000011 00000-0 00000+0 0 142
2 24728 82.6024 216.7015 0007152 13.2537 346.8742 12.63656919 2201
Gonets-D1 5
1 24729U 97006E 97062.89825124 .00000011 00000-0 00000+0 0 148
2 24729 82.6031 216.7203 0001676 193.5474 166.5573 12.62177325 2203
Gonets-D1 6
1 24730U 97006F 97059.96497614 .00000011 00000-0 00000+0 0 97
2 24730 82.6051 218.5881 0002007 117.8233 242.3061 12.62210191 1832
1997006G
1 24731U 97006G 97059.48960141 .00000010 00000-0 00000+0 0 128
2 24731 82.5964 218.9927 0041603 203.8247 156.0908 12.55181521 1776
JCSAT 4
1 24732U 97007A 97062.70957572 -.00000452 00000-0 00000+0 0 90
2 24732 0.3621 6.7350 6596307 167.2411 72.1872 0.86527869 87
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97062.78431434 -.00000227 00000-0 00000+0 0 174
2 24742 3.4236 356.9277 5354079 173.7578 36.7005 1.93449754 62
1997009B
1 24743U 97009B 97060.29949170 .00341263 -41902-6 16998-1 0 41
2 24743 6.8731 353.4140 7361745 177.3752 191.7744 2.21465814 08
ZEYA
1 24744U 97010A 97063.20671038 .00694762 00000-0 15897-1 0 20
2 24744 97.2762 330.3211 0031346 254.8354 104.9424 15.40069703 17
1997010B
1 24745U 97010B 97063.27281624 -.00000074 00000-0 00000+0 0 11
2 24745 97.2770 330.3106 0008496 103.6778 256.5408 15.31122317 30
1997010C
1 24746U 97010C 97063.27285650 -.00000074 00000-0 00000+0 0 15
2 24746 97.2739 330.2997 0010214 105.6644 254.5810 15.30811998 21
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

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```

Date: 4 Mar 1997 19:32:00 GMT
From: dbcntcas@teleport.com (Dave Bernhardt)
Subject: RS-16?

Just heard the beacon from RS-16 this morning (~1915Z) a couple khz below
RS12's beacon. Very strong signal. Guess I missed the postings on this
new bird. I'll be looking for Kep's & freqs.
de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

Date: 4 Mar 1997 22:13:25 GMT
From: "William F. Erhardt" <erhardt@mt.net>
Subject: rs-16?

Howdy from Helena, Montana (Bill KA7YA0) and I copied the following today
on 29.408 four different passes:

rs-16 p167 o206 n50 m12 l17 k92 j0 e1 h2 g0 f164 e9 d14 c6 b9 a9 rs-16

Could sure use some keps for this new bird.

Bill

Date: Mon, 03 Mar 1997 20:05:45 -0500
From: Rich Griffiths <richg@one.net>
Subject: WeFAX APT

Rafael Garcia wrote:
>
> Hi all,
>
> I'm in the process to setup a station capable of WEFAX APT image
> receiving, at the 137 MHz band. But I have a doubt about what is the
> right receiver choice. I know that APT transmision is in FM mode, with
> the FAX signal AM modulated. The problem is if with a simple modified
> transceiver (TS-790, IC-821) for that band will be enough. In fact, the
> question: is it enough FM narrow (5 kHz voice channel) to get the data?

5kHz is not nearly wide enough. You need 50kHz, though some people claim
the 40 kHz works OK for them. Most APT users seem to have special wxsat
receivers made by Quorum, Spectrum (Timestep), etc. I use a Timestep
receiver, demodulator board, and software.

>
> I've got a DSP-2232 multi-mode controller and IC-821. The software is
> something called "wefax256" by AEA. I have had unsuccesful results with
> that software, and I'm thinking in JVFAX or the like, with serial input.

WEFAX generally refers to the fax images sent on HF frequencies. Here in
the U.S., geostationary satellite images are rebroadcast on 8080 kHz (for

example). I think that is what your AEA software is designed for. I use
JVFAX myself with a Hamcomm interface to receive those images.

You can use JVFAX for the the 137-MHz satellite transmissions, but you'll
need a more sophisticated demodulator than the Hamcomm circuit.

>
> I'll appreciate any input about this.
> Thanks in advance,
>
> --
> Rafael,
> Madrid (Spain)

I strongly recommend that you get a good book on the subject or find
someone who is already experienced with APT if you want to get into receiving
images directly from the satellites. A good book (in English) is the
"Weather Satellite Handbook" by Ralph Taggart.

Good luck.

Rich

End of Ham-Space Digest V97 #76
****

835. RS-16?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc2923$92dbbe00$6dc56cce@default>
Source record: 19589

Rumours circulate about RS-16 having been launched. Details anyone? Keps?

73 de VE7MDL ....Erik.

836. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970305125708_515664.456256_IHH44-41@CompuServe.COM>
Source record: 19590

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #78

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-2.compuserve.com (8.6.10/5.950515)
id HAA11983; Wed, 5 Mar 1997 07:56:49 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA29554 for <ham-space-list@mailbox.ucsd.edu>; Wed, 5 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05945
sendmail 8.8.5/UCSD8.3
Wed, 5 Mar 1997 04:31:19 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05913
sendmail 8.8.5/UCSD8.3
Wed, 5 Mar 1997 04:31:14 -0800 (PST)
Message-Id: <199703051231.EAA05913@noc.ucsd.edu>
Date: Wed, 5 Mar 97 04:31:11 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #78
To: Ham-Space@ucsd.edu

Ham-Space Digest Wed, 5 Mar 97 Volume 97 : Issue 78

Today's Topics:
laser moon bounce
MIR on the air?

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 4 Mar 1997 17:49:37 -0800
From: Clifford Buttschardt <cbuttsch@slonet.org>
Subject: laser moon bounce

There recently was a group of experimenters attempting to bounce
laser signals off the moon. I lost track of the names or ham calls of
this group. Can anyone refresh my memory! Cliff Buttschardt K7RR

Date: Wed, 05 Mar 1997 04:30:39 GMT
From: fertree@pacbell.net (Gus Treewater)
Subject: MIR on the air?

"John D. Wilkins" <jwilkins@bucknell.edu> wrote:

>After a long hiatus from packet radio, I've been trying to
>monitor MIR again. I read in March QST that the downlink
>is at 145.800...but I haven't heard a peep. Is R0MIR/R0MIR-1 active?

>---
>John D. Wilkins, KC4SYX
Yes..I heard it on 145.8 over the weekend.

End of Ham-Space Digest V97 #78
****

837. Re: laser moon bounce

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaE6Kq47.20I@netcom.com>
Source record: 19591

In article <Pine.GSO.3.95.970304174714.8714G-100000@oso.slonet.org> Clifford Buttschardt <cbuttsch@slonet.org> writes:
>There recently was a group of experimenters attempting to bounce
>laser signals off the moon. I lost track of the names or ham calls of
>this group. Can anyone refresh my memory! Cliff Buttschardt K7RR
>

This work has been going on at McDonald Observatory in west Texas (near Marfa) since the Apollo moon missions. The astronauts left arrays of corner reflectors at the landing sites. (I think one or more of the lunokhods also carried retroreflectors.)

838. Re: RS-16?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaE6Kq96.2Cy@netcom.com>
Source record: 19592

In article <01bc2923$92dbbe00$6dc56cce@default> "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> writes:
>Rumours circulate about RS-16 having been launched. Details anyone? Keps?
>

>

1 24744U 97010A 97064.12259265 .00006736 00000-0 22804-3 0 66
2 24744 97.2838 331.1283 0009514 100.1948 260.0365 15.30873511 166

839. RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: Michael Lamanna <mustang@kickit.pgh.net>
Message-ID: <331D575F.33EE@kickit.pgh.net>
Source record: 19593

Does anyone know the freqs for rs-16 beacon?? I would also like the
uplink and downlinks
thanks
MIKE WA3O

840. Re: RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: jachim@netnet1.netnet.net
Message-ID: <5fk6ce$imf@laslo.netnet.net>
Source record: 19594

```
-----BEGIN PGP SIGNED MESSAGE-----

Michael Lamanna (mustang@kickit.pgh.net) wrote:
: Does anyone know the freqs for rs-16 beacon?? I would also like the
: uplink and downlinks
: thanks
: MIKE WA3O

Check out the amsat page at http://www.amsat.org.
They have pages for all current and planned satellites.

Matthew

- --

Signatures follow

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| mtj@usa.net WWW: http://netnet.net/~jachim
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger @netnet.net for PGP keys

-----BEGIN PGP SIGNATURE-----
Version: 2.6.2
Comment: Encrypted email vastly preferred.

iQEVAwUBMx2eTwGqm95oP3QdAQGVOAf/R06jIsOP94Brk/0g+bnlVQx4mbwmHTNC
wKmXTxRwmS4LEaCGk8IQKkcaJOCZy8BvYkiulTDmTjhbTH115SR2W5Lg1mjS6Rsx
I7dLNYA1c65keUpGCSp+GdiqIZXqs9glUCKQrTGHuNfqqLdA3KktqCStx/8yh6iw
vHbahou7AD8exysw/qs+S10aMRZt2nSK/ok7eP3qMNPceZN9+S/XnKe7gcyoelrW
J8wqOFSTTP2BfoWgnelAwzaMbUAeccmYCJpk+2GUo6Za1xiSB9mIGu0n2u5r9vQe
gaeAxO1eVL2TyZ1GrSKMYygB2n9/Sw5OTWB+6lRe6PCucsjh9YrnQg==
=RbQE
-----END PGP SIGNATURE-----
```

841. Re: RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: William Horner <kd8ow@alpha.wcoil.com>
Message-ID: <331DB208.4260@alpha.wcoil.com>
Source record: 19595

Michael Lamanna wrote:
>
> Does anyone know the freqs for rs-16 beacon?? I would also like the
> uplink and downlinks
> thanks
> MIKE WA3O
try 29.408 MHz

842. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: wb4yuc
Message-ID: <5fju7m$qnp@lana.zippo.com>
Source record: 19596

In article <331c3fee.1396447@news.eindhoven.nl.net>, pa3cev_@_amsat.org says...
>
>
>logsat is a program which combines different
>functions.....logging/tracking sats and numbercrunching on
>antenna systems...
>being active on sats since 1978 and always wanting the best for
>this purpose I vote for Instant Track. It is still the fastest and has
>though its dos-based (runs ok in w95) a very nice and very to- the-
>point userinterface . Money goes to AMSAT, the guys who put the
>birds in space so you can use them for FREE!!!! yadayada .
>And as someone else posted: If you want windows no matter what
>use WISP. (also AMSAT).

There are better programs than WISP for tracking. WISP is really
intended for operating on the packet store and forward satellites.
WISP will also do station control.

For that purpose, it is great!

I would recommend contacting AMSAT and ask what they have available.
They had a really neat looking program out at the Miami Hamfest
for Windows 95.

73,

Bruce, WB4YUC

843. Re: Sat. Tracking program.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: mbrinkho@inetnebr.com
Message-ID: <5fkn8u$6es@owl.inetnebr.com>
Source record: 19597

J.H.M. Wosten (pa3cev_@_amsat.org) wrote:

: Logsat is certainly not professional, who the hell wants to calculate
: a 80 mtrs dipole when tracking a satellite? It's a compromise.

I'm not sure why having the ability to do antenna work makes the program a compromise. Admittedly, I see little reason to maintain that feature in the program, but the simple solution is "don't use it."

What features (present or not) related to satellite tracking do you dislike about the program?

Regarding the demo - the old one let you set your QTH for an 'eval' period (30 days or something), then reset to default after that. Seems reasonable to me, unless they've changed since then. (Also, if you've installed the demo before, and your 'eval' period has elapsed, LogSat may make an entry in the Registry and not allow you to "re-evalutate" the program.)

I still believe that LogSat is the best form/function combination in Sat tracking software... But I'm open to comments on other apps.

--
Matt C. Brinkhoff, KB0RXC
mbrinkho@inetnebr.com
http://incolor.inetnebr.com/mbrinkho
Lincoln, Nebraska [EN10]

844. ARLS006 RS-16 Satellite In Orbit

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls006.1997@arrl.org>
Source record: 19598
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS006
ARLS006 RS-16 Satellite In Orbit

ZCZC AS06
QST de W1AW
Space Bulletin 006 ARLS006
From ARRL Headquarters
Newington, CT March 5, 1997
To all radio amateurs

SB SPACE ARL ARLS006
ARLS006 RS-16 Satellite In Orbit

According to sources at AMSAT, a new Russian Amateur Radio satellite, designated RS-16, has been launched from the Svobodny Cosmodrome as part of a Zeya satellite package. RS-16 reportedly has an average orbital altitude of 276 miles, producing a footprint some 2000 miles in diameter on Earth.

On March 4, 1997, 1614 UTC, Jim White, WD0E, reported hearing strong signals from the RS-16 CW beacon on 29.408 MHz. Others in the US and Europe have reported strong signals on 10 meters. The transponders are not yet active. The twice-delayed launch had been expected as early as December. RS-16 is expected to be a Mode A (2 meters up/10 meters down) satellite, like RS-10 and RS-15. It's the first Russian satellite to have a 70-cm beacon, but the beacon there is not yet operational. Beacon frequencies are 29.408, 29.451, 435.504 and 435.548 MHz.

When the transponders are operational, the RS-16 frequencies are expected to be: uplink, 145.915 to 145.948 MHz, downlink, 29.415 to 29.448 MHz. Orbital elements and additional information will be announced as they become available.
NNNN
/EX

845. Re: RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-05 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5fkrrd$hk1$1@news.mhv.net>
Source record: 19599

In article <331D575F.33EE@kickit.pgh.net>, Michael Lamanna <mustang@kickit.pgh.net> wrote:
>Does anyone know the freqs for rs-16 beacon?? I would also like the
>uplink and downlinks
>thanks
>MIKE WA3O

Beacons: 29.408, 29.451
435.504, 435.548

Uplinks are from 145.915-145.948
Downlinks: 29.415-29.448

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

846. Re: Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: wb4yuc
Message-ID: <5fmho4$ct2@lana.zippo.com>
Source record: 19600

In addition to my previous post. The jpl web page has a section
on viewing hints and tips. there you will find an astrophotography
help section.

73,

Bruce, WB4YUC

again those URLs:

http://newproducts.jpl.nasa.gov/comet/
http://galileo.ivv.nasa.gov/comet/

847. Re: RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: dbcntcas@teleport.com
Message-ID: <dbcntcas-0603970819120001@ip-pdx04-27.teleport.com>
Source record: 19601

Yes, beacon is 29.408, uplink is 145.915-.948, downlink 29.415-.448. Keps are not complete yet, but period is about 93 minutes with an altitude of about 450-500km.
de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

848. Re: RS-16 BEACON

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: mtjachim@mtu.edu
Message-ID: <5fn5dv$gc2@colossus.csl.mtu.edu>
Source record: 19602

Dave Bernhardt (dbcntcas@teleport.com) wrote:
: Yes, beacon is 29.408, uplink is 145.915-.948, downlink 29.415-.448. Keps
: are not complete yet, but period is about 93 minutes with an altitude of
: about 450-500km.
: de Dave, N7DB (CN85)

I heard it today. Very strong signal! I had a bit of a hard time copying
it though. RS-12 was up at the same time, and its beacon is also on 29.408.
You'd be amazed at what a KAM will spit out trying to decode two
simultaneous CW signals. :)

Matthew
--

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtjachim@mtu.edu Voice: 906-487-0899 Pager: 906-222-9880
| WWW: http://jachsys.resnet.mtu.edu
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

849. Re: WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970306204900.PAA27454@ladder01.news.aol.com>
Source record: 19603

hi
check out:
http://members.aol.com/jkktl/ham.htm

good wxsat page with lots of info links!

850. Re: Hale-Bopp photo tips

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: WB4YUC
Message-ID: <5fmgs0$bg3@lana.zippo.com>
Source record: 19604

In article <cochraneE6JvDy.9Mn@netcom.com>, cochrane@netcom.com says...
>
Can someone suggest an exposure/ASA for the comet? All
>: we need is something to get started! Cliff Buttschardt K7RR
>
I would suggest going over to the Hale-Bopp comet page
at JPL or it's mirror site.

They have over 1100 pictures posted, you should be able to
get an idea of what to expect there.

The URLs:

http://newproducts.jpl.nasa.gov/comet/

http://galileo.ivv.nasa.gov/comet/

73,

Bruce, WB4YUC

851. Radio Meteor Obs. Bull. Feb. 1997 + more Quadrantids

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.110.331F4780@vvs.innet.be>
Source record: 19605

Radio Meteor Observation Bulletin No. 43 March 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

February 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Feb	UT									
1997	21h	22	23	00	01	02	03	04	05	06	07
1- 2	11	22	21	26	31	31	&	&	&	&	&
2- 3	5	23	20	21	&	&	&	&	&	&	
3- 4	-	37	&	&	&	&	&	&	&	&	
4- 5	5	18	27	&	&	&	&	&	&	&	
5- 6											
6- 7	19	26	28	25	37	39	49	30	38	43	31
7- 8	9	26	33	23	38	35	39	39	&	&	&
8- 9	12	21	34	25	25	38	39	43	34	42	33
9-10	20	21	22	&	22	9	&	&	&	&	&

```
10-11 | 10 24 42 & & & & & 46 57 33
11-12 | 8 26 36 27 25 38 & & & & &
12-13 | 13 19 26 31 21 & 58 49 & & &
13-14 |
14-15 |
15-16 | 29 32 14 37 25 25 49 39 37 45 32
16-17 | 8 10 24 15 12 26 24 24 26 33 37
17-18 | 5 14 8 19 15 24 30 58 24 29 29
18-19 | 8 10 17 8 14 15 15 21 30 51 20
19-20 | 3 14 15 18 21 20 53 23 24 28 25
20-21 | 4 16 16 10 12 19 22 40 29 32 26
21-22 | 9 18 19 21 26 18 22 32 28 16 20
22-23 | 6 16 22 38 35 18 9 29 33 22 30
23-24 | 1 18 11 8 & & & & & & &
24-25 | 28 25 29 31 38 26 29 27 41 & &
25-26 | 24 32 35 43 38 43 44 & & & &
------+----------------------------------------------------
1997 | 21h 22 23 00 01 02 03 04 05 06 07
Feb | UT
```

Notes:
. & hardware trouble, causing communication buffer overflow.
. local time = UT + 1 hour.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 degs
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic E.

| Jan 1997 | 10x % reflec. time | horiz: day | vert: time |

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+--
0 | 32 22 63 41 52 42 26 36 26 27 28 21 21 28 31
1 | 52 35 41 54 37 25 28 33 36 50 42 39 27 15 35
2 | 34 28 45 44 45 36 28 43 34 52 47 46 25 16 34
3 | 35 44 68 101 42 53 39 40 40 56 66 48 47 34 42
4 | 49 77 66 55 50 71 56 46 55 54 58 68 51 42 58
5 | 37 31 42 72 43 54 40 39 55 37 36 87 55 28 47
6 | 33 18 23 67 51 48 23 38 29 14 20 56 31 25 30
7 | 37 41 30 56 59 51 53 35 38 26 34 52 19 26 52
8 | 43 64 34 67 62 32 40 27 67 58 9 42 16 18 30
9 | 45 51 432 75 58 29 19 24 56 15 15 43 4 27 25
10 | 54 39 447 46 61 19 25 17 22 10 21 72 7 19 29
11 | 33 28 659 43 47 28 32 24 35 14 28 51 4 23 22
12 | 28 36 492 46 41 17 18 43 14 10 22 49 18 31 18
13 | 53 36 304 33 32 21 16 21 15 16 14 50 12 12 11
14 | 37 14 194 42 25 12 8 11 9 15 18 55 7 11 16
15 | 44 17 211 29 15 17 15 7 9 6 8 24 13 7
16 | 11 10 188 22 21 9 8 13 6 7 7 20 9 7
17 | 9 17 142 19 17 12 22 7 8 8 10 11 6 10
18 | 13 17 113 12 17 14 13 11 15 2 9 16 5 7 8
19 | 23 26 88 18 23 15 24 14 13 10 12 24 4 7 4
20 | 28 22 44 27 31 25 35 22 14 2 26 22 8 16 19
21 | 46 37 91 35 27 54 26 45 21 24 24 37 11 19 21
22 | 24 33 82 39 32 37 38 41 17 21 35 25 9 29 23
23 | 21 62 60 35 46 47 41 39 35 14 31 29 9 23 26
---+--
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

| Jan 1997 | 10x % reflec. time | horiz: day | vert: time |

| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+---
0 | 20 23 30 15 22 27 13 24 29 24 18 27 16 23 25 26
1 | 32 46 39 27 18 24 26 22 25 30 22 24 17 20 24 43
2 | 32 29 27 28 25 56 22 37 33 33 28 21 22 42 35 39
3 | 53 37 39 52 35 33 34 41 50 45 22 32 29 43 34 23
4 | 51 61 46 65 62 56 46 41 47 38 46 41 36 38 38 38
5 | 25 30 32 56 45 40 53 61 34 25 32 42 50 41 28 44
6 | 36 32 50 73 71 35 47 43 39 21 30 38 40 36 21 31
7 | 30 39 51 64 31 25 40 37 27 22 23 32 34 56 14 18
8 | 27 30 66 39 32 26 34 28 12 50 35 32 39 25 17 22
9 | 27 24 86 53 22 25 21 22 26 42 10 32 23 17 30
10 | 23 20 43 49 25 55 26 18 37 24 10 34 33 19 14
11 | 25 23 44 31 47 26 30 9 42 46 22 21 33 16 15
12 | 30 9 53 35 20 19 20 18 16 43 13 13 23 22 42
13 | 11 12 41 21 16 18 15 6 18 26 29 10 7 9 14 10
14 | 7 18 21 18 6 19 4 11 16 11 4 15 13 6 13
15 | 7 22 60 6 4 7 9 5 8 8 14 18 3 5 3

```
16 | 13 5 14 30 7 13 7 11 9 7 9 9 2 3 1
17 | 7 11 26 9 27 14 9 6 10 10 6 6 10 10 3
18 | 9 10 8 13 15 11 4 8 9 8 7 8 9 8 4
19 | 21 9 20 22 15 8 18 10 11 17 14 7 14 15 12 5
20 | 21 25 17 18 21 26 15 12 20 24 15 8 19 14 12 8
21 | 16 49 31 29 27 26 25 21 22 13 15 14 39 25 19 7
22 | 27 27 40 24 29 22 24 24 26 19 29 17 18 16 46 9
23 | 38 31 26 24 16 21 21 25 18 19 24 23 26 32 30 6
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

. nice observation of the Quadrantids maximum on Jan 3, around 11h UT.

Pierre De Groote / comments by Chris Steyaert

```
Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitter: 30 kW TV video carrier in Arezzo, Italy, distance 400 km,
direction south. Several high mountains in transmitter
direction prevent direct and tropospheric reception. This
transmitter is available for 24 hours (!).
Observing method: automatic setup using FFTDSP42t software by AF9Y to record
the audio signal. 20 channels of 2 Hz width are used for meteor
identification, pictures with interference are manually rejected.
More details see <http://www.net4you.co.at/user/kuneth/info.html>

All counts below are corrected for a full hour observing time. If the
availability of the data is 20-40 minutes, a dot is shown after the value.
Data for less than 20 minutes obs. time are not shown here.

Counts of reflections longer than 6.5 seconds (assumed to be overdense):

| Feb 1997
UT | 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
----+------------------------------------------------------------
0 | 4 7 2 0 0. 1 2 0 3 4 3 4 3 2 3 0 1
1 | 3 2 0 1 5 2 1 0 3 1 3 4 1 3 1 2 1
2 | 3 2 4 4 1 2 1 1 1 3 3 0 5 5 4 0 1
3 | 2 2 5 5 3 2 6 2 3 1 3 4 4 4 4 5 0
4 | 7 3 4 1 2 2 1 1 2 0 0 6 6 2 4 2 0.
5 | 2 0 2 0 2 2 0 4 2 5 3 5 1 6 2.
6 | 8 5 2 1 4. 2 8 2 4 1 4 2 6 4 4 1
7 | 3 4 3 3 5 8 3 8 2 4 6. 10 9 2
8 | 3 2 12 5 4 5 10 1 1 3 8 3 6 1
9 | 2 4 5 1 6 12 12. 1 6 5 10 2 14 1
10 | 7 8 10 4 10 5 2 4 4. 4 5 3 6 3
11 | 1 2 4 3 0 4 0 1 4. 5 5 4 3 4
12 | 1 6 3. 3 5 0 0 2 2. 2 0 4
13 | 1 2 0 1 3 1 2 2. 1 0 1
```

```
14 | 5 2 4. 0 2 0 0. 1 2. 1 0 1 0
15 | 0 1 0 1 0 0 2. 3. 1 0.
16 | 0 0 0 0. 2. 0.
17 | 0 1 1 0 0. 2
18 | 0. 0. 0 0 0
19 | 4 0 0. 0 0 0
20 | 0 0. 0. 0 1 1 0 0 0 0 0.
21 | 2 1 0 4 0 1 0 1 0 0 1 0 1
22 | 0 1 4 1 3 1 0 1 1 0 0 1 0 2
23 | 2. 2 1 0. 0. 2 2 1 0 4 2 1 0 0 1 1
----+------------------------------------------------------------------
UT | 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
| Feb 1997
```

For comparison: The highest value (6.5+ seconds count) for the Quadrantids was 125 at Jan. 3.

Counts of 0.5 seconds length (shortest period available, assumed to be underdense):

```
| Feb 1997
UT | 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
----+------------------------------------------------------------------
0 |123,140,123,109,118,105,116, 88,105,114, 97,142,115,118, 97,128, 87
1 |159,157,151,128,129,139,144,100,137,137,148,173,161,193,141,148,145
2 |193,176,204,192,143,158,196,137,158,173,161,218,162,169,161,193,174
3 |210,164,170,188,179,150,199,162,183,159,172,258,197,222,162,199,162
4 |186,174,177,188,155,179,168,132,179,173,140,175,165,186,147,193,165
5 |139,136,164,150,137,135,162,137,162,131,151, , ,141,113,171,119
6 |149,137,166,142,105,151,139,115,136,117,117, ,127,166,126,150,141
7 |165,160,186, , ,129,141,117,127,126,162, ,128,138,151,153,142
8 |128,130,175, , ,123,156,130,151,127,132, ,155,133,159,170,149
9 |118,123,171, , ,102,120,127,140, 89, 86, ,113,136,141,179,151
10 |107,111,115, , , 90, 95, 87,144, 87, 72, ,120,128,120,129,124
11 | 60, 91, 85, , , 70, 82, 75, , 75,109, 92, 80, 70, 96,128,107
12 | 63, 83,110, , , 81, 58, 74, , 58, , 75, 85, 73, 90, ,102
13 | 62, 73, , 54, , 56, 72, , , 52, , 46, 65, 72, 83, , 76
14 | 62, 54, , 43, , 29, 54, 57, 67, 28, , 54, 52, 54, 45, , 42
15 | 40, 48, , 42, , 39, 41, 26, , , , , 36, 42, 30, , 47
16 | 37, , , 33, , , 31, , , , , 21, 24, , 27, ,
17 | 41, , , 26, , , 31, , 37, , , 23, 31, , , ,
18 | 31, , , 34, , , , , 42, , , 27, 28, , , ,
19 | 63, , , 42, , , 36, , 50, , , 42, 49, , , ,
20 | 91, 80, 74, 61, , , 60, , 70, 49, , 77, 84, 54, 76, ,
21 | ,123, 64, 78, 57, 83, 81, 68, 66, 63, , 85, 95, 68, 84, ,
22 | ,109, 78,109, 81, 99,100, 99, 82, 83,113,110, 83, 90,112, ,
23 |119,110,109,113,103,107, 95,111, 82, 87,114, 99, 97, 81,118, , 82
----+------------------------------------------------------------------
UT | 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
| Feb 1997
```

Notes:
. Summary for February 1997: not much meteor activity at all. The underdense counts show a significant dip at 05:00 - 06:00 UT, throughout the month. The underdense counts maximum is at 02:00 to 04:00 UT and the overdense maximum is at 08:00 to 10:00 UT, again throughout the month. Still looking for explanations.
. blank value means either few or no data available or interference.
. local time conversion: 1 hours ahead of UT (05h00 UT is 06h00 local)

Werfried Kuneth

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were recorded on a pen-recorder chart.

Feb 1997	UT 11 12 13 14 15 16 17 18 19 20 21 22	*(1) **(2)
1	6 8 10 15 14 10 11 19 11 17 15 15	10.5 14.7
2	4 12 8 15 14 17 17 19 12 11 13 18	11.7 15.0
3	5 8 11 14 15 16 15 12 19 9 12 12	11.5 13.2
4	3 9 13 12 19 20 18 18 13 17 12 14	12.7 15.3
5	12 10 17 15 14 14 17 13 9 13 12 17	13.7 13.5
6	8 11 21 18 12 17 15 16 17 14 9 10	14.5 13.5
7	8 8 16 14 11 14 20 13 11 11 18 19	11.8 15.3
8	6 16 14 11 11 14	12.0
9	17 16 12 18 11 13 17 20 10 12 17	14.8 14.8
10	10 16 14 10 19 16 18 16 17	14.2 17.0
11	7 10 14 11 20 11 13 20 15 12 12 13	12.2 14.2
12	11 11 11 24 11 11 21 12 22 13 13 13	13.2 15.7
13	11 14 16 11 14 13 12 12 10 12 10 8	13.2 10.7
14	7 13 15 13 7 11 11 15 14 12 12 12	11.0 12.7
15	9 9 17 15 8 8 15 14 14 18 17 16	11.0 15.7
16	11 10 14 11 8 18 15 15 10 12 16 12	12.0 13.3
17	7 15 14 13 17 9 11	12.5 11.0
18	10 12 12 14 20 11 14 17 16 9	12.0 14.5
19	5 10 10 12 14 10 13 15 17 11 13 9	10.2 13.0
20	6 11 14 12 15 18 11 14 12 10 17 11	12.7 12.5
21	5 9 17 14 14	11.8
22		
23	12 21 9 10 15 10 10 16 7	13.4 10.8
24	12 9 10 17 18 11 15 17 12 14 14 15	12.8 14.5
25	10 11 9 10 16 13 16 22 11 9 20 20	11.5 16.3
26	6 15 11 14 12 12 18 16 10 10 14 18	11.7 14.3
27	12 14 13 17 9 12 11 14 14 11 12 15	12.8 12.8
28	7 10 12 11 13 12 16 16 15 26 19 18	10.8 18.3

```
-----+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Feb | UT
```

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

- local time = JST = UT + 9 hours

Chikara Shimoda

Observer: Kazuhiro Suzuki
HRO (Radio Meteor Observation using HAM)
Location: Toyokawa Meteor Observatory (137.32 deg E, 34.81 deg N)
Shiinoki, Toyokawa-city, Aichi, 442, Japan
Transmitter: JA9BOH 53.7500 MHz, CW 50 W
Antenna: Dipole (height 7 m, to zenith)
Receiver: IC-575 (ICOM) LSB BW 2.5 kHz
Transmitter location: Sabae (in Fukui pref.), about 150 km
north north-west from receiving station.
Method of echo sampling: after image procedure was done by PC with FFT
software, echoes(>10 dB(S/N)) were counted.

Total echo rates

```
Feb | UT
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
------+--------------------------------------------------------------------------
31- 1 | 17 23 32 31 28 21 29 41 32 33 25 20 31 20 21 14 11 14 14@16 15 22 19 16
1- 2 | 22 31 26 43 29 34 29 37 46 28 35 27 19 18 19 16 11 15 12@18@18 11 19 27
2- 3 | 33 20 28 29 22 26 23 29 39 39 34 33 22 19 19 14 11 14 16@15@12 18 26 23
3- 4 | 29 29 25 34 37 39 32 38 31 27 36 29 17 14 18 15 14 14 15@19@22 19 18 25
4- 5 | 34 24 44 34 31 26 33 38 38 35 30 25 27 15 17 14 13 11 15 11@13 20 16 24
5- 6 | 21 30 29 32 37 35 24 43 33 32 24 23 29 17 15 19 15 14 15@13@13 15 20 28
6- 7 | 29 23 36 41 31 25 26 30 30 29 25 16 22 16 17 13 11 14 12@16@14 13 10 26
7- 8 | 22 27 32 35 35 37 24 28 35 32 28 22 23 14 23 18@14 12 15 16 12 17 16 21
8- 9 | 23 25 28 24 26 17 34 37 20 23 21 23 19 18 19 18@16 14 11 13@20 14 21 21
9-10 | 16 22 25 30 32 29 33 33 37 40 30 27 22 12 15 15 12 13 13@14@17 22 14 18
10-11 | 22 20 22 24 29 27 22 32 35 35 22 24 18 18 18 16 14 14 17@17 16 20 24 27
11-12 | 20 38 29 33 22 31 32 30 47 37 34 24 22 20 21 17 15 12 15@13 16 14 24 24
12-13 | 23 29 24 29 27 34 32 33 32 33 26 16 16 16 20 15 13 21 19@16@17 22 24 34
13-14 | 31 35 29 38 36 30 25 35 37 30 28 23 24 23 20 16 11 14 13 13@17 16 18 27
14-15 | 30 26 24 26 38 34 29 40 38 34 30 16 19 23
15-16 | @24 21 22 18 19 12 15 17 17@15 13 20 21
16-17 | 23 20 30 29 30 40 27 43 43 36 41 21 27 23 16 17 15 14 16@17@15 17 29 19
17-18 | 29 33 36 30 28 31 29 41 33 28 23 24 18 16 21 16 13 14 17@12@14 19 12 21
18-19 | 18 31 33 26 33 33 22 30 24 24 18 22 24 20 20 15 15 13 13@14 17 16 23 20
19-20 | 26 24 24 27 28 24 34 38 38 39 26 15 22 17 18 19 15 13 16@16 19 21 18 24
20-21 | 20 16 32 29 36 33 30 29 32 30 27 28 18 15 17 14 15 13 17@15@14 22 13 26
21-22 | 23 24 36 40 41 24 30 45 34 31 24 20 22 18 20 14 15 15 19@14 18 17@28 31
22-23 | 22 29 22 36 34 29 38 35 38 26 30 26 16 19 19 17 13@12 15 12@20 22 18 25
```

```
23-24 | 19 37 31 37 32 33 31 40 43 35 33 28 26 18 21 14 16 13 14@16@12 13 19 20
24-25 | 27 30 32 42 30 41 31 33 40 33 35 22 16 17 19 18 16 14 15@17@17 16 21 27
25-26 | 16 23 26 26 22 21 18 29 32 34 42 31 33 24 21 17 16 17 14@19 14 15 26 25
26-27 | 20 19 30 36 34 43 32 35 30 29 23 24 21 20 16 18 16 11 17@14@12 17 17 16
27-28 | 20 21 28 26 23 24 24 30 28 21 22 15 21 14 23 14 13 14 13 12 15@12
------+------------------------------------------------------------------------
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Feb | UT

Hourly rate of long (> 20 s) echoes

Feb | UT
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
------+------------------------------------------------------------------------
31- 1 | 1 1
1- 2 | 1 1
2- 3 | 1
3- 4 | 1 1 1
4- 5 | 1 1
5- 6 | 1 1 1 1 1
6- 7 | 1 1 1 1
7- 8 | 1
8- 9 | 1
9-10 | 1 1

12-13 | 1 1 1

14-15 | 1

19-20 | 1

21-22 | 1
22-23 | 1 1
23-24 | 1 1
24-25 | 1 1

26-27 | 1
27-28 | 1 1 1
------+------------------------------------------------------------------------
1997 | 15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Feb | UT

Notes:
. local time = JST = UT + 9 hours.
. @nn means converted hourly rate.

Kazuhiro Suzuki

--------------------------------------------------------------------------------
Observer : W.T. Zanstra
Location : Appingedam, Netherlands (6 50' E, 53 19' N)
Frequency: 72.11 MHz
Transmitter Location:
```

Wroclaw (16 43' E, 50 52' N), Poland, 135 kW, distance 735 km
Antenna : Yagi, 5 elements, geographical azimuth 108 degr. (ESE),
elevation 14 degrees
Receiver : Bearcat UBC 177XLT Scanning Radio, sensitivity 0.3 uV
Observing method: listening

Geminids and Ursids in December 1996 and Quadrantids in January 1997.

Sporadics are mean values over the years 1995 and 1996 (first column).
Raw counts of reflections (corrected for dead time) during one hour
intervals starting at:

|1995| December 1996 January 1997
UT |1996| 12 13 14 22 2 3
----+----+--
00 | 81 | 129 132 141
01 | 86 | 129 114 121
02 | 89 | 100 79 160
03 | 92 | 170
04 | 92 | 169
05 | 91 | 106 156
06 | 89 | 106 135
07 | 84 | 95 116
08 | 79 | 52 61
09 | 73 | 72 89
10 | 67 | 100
11 | 60 | 102
12 | 53 | 35 111
13 | 46 | 35 51 186
14 | 42 | 39 63 207
15 | 39 | 56 46 178
16 | 39 | 87 59 125
17 | 40 | 115 46 92
18 | 44 | 85 138 44 72
19 | 50 | 137 109 64 46 51
20 | 56 | 158 158 74 70 58
21 | 62 | 112 143 67
22 | 68 | 101 152 92
23 | 75 | 108 98 123
----+----+--
UT |1995| 12 13 14 22 2 3
|1996| December 1996 January 1997

Wim Zanstra / via Ton Schoenmaker

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio
meteor scatter observations and data reduction. It started in August 1993
in order to spread rapidly the Perseid results via E-mail. Since then, it
has appeared monthly, and it has gradually been expanded. In regularly
publishing summaries of observations, potential radio observers are kept

up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. ANNOUNCEMENT

Jim Richardson would like to announce the release of the new revision to the American Meteor Society (AMS) Bulletin No. 203, "The AMS Radiometeor Project." The original version came out in January, 1997, so this revision amounts to a complete rewrite and update. The bulletin is about 50 pages long, and includes illustrations.

The bulletin is intended to outline the procedure and give technical information to those wishing to establish a meteor forward-scatter receiving station for inclusion into the AMS Radiometeor Network. This manual should also prove helpful to those who are interested in forward-scatter, but might not want to join the project itself. The bulletin pulls in practical information from a variety of sources, many of which are now out of print and difficult to find.

The bulletin is being released in three different formats:

a. All AMS members can receive an unbound (stapled) copy of the bulletin with their membership.

b. A bound single copy of the bulletin can be obtained for $2.00 from the AMS, in order to cover production and mailing costs. Requests should be sent to AMS headquarters at the below address:

American Meteor Society
c/o Dr. David D. Meisel
Dept. of Physics and Astronomy
State University of New York at Geneseo
1 College Circle
Geneseo, NY 14454

USA

c. Those who are more seriously interested in joining the project can obtain bound copies of AMS Bulletin No. 203 and the "Apple IIe Meteor Burst Software User's Manual" (which outlines the establishment of the computer automated data collection system) by sending $5.00 to the above address and requesting both manuals. The AMS is also including a short non-narrated demonstration video tape of system operation with this package.

Questions or comments regarding the AMS bulletin or the AMS Radiometeor Project should be directed to Jim Richardson

4. CONTRIBUTORS / USEFUL ADDRESSES

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: ON4NU@ON4AWP
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: 100021.514@compuserve.com

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Jim Richardson
AMS Radiometeor Project Coordinator
Route 2, Box 118
Graceville, FL 32440, USA
E-mail: richardson@digitalexp.com

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@pcvan.or.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Kazuhiro Suzuki
249-1, Shiinoki, Tameto-cho, Toyokawa, 442, Japan
Fax: +81-5337-6-2852
E-mail: kaze@tcp-ip.or.jp

Radio Meteor Data (RMD), Japan: http://www.tcp-ip.or.jp/~kaze/rmd.htm

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

W.T. Zanstra
Spijkerlaan 13, 9903 BB Appingedam, Netherlands
tel: +31 (0)596 625617
Email: via tonsch@nfra.nl

--
Christian Steyaert (RMOB9702) 6 March 1997
--

852. http://www.pipeline.com/~acatalan/ WW2W's homepage

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5fnndv$95g@camel4.mindspring.com>
Source record: 19606

```
========
Everyone is welcome to check out my Ham Radio Homepage at
http://www.pipeline.com/~acatalan/
"Classics Subjects" such as Tesla and Theremin populate
the front page as well as various issues surrounding them.
Little LEOS (satellites) threatening the ham bands are
discussed within the KCRC club's subpage at:
http://www.pipeline.com/~acatalan/kcrc.htm
Please sign my GUESTBOOK at the bottom and give
feedback, support or hate. FB on all 73
de WW2W Tony Catalano
```

853. Hamcom 97 Digital / Packet programs

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: Tom McDermott <mcdermot@aud.alcatel.com>
Message-ID: <331F4B7E.167EB0E7@aud.alcatel.com>
Source record: 19607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Hamcom will be held in the Arlington, Tx. Convention Center
from Friday, June 6 through Sunday, June 8, 1997. The
Texas Packet Radio Society (TPRS) http://www.tprs.org/ will
again host extensive programs on packet and digital subjects,
and has announced the program schedule and speakers.

In the past, these programs have been extremely well-attended,
so be sure to mark you calendar.

HAMCOM 97
TPRS Digital/Packet Program Schedule
Arlington, Tx. Convention Center

Saturday, June 7, 1997

9:00 - 9:30 Introduction to Digital Modes - Dave Wolf, WO5H
9:30 -10:30 Intro to Internet - Lee Ziegenhals, N5LYT
10:30-11:30 Spread Spectrum - Greg Jones, WD5IVD, Tom McDermott, N5EG
11:30-12:00 TEXNET update - Harry Ridenour, N0CCW
12:00-12:30 TPRS annual meeting
12:30- 1:00 break
1:00 - 2:00 APRS - Mike Heskett, WB5QLD
2:00 - 2:30 DXing with 2 Meter Packet - Presley Smith, N5VGC
2:30 - 3:00 Weather / NWS - Bob Morgan, WB5AOH
3:00 - 3:30 Radio Modifications - Joe Borovetz, WA5VMS
3:30 - 4:00 Channel Capacity - Tom McDermott, N5EG

Sunday, June 8, 1997

10:00- 10:30 Introduction to Digital Modes - Jim Neely, WA5LHS
10:30- 11:30 BBS forum - Dave Wolf, WO5H

--
Tom McDermott
mcdermot@aud.alcatel.com

854. FOR SALE:COMPLETE SAT SYSTEM

Newsgroup: rec.radio.amateur.space
Date: 1997-03-06 00:00:00 UTC
From: hc@primenet.com
Message-ID: <5foa8f$7nh@nnrp1.news.primenet.com>
Source record: 19608

FOR SALE: KENPRO AZ/EL ROTATOR, 5400A DUAL CONTROLLER, KANSAS CITY
TRACKER P.C.BOARD AND CABLE TO CONTROLLER. EXCELLENT CONDITION. IT IS
THE SAME AS THE YAESU AZ/EL UNIT, YAESU BOUGHT OUT KENPRO. 2M CIR POL
AND 70CM CIR POL ANTENNAS , FIBERGLASS BOOM, 40FT TOWER. ROTATOR
CONTROLLER CABLES. AND SOFTWARE, NOVA FOR WINDOWS , INSTANTTRACK,
REALTRACK AND WISP.
$900.00 TAKES ALL WORKS VERY WELL.
73'S PHIL

855. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-07 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970307125602_515664.456256_IHJ65-12@CompuServe.COM>
Source record: 19609

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #80

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox.ucsd.edu [132.239.1.54]) by
dub-img-1.compuserve.com (8.6.10/5.950515)
id HAA28199; Fri, 7 Mar 1997 07:55:51 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA18571 for <ham-space-list@mailbox.ucsd.edu>; Fri, 7 Mar
1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA07645
sendmail 8.8.5/UCSD8.3
Fri, 7 Mar 1997 04:31:12 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA07633
sendmail 8.8.5/UCSD8.3
Fri, 7 Mar 1997 04:31:10 -0800 (PST)
Message-Id: <199703071231.EAA07633@noc.ucsd.edu>
Date: Fri, 7 Mar 97 04:31:09 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #80
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 7 Mar 97 Volume 97 : Issue 80

Today's Topics:
Hale-Bopp photo tips
http://www.pipeline.com/~acatalan/ WW2W's homepage
Sat. Tracking program.
WeFAX APT

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Mar 1997 05:29:36 -0800
From: WB4YUC@ihnp4.ucsd.edu
Subject: Hale-Bopp photo tips

In article <cochraneE6JvDy.9Mn@netcom.com>, cochrane@netcom.com says...
>
Can someone suggest an exposure/ASA for the comet? All
>: we need is something to get started! Cliff Buttschardt K7RR
>
I would suggest going over to the Hale-Bopp comet page
at JPL or it's mirror site.

They have over 1100 pictures posted, you should be able to
get an idea of what to expect there.

The URLs:

http://newproducts.jpl.nasa.gov/comet/

http://galileo.ivv.nasa.gov/comet/

73,

Bruce, WB4YUC

Date: Thu, 06 Mar 1997 00:37:23 GMT
From: acatalan@pipeline.com (Anthony G. Catalano)
Subject: http://www.pipeline.com/~acatalan/ WW2W's homepage

========
Everyone is welcome to check out my Ham Radio Homepage at
http://www.pipeline.com/~acatalan/
"Classics Subjects" such as Tesla and Theremin populate
the front page as well as various issues surrounding them.
Little LEOS (satellites) threatening the ham bands are
discussed within the KCRC club's subpage at:
http://www.pipeline.com/~acatalan/kcrc.htm
Please sign my GUESTBOOK at the bottom and give
feedback, support or hate. FB on all 73
de WW2W Tony Catalano

Date: 5 Mar 1997 21:06:38 GMT
From: mbrinkho@inetnebr.com (Matt C. Brinkhoff)
Subject: Sat. Tracking program.

J.H.M. Wosten (pa3cev_@_amsat.org) wrote:

: Logsat is certainly not professional, who the hell wants to calculate
: a 80 mtrs dipole when tracking a satellite? It's a compromise.

I'm not sure why having the ability to do antenna work makes the program a compromise. Admittedly, I see little reason to maintain that feature in the program, but the simple solution is "don't use it."

What features (present or not) related to satellite tracking do you dislike about the program?

Regarding the demo - the old one let you set your QTH for an 'eval' period (30 days or something), then reset to default after that. Seems reasonable to me, unless they've changed since then. (Also, if you've installed the demo before, and your 'eval' period has elapsed, LogSat may make an entry in the Registry and not allow you to "re-evalutate" the program.)

I still believe that LogSat is the best form/function combination in Sat tracking software... But I'm open to comments on other apps.

--
Matt C. Brinkhoff, KB0RXC
mbrinkho@inetnebr.com
http://incolor.inetnebr.com/mbrinkho
Lincoln, Nebraska [EN10]

Date: 6 Mar 1997 20:49:29 GMT
From: jkktl@aol.com (Jkktl)
Subject: WeFAX APT

hi
check out:
http://members.aol.com/jkktl/ham.htm

good wxsat page with lots of info links!

End of Ham-Space Digest V97 #80
****

856. Re: HELP Satellite/CW/Fax via Soundcard

Newsgroup: rec.radio.amateur.space
Date: 1997-03-07 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970307134500.IAA10597@ladder01.news.aol.com>
Source record: 19610

hi
log onto:
http://members.aol.com/jkktl/ham.htm

download WxSat and all English docs..

superb, out of this world program!

Jim

857. Re: WeFAX APT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-07 00:00:00 UTC
From: Rafael Garcia <rgarcia@sat.cide.upm.es>
Message-ID: <33201DA2.4A49623A@sat.cide.upm.es>
Source record: 19611

Colin Tinker wrote:

> Bandwith needs to be 50khz so a dedicated rx is best but I have
> received them sucessfully with 17khz on my WiNRADiO card but I would
> think 5 khz is to narrow. Try WXSat from my site for decoding wefax
> and apt. www.titanic.u-net.com

I've got a lot of replies from amsat-bb list, and all suggest as minimum as 35 kHz filter bandwith. Assuming the NOAA satellites have +/- 17 kHz deviation on FM, and taking in mind the doppler shift, 50 kHz is the figure I'm guessing for wefax sat receiver.

After my posting, I was experimenting with an IC-R100 general coverage receiver at WFM mode (180 kHz); it is too much, I know, but I'm getting very good results with NOAA and METEOR. Not excessive intermod and adjacent channel interference. The antenna is a 7+7el yagi, tracking the satellites.

I've definitively discarded the DSP-2232, because the lack of proper software, and using WXSat and a souncard. This software is really excelent. The author tells that he is preparing an English language interface of his program.

--
Rafael,
ETSIA, Lab. Aerodinamica
Madrid (SPAIN)

858. receptor satelites meteorologicos

Newsgroup: rec.radio.amateur.space
Date: 1997-03-07 00:00:00 UTC
From: salvador esteban mu&#65533;oz <sesteban@compuserve.com>
Message-ID: <01bc2b45$bcdd78a0$c0a6aec7@sesteban>
Source record: 19612

si estas interesado en recibir los satelites meteorologicos dispongo de
todo lo necesario sesteban@compuserve.com

859. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0803970621090001@wd1v.mv.com>
Source record: 19613
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

860. Free Mac/Ham Software on WWW

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0803970625080001@wd1v.mv.com>
Source record: 19614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Macnet information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

861. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970308125328_515664.456256_JHR110-6@CompuServe.COM>
Source record: 19615

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #82

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-2.compuserve.com (8.6.10/5.950515)
id HAA01868; Sat, 8 Mar 1997 07:53:16 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA04141 for <ham-space-list@mailbox.ucsd.edu>; Sat, 8 Mar
1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA08244
sendmail 8.8.5/UCSD8.3
Sat, 8 Mar 1997 04:31:22 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA08227
sendmail 8.8.5/UCSD8.3
Sat, 8 Mar 1997 04:31:18 -0800 (PST)
Message-Id: <199703081231.EAA08227@noc.ucsd.edu>
Date: Sat, 8 Mar 97 04:31:16 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #82
To: Ham-Space@ucsd.edu

Ham-Space Digest Sat, 8 Mar 97 Volume 97 : Issue 82

Today's Topics:
FOR SALE:COMPLETE SAT SYSTEM
Hale-Bopp photo tips
HELP Satellite/CW/Fax via Soundcard
RS-16 BEACON (3 msgs)
WeFAX APT

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Mar 1997 22:49:03 -0700
From: hc@primenet.com (phil diaz)
Subject: FOR SALE:COMPLETE SAT SYSTEM

FOR SALE: KENPRO AZ/EL ROTATOR, 5400A DUAL CONTROLLER, KANSAS CITY
TRACKER P.C.BOARD AND CABLE TO CONTROLLER. EXCELLENT CONDITION. IT IS
THE SAME AS THE YAESU AZ/EL UNIT, YAESU BOUGHT OUT KENPRO. 2M CIR POL
AND 70CM CIR POL ANTENNAS , FIBERGLASS BOOM, 40FT TOWER. ROTATOR
CONTROLLER CABLES. AND SOFTWARE, NOVA FOR WINDOWS , INSTANTTRACK,
REALTRACK AND WISP.
$900.00 TAKES ALL WORKS VERY WELL.
73'S PHIL

Date: 6 Mar 1997 05:44:36 -0800
From: wb4yuc@ihnp4.ucsd.edu
Subject: Hale-Bopp photo tips

In addition to my previous post. The jpl web page has a section
on viewing hints and tips. there you will find an astrophotography
help section.

73,

Bruce, WB4YUC

again those URLs:

http://newproducts.jpl.nasa.gov/comet/
http://galileo.ivv.nasa.gov/comet/

Date: 7 Mar 1997 13:45:12 GMT
From: jkktl@aol.com (Jkktl)
Subject: HELP Satellite/CW/Fax via Soundcard

hi
log onto:
http://members.aol.com/jkktl/ham.htm

download WxSat and all English docs..

superb, out of this world program!

Jim

Date: 6 Mar 1997 16:18:14 GMT
From: dbcntcas@teleport.com (Dave Bernhardt)
Subject: RS-16 BEACON

Yes, beacon is 29.408, uplink is 145.915-.948, downlink 29.415-.448. Keps
are not complete yet, but period is about 93 minutes with an altitude of
about 450-500km.
de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

Date: 6 Mar 1997 14:20:31 -0500
From: mtjachim@mtu.edu (Matthew T. Jachimstal)
Subject: RS-16 BEACON

Dave Bernhardt (dbcntcas@teleport.com) wrote:
: Yes, beacon is 29.408, uplink is 145.915-.948, downlink 29.415-.448. Keps
: are not complete yet, but period is about 93 minutes with an altitude of
: about 450-500km.
: de Dave, N7DB (CN85)

I heard it today. Very strong signal! I had a bit of a hard time copying
it though. RS-12 was up at the same time, and its beacon is also on 29.408.
You'd be amazed at what a KAM will spit out trying to decode two
simultaneous CW signals. :)

Matthew
--

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtjachim@mtu.edu Voice: 906-487-0899 Pager: 906-222-9880
| WWW: http://jachsys.resnet.mtu.edu
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

---

Date: Wed, 05 Mar 97 17:24:06 GMT
From: Tom@astro.net
Subject: RS-16 BEACON

In article <331D575F.33EE@kickit.pgh.net>, Michael Lamanna <mustang@kickit.pgh.net> wrote:
>Does anyone know the freqs for rs-16 beacon?? I would also like the
>uplink and downlinks
>thanks
>MIKE WA3O

Beacons: 29.408, 29.451
435.504, 435.548

Uplinks are from 145.915-145.948
Downlinks: 29.415-29.448

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

Date: Fri, 07 Mar 1997 14:52:34 +0100
From: Rafael Garcia <rgarcia@hp433.cide.upm.es>
Subject: WeFAX APT

Colin Tinker wrote:

> Bandwith needs to be 50khz so a dedicated rx is best but I have
> received them sucessfully with 17khz on my WiNRADiO card but I would
> think 5 khz is to narrow. Try WXSat from my site for decoding wefax
> and apt. www.titanic.u-net.com

I've got a lot of replies from amsat-bb list, and all suggest as minimum as 35 kHz filter bandwith. Assuming the NOAA satellites have +/- 17 kHz deviation on FM, and taking in mind the doppler shift, 50 kHz is the figure I'm guessing for wefax sat receiver.

After my posting, I was experimenting with an IC-R100 general coverage receiver at WFM mode (180 kHz); it is too much, I know, but I'm getting very good results with NOAA and METEOR. Not excessive intermod and adjacent channel interference. The antenna is a 7+7el yagi, tracking the satellites.

I've definitively discarded the DSP-2232, because the lack of proper software, and using WXSat and a souncard. This software is really excelent. The author tells that he is preparing an English language interface of his program.

--
Rafael,
ETSIA, Lab. Aerodinamica
Madrid (SPAIN)

End of Ham-Space Digest V97 #82
****

862. Service Call Not Included

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <332178E0.2923@ix.netcom.com>
Source record: 19616

Found the following on rec.humor.funny.
--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html
--
Subject:
Service call not included
Date:
Fri, 7 Mar 97 19:30:02 EST
From:
pklein@seattleu.edu (Peter A. Klein)
Newsgroups:
rec.humor.funny

You've probably heard about the Mars Pathfinder probe. Once it lands on the Red Planet, Pathfinder will release the Sojourner Rover, a little laboratory on wheels. Sojourner will cruise about the Martian surface performing experments. It turns out that Sojourner and Pathfinder will communicate using two standard, off-the-shelf 9600 baud radio modems.

According to Jet Propulsion Laboratory program manager Donna Shirley, the modem manufacturer warned JPL that sending the modem to Mars would void the warrantee.

(This came from amsat-bb, an email list for amateur radio satellite enthusiasts).

--

863. WISP & PK-96?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: fritzing@mhv.net
Message-ID: <3320bbfc.16717003@NEWS.MHV.NET>
Source record: 19617

Which TNC choice works best for the AEA PK-96 with the Windows 95 version of WISP? I've been using the TNC-2 choice, but was wondering if one of the other TNC types is better. Thanks & 73.

864. [Help] Winorbit 3.1: "Path Not Found" Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: buster <lathrop@azstarnet.com>
Message-ID: <3321AC6A.2B53@azstarnet.com>
Source record: 19618

Whenever I go to save anything, I get the error "Path Not Found" and
WinOrbit closes.

It occurs when I try to save the satellite database, the ini file and
when the save setting on exit is checked.

I've tried changing my default directory under windows program manager,
lauched it from file manager. I even included the directory in my path
statement.

I've tried different names for the directory.

When I tried to go back and run WinOrbit 2.9 after this failed attempt
at
3.1, I got the "Path Not Found" error when opening 2.9. It then won't
let
me open 2.9.

This is kind of a wacky problem, huh:-) I have no idea what path it may
be looking for, I assume it's looking for the path that it's in.

Any Idea's

I tried to be a detailed as I could.

TIA

Buster C.
KC7KMJ

865. ARLK019 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk019.1997@arrl.org>
Source record: 19619
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK019
ARLK019 Keplerian data

ZCZC SK19
QST de W1AW
Keplerian Bulletin 19 ARLK019
From ARRL Headquarters
Newington, CT March 8, 1997
To all radio amateurs

SB KEP ARL ARLK019
ARLK019 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97066.10124359 .00000019 00000-0 40290-5 0 03442
2 18129 82.9269 314.2007 0011936 137.9915 222.2162 13.72375006486235
UO-11
1 14781U 84021B 97065.96740060 .00000171 00000-0 36688-4 0 09618
2 14781 97.8232 51.3485 0011643 336.8106 23.2570 14.69530108696245
RS-12/13
1 21089U 91007A 97066.12929332 -.00000015 00000-0 -31366-4 0 09649
2 21089 82.9228 354.3356 0027324 222.1524 137.7536 13.74076862305147
UO-14
1 20437U 90005B 97066.14903668 .00000026 00000-0 26689-4 0 02654
2 20437 98.5249 150.0052 0011222 143.7992 216.3953 14.29951367371637
RS-15
1 23439U 94085A 97066.07550655 -.00000039 00000-0 10000-3 0 02178
2 23439 64.8186 317.9630 0151791 151.4871 209.4459 11.27525594090425
AO-16
1 20439U 90005D 97066.16722484 -.00000010 00000-0 12873-4 0 00633
2 20439 98.5424 152.7382 0011449 145.5582 214.6349 14.30000014371653
DO-17
1 20440U 90005E 97066.30325639 .00000008 00000-0 19832-4 0 517
2 20440 98.5435 153.6597 0011574 143.8647 216.3319 14.30142678371702
```

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WO-18
1 20441U 90005F 97066.15889860 .00000035 00000-0 30315-4 0 00702
2 20441 98.5462 153.4329 0011825 145.3922 214.8031 14.30111136371682
LO-19
1 20442U 90005G 97065.78454244 -.00000005 00000-0 14719-4 0 00657
2 20442 98.5479 153.6795 0012390 146.1119 214.0858 14.30223617371659
FO-20
1 20480U 90013C 97065.89538443 -.00000043 00000-0 -17413-4 0 09616
2 20480 99.0296 46.7800 0539933 249.0546 105.2003 12.83236393331589
AO-21
1 21087U 91006A 97066.22080313 .00000094 00000-0 82657-4 0 7949
2 21087 82.9423 127.0560 0034403 190.7624 169.2799 13.74578565306140
UO-22
1 21575U 91050B 97066.17334108 .00000011 00000-0 17876-4 0 07746
2 21575 98.3170 130.2595 0007087 192.4590 167.6424 14.37059267295838
KO-23
1 22077U 92052B 97065.96976063 -.00000037 00000-0 10000-3 0 06610
2 22077 66.0848 359.2570 0013493 238.4678 121.5000 12.86300994214605
KO-25
1 22828U 93061F 97066.13027978 .00000013 00000-0 22494-4 0 05328
2 22828 98.5488 142.8760 0010164 160.5319 199.6256 14.28169831147644
IO-26
1 22826U 93061D 97066.14160104 .00000019 00000-0 25197-4 0 05415
2 22826 98.5538 142.8142 0008887 176.4764 183.6482 14.27828452179527
AO-27
1 22825U 93061C 97066.16534276 -.00000014 00000-0 11965-4 0 05505
2 22825 98.5530 142.6140 0008188 175.1973 184.9292 14.27719080179514
FO-29
1 24278U 96046B 97066.13785139 -.00000001 00000-0 31960-4 0 00663
2 24278 98.5556 121.2318 0352229 90.6223 273.5312 13.52629234027320
Mir
1 16609U 86017A 97066.82752829 .00005675 00000-0 73254-4 0 1085
2 16609 51.6509 235.3850 0011268 152.3706 207.7923 15.60625729631203

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

866. WEB SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33223BF9.D7E@cyberramp.net>
Source record: 19620

http://www.cyberramp.net/~rnewland

867. Re: Oppose OR Support Little Leo instructions

Newsgroup: rec.radio.amateur.space
Date: 1997-03-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ftspe$grk@camel2.mindspring.com>
Source record: 19621
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

3W8PE1B <willi6@erols.com> wrote:

>Re what was previously posted regarding the ARRL/AMSAT position
> on this issue. I would recommend that individuals do their own
>research
> prior to sending the suggested response. The poster points out that:

> "Please note! The proposals the League opposes are not FCC proposals,
> nor are they endorsed by any other branch of the government. They are
> industry proposals. The League's objective is to falsely demonstrate
> there is broad citizen opposition to the industry proposals."

Read my letter to the wrc97 location at:
My letter was long: I did recieve a confirmation of their receipt and
thay told me that letters that are in depth would be kept separately
and presented in case certain points had to be made at any pertinant
hearing.
http://www.pipeline.com/~acatalan/kcrc.htm
This is the Kings County Radio Club's BB/Newsletter
THE IS ALSO A PICTURE OF A LITTLE LEO THERE.
CUTE LITTLE BUGGERS aren't they?

868. NOAA & METEOR Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: "Duco W. Weytze" <dweytze@hookup.net>
Message-ID: <3322F9D5.4638@hookup.net>
Source record: 19522

Could anyone please tell me which NOAA & METEOR weather satellites are presently active.

Thanks
Duco W. Weytze
dweytze@hookup.net

869. Re: WISP & PK-96?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: Charlie Rubenstein <rubenc@iglou.com>
Message-ID: <3322D229.21B3@iglou.com>
Source record: 19523

Keith Fritzinger wrote:
>
> Which TNC choice works best for the AEA PK-96 with the Windows 95
> version of WISP? I've been using the TNC-2 choice, but was wondering
> if one of the other TNC types is better. Thanks & 73.

I used the TNC-2 selection, worked great.

Charlie kb8bwe@amsat.org

870. Sun and moon Keps

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: Tone <n2izl@dorsai.org>
Message-ID: <3322E6DF.347F@dorsai.org>
Source record: 19524

HI,
Does anyone out there have nasa keps for the sun and moon.
Would like to do some sun noise and EME experiments.
Tnx

871. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <33231A54.517B@cyberramp.net>
Source record: 19525

http://www.cyberramp.net/~johnf

872. RS-16 Telemetry format?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <246021813wnr@brimar.demon.co.uk>
Source record: 19526

Hi. Having heard the newly launched RS-16 telemetry on its
beacon frequency of 29.408 MHz I wondered if there may be a
standard format for working out the values of transmitted data.

I ask the same question for RS-12, whose TLM appears on about
the same frequency.

I am hoping to write a simple programme to decode the stuff.

TIA for any useful information.....73.....Brian

--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
---

873. Home Page for FO-20, and AO-27 Schedules

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5fv8pv$s7u@library.airnews.net>
Source record: 19527

No, I'm not announcing one. Just want to know if there
is anything like this on the web. We could setup skeds
and maybe even use electronic QSLs if confirmation is
needed for the contacts.
There are several Ham chat groups, but they don't seem
to have any purpose and are usually empty or taken up
by friends having their personal chats.

Ken K5MBV 5mbv@airmail.net and mbv@ti.com

874. FTV = WEFAX-FAX-SSTV-RTTY with SoundBlaster

Newsgroup: rec.radio.amateur.space
Date: 1997-03-09 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc2cd3$3ce08540$0101a8c0@gcauchi.keyworld.net>
Source record: 19528
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Hello... Brian here!

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to:

RECEIVE - WEFAX, FAX, SSTV, COLOUR SSTV and RTTY
TRANSMIT - FAX, SSTV and COLOUR SSTV

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside this software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
RTTY (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

Registration promotes the further development of this software and entitles the user to future upgrades paying only for delivery expenses, if any.
Current release is 0.98f

Finally, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

875. Re: NOAA & METEOR Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: bheaton@txdirect.net
Message-ID: <332374e0.9229761@news.txdirect.net>
Source record: 19529

Duco,

NOAA 12 137.5M
NOAA 14 137.62M
METERO 3-5 137.85M
OKEAN 4 137.4M

(From Peter Wekelin's WXSAT status report #173)

"Duco W. Weytze" <dweytze@hookup.net> wrote:

>Could anyone please tell me which NOAA & METEOR weather satellites are
>presently active.
>
>Thanks
>Duco W. Weytze
>dweytze@hookup.net

876. ANS-068 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc2cf7$91037b40$31bc92ce@bjarts.uslink.net>
Source record: 19530

SB SAT @ AMSAT $ANS-068.01
PHASE 3-D COMES ALIVE!

HR AMSAT NEWS SERVICE BULLETIN 068.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.01

During the last week of February and the first week of March, major integration milestones for assembly and checkout of the AMSAT Phase 3-D satellite were accomplished by members of a combined international team working at the P3-D Lab in Orlando, Florida.

In a joint statement issued on March 7th, AMSAT-DL Vice President Werner Haas, DJ5KQ, and AMSAT-NA Executive Vice President Keith Baker, KB1SF, gave a brief rundown of the team's significant progress over the past two weeks.

"Phase 3-D is alive and doing very well!" said Werner. "We have now accomplished all the objectives we had hoped to achieve on this, our first major joint integration visit in Florida."

During this period, the combined team installed, powered up and then extensively tested the satellite's main power and computer (IHU) systems as well as transmitters for X-Band, V-Band and U-Band. All performed without problem. In addition, all of the spacecraft's many communications receivers have now been built into the satellite and they, too, were thoroughly tested and are now working well.

Likewise, the SCOPE camera experiment built by JAMSAT, the Japanese AMSAT group, was successfully installed and powered up while in the spacecraft. "First light" was also received via SCOPE during this test and the image quality of the initial pictures were absolutely superb.

Besides installing the various transmitters and receivers, Phase 3-D's Intermediate Frequency (IF) switching matrix, a device that will allow most any receiver to be cross linked to any transmitter, as well as the LEILA experiment (strong signal attenuator) were also successfully brought on line in the spacecraft.

Another major integration milestone came late Tuesday afternoon, March 4th, when team members Werner Haas (DJ5KQ), Peter Guelzow (DB2OS), Keith Baker (KB1SF), Stan Wood (WA4NFY) and Lou McFadin (W5DID) completed the first QSOs via Phase 3-D's configuration U/V "transponder". For this test, P3-D's U-Band

receiver was cross-linked to the V-Band transmitter through the IF Matrix.

What's more, the distinctive "warble" warning tone and notch capabilities of P3-D's LEILA were clearly demonstrated when Stan Wood deliberately overpowered his SSB "uplink" signal, thus triggering LEILA to first superimpose its warning tone on his "downlink" signal. When Stan persisted in overpowering his uplink, team members then watched (in amazement!) as the LEILA cut his downlink signal via P3-D's V-Band amplifier from some 140 watts to about 2 watts! Needless to say, the members of the German communications team were most pleased to finally show their American counterparts the fine quality and function of Phase 3-D's extremely capable communications suite.

On behalf of the P3-D Project Leader, Dr. Karl Meinzer, DJ4ZC, Werner and Peter expressed thanks for the fine hospitality shown by their American hosts. While much work remains to be accomplished, Phase 3-D's final integration and checkout is progressing on schedule for its anticipated launch in July. Stay tuned to ANS for further updates as work on making Phase 3-D "flight ready" continues.

[ANS thanks Keith Baker, KB1SF and Werner Haas, DJ5KQ, for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-068.02
PHASE 3-D FUNDING UPDATE

HR AMSAT NEWS SERVICE BULLETIN 068.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.02

While the Phase 3-D satellite was undergoing final integration in the next room, senior representatives of the Phase 3-D Integration Team also met at the P3-D Integration Lab in Orlando Florida in early March to discuss the latest fund status of the project.

In a joint news release on March 4th, Werner Haas, DJ5KQ, AMSAT-DL's Vice President and Keith Baker, AMSAT-NA's Executive Vice President outlined the success of the project's fund raising so far and the amount expended by each organization to date. In addition, they laid out a revised estimate of the funds that will be needed to finish and launch the satellite.

"The gap is closing, but we aren't out of the woods yet", Keith said.

As of December 31, 1996, the two major spending partners in the Phase 3-D effort, AMSAT-DL and AMSAT-NA, had together expended about $3 Million (US) on the project. This figure included some 2.5 Million Deutsche Marks (or about $1.6 Million (US)) by AMSAT-DL and about $1.4 Million (US)

by AMSAT-NA. Assuming the mid-year launch schedule of Phase 3-D holds, ,and no major problems with the satellite or the launch are encountered, the P3-team estimates that another $700,000 to $800,000 will be expended to complete, test and ship the satellite as well as to conduct the launch campaign in Kourou, French Guyana, South America.

"When comparing needed out-of-pocket funding to complete the project with funds currently on hand or expected, the team now projects a combined funding shortfall of about $200,000. Recent contributions have contributed significantly to offsetting this deficit. But, even counting these large and most welcome donations, about $120,000 has yet to be identified to complete the project. "

"Of course, this all assumes an on-time launch from Kourou with no delays or other problems between now and then", Werner said. "If we incur a launch delay, or if the satellite develops problems during final integration and test, the amount of funds needed to finish and launch the satellite could be much greater."

On behalf of the combined P3-D Team, Keith expressed his gratitude to those who have given generously to the project over the years. "Even during our labors to make Phase 3-D a technical reality, we are very grateful for the many sacrifices our donors have made to make the Phase 3-D satellite a fiscal reality as well." Baker went on to note that,

"Each of us on the Team remains ever-mindful that most of the money raised for P3-D came from individual Ham Radio Operators, many of whom have willingly postponed plans to buy one or more major pieces of equipment for their 'Ham Shacks' in exchange for contributions to sustain the project. This is a truly remarkable outpouring of support and is another example of the selfless sprit of Amateur Radio." he said.

The launch of Phase 3-D is now slated for early July aboard the next flight of the European Space Agency's Ariane 5 (Ariane 502) from Kourou, French Guyana.

[ANS thanks Werner Haas, DJ5KQ and Keith Baker, KB1SF, for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-068.03
RS-16 LAUNCHED

HR AMSAT NEWS SERVICE BULLETIN 068.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.03

A new Russian Amateur Radio satellite, listed as RS-16, has been launched from the Russian Cosmodrome Svobodny as part of a Zeya satellite package. RS-16 reportedly

has an average orbital altitude of 276 miles, producing a footprint some 2000 miles in diameter on Earth.

On March 4, 1997, 1614 UTC, Jim White, WD0E, reported hearing strong signals from the RS-16 CW beacon on 29.408 MHz. Others in the US and Europe have reported strong signals on 10 meters. The transponders are not yet active. The twice-delayed launch had been expected as early as December. RS-16 is expected to be a Mode A (2 meters up/10 meters down) satellite, like RS-10 and RS-15. It's the first Russian satellite to have a 70-cm beacon, but the beacon there is not yet operational. Beacon frequencies are 29.408, 29.451, 435.504 and 435.548 MHz. The 29.408 MHz beacon is the 435.505 only active beacon on at this time

Andy, RK3KPK, passed along this preliminary frequency and transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

The following are the latest Keplerian elements for Radio Sputnik 16 (RS-16) from the NASA OIG RAID RBBS:
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

[ANS thanks the ARRL, Andy, RK3KPK, and Ken Ernandes, N2WWD for this report.]

/EX

SB SAT @ AMSAT $ANS-068.04
STS-83/ SAREX INFO

HR AMSAT NEWS SERVICE BULLETIN 068.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.04

STS-83 is scheduled to launch on April 3rd, 1997 at approximately 2:01 p.m. EST. The launch window is 2 hours 30 minutes long. STS-83 will be a SAREX mission. The following information will aid in communicating with the shuttle.

The SAREX Working Group has designated the following frequencies during the STS-83 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz

FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz***
FM Packet Uplink: 144.49 MHz***

***If packet is on the air.

CONFIGURATION: Officially, the SAREX hardware will be flown in configuration B. SAREX configuration B is voice only, battery operation. The SAREX equipment on-board STS-83 includes the Motorola 2 meter FM hand-held transceiver, 15 spare batteries, the window antenna, SAREX headset assembly, personal recorder and the required interconnecting cables. Since STS-83 is an extended duration flight with power hungry primary experiments, the power allocated for SAREX is 0 watts. The SAREX team is also flying the Heathkit Packet Radio TNC for potential use later in the flight. In the event that power conservation measures are successful, the mission control team will advise SAREX and the astronauts to initiate use of the Packet Radio system which also includes one of the Shuttle Laptop computers. Please stay tuned to ANS and sarex@amsat.org during the mission for late breaking news regarding packet operation.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1 (If turned on during the flight)

CREW MEMBERS (titles and Amateur Radio call signs):
James D. Halsell, Commander, KC5RNI
Susan L. Still, Pilot
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF
Michael L. Gerhardt, Mission Specialist
Roger Crouch, Payload Specialist
Greg Linteris, Payload Specialist

QSL VIA: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

Below is a prelaunch Keplerian element set for STS-83, provided by Gil Carman, WA5NOM, of the NASA Johnson Space Center.

STS-83
1 99983U 97093.96818645 .00020853 00000-0 62025-4 0 36
2 99983 28.4669 306.6090 0004357 294.3836 65.6533 15.90889019 45

Satellite: STS-83
Catalog number: 99983
Epoch time: 97093.96818645 = (03-Apr-97 23:14:11.309 UTC)
Element set: 003
Inclination: 28.4669 deg
RA of node: 306.6090 deg Space Shuttle Flight STS-83
Eccentricity: .0004357 Prelaunch element set JSC-003

Arg of perigee: 294.3836 deg Launch: 03-Apr-97 19:01:00 UTC
Mean anomaly: 65.6533 deg
Mean motion: 15.90889019 rev/day Gil Carman
Decay rate: 2.0853e-04 rev/day^2 NASA Johnson Space Center
Epoch rev: 4
Checksum: 348

Deorbit: 19-Apr-97 10:37 UTC (orbit 250)
Landing: 19-Apr-97 11:37 UTC (orbit 251)

[ANS thanks the SAREX Working Group for this information.]

/EX

SB SAT @ AMSAT $ANS-068.05
P3D BITS AND PIECES

HR AMSAT NEWS SERVICE BULLETIN 068.05 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.05

There will be coverage of the Amsat P3D satellite project with video from
the
P3D-lab in Orlando Amsat-DL Marburg (Dr. Karl Meinzer) and IRS Stuttgart
(ATHOS plasma motor - prof Messerschmid) on BRTN (Belgian TV Dutch
program) on March, 17 at 2200 local time. The program, from Frank
Debosere, is named "alle vijf". This program can be viewed in central
Europe, Netherlands, Luxembourg Germany and parts of France and the UK.
This program is not on satellite.

[ANS thanks Freddy De Guchteneire, ON6UG, for this information.]

Design News magazine for March 3, 1997 has a one-page article with a
drawing titled "On a wing and a shoestring: Hams design their
next-generation communications satellite". The drawing shows P3D with the
ESA adapter and SBS with a size comparison to AO13. This is in the
Engineering News section, page 42. Dick Jansson, WD4FAB, is quoted several
times in the article.

[ANS thanks Ed Krome, K9EK (ex-KA9LNV), for this report.]

/EX

SB SAT @ AMSAT $ANS-068.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 068.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.06

MIR:
(New frequencies implemented 1 January 1997:

Uplink 145.2 MHz FM
Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode. During the weekend of March 1st, the transponder was
swamped by the exuberant DX-contesters on 15m, thus raising the hopes
of those of us on the east coast of the US for an ionospheric hop into
the sat which may just make possible a QSO with the rare DX of
KH6-land.

[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..

[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
Beacon operational only on 29.408 MHz at this time.
The transponders are not yet active.
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,

9600 Baud FSK.)
KO-25 operating normally.

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Operating normally and lots of activity heard.
As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.

[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in Analog mode at the current time.

/EX

SB SAT @ AMSAT $ANS-068.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 068.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.07

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
Operational. Many stations heard using the bird during the past week.
AO-10
1 14129U 83058B 97054.50000000 .00000010 00000-0 57107-5 0 5005

2 14129 25.8792 163.0281 6052907 93.3854 313.1701 2.05882272103000

[ANS thanks Ken Ernandes, N2WWD, for the updated keps.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)
.The last month (14 January - 17 February) has been uneventful for
OSCAR-11. Good, steady signals have been received from the 145.826
MHz. beacon. Mirek, OK2AOK reports hearing the mode-S beacon on
January 25th. The signals peaked at S6 on a pass when the maximum
elevation was 21 degrees.

[ANS thanks Clive Wallis, G3CWV, and Richard W L Limebear, G3RWL,
for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
PACSAT (AO-16)
It is working normally in its orbits on Europe..
The WOD files are active again.
Graphic information about WOD/Telemetry values can be found
at:
http://arrakis.es/~ea1bcu/ao16.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
No changes reported during last few weeks

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V 10V
14.036V

[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB,
1200 Baud PSK AX.25.)
LUSAT (LO-19)is working excellently in its orbits on Europe.

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports

that the digipeater is OFF and that the ROBOT is undergoing tests. Controllers ask that groundstations please do not transmit on any of the satellite's uplink frequencies for the time being.

[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N, via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

877. RS-16 Telemetry query.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <233277673wnr@brimar.demon.co.uk>
Source record: 19531

Having heard the CW telemetry from the newly launched RS-16 at good signal strength on 29.408 MHz today, 7th March: I was hoping to get some TLM format information. It may then be possible to write some simple software (it would need to be for me to write it!) to decode it.

Does anyone have such info yet please.

I also received the TLM from RS-12 whilst monitoring the same frequency this morning. Likewise, some format info would be very much appreciated to decode this too.

TIA.....73.....Brian
--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
---

878. Re: [Help] Winorbit 3.1: "Path Not Found" Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: cgregory@uiuc.edu
Message-ID: <332427E0.4368@uiuc.edu>
Source record: 19532

buster wrote:
>
> Whenever I go to save anything, I get the error "Path Not Found" and
> WinOrbit closes.
>
> It occurs when I try to save the satellite database, the ini file and
> when the save setting on exit is checked.

Most likely due to a missing subdirectory. The satellite database must be in ...\DATABASE\SAT\, where ... represents the WinOrbit program's directory (startup directory). This subdirectory should have been created when you UNZIPed the software. If not, refer to the documentation for your UNZIP program to see how to restore path names when UNZIPing.

> When I tried to go back and run WinOrbit 2.9 after this failed attempt
> at
> 3.1, I got the "Path Not Found" error when opening 2.9. It then won't

Not surprising, since the .INI file formats are quite different. Delete the .INI file and 2.9 should run again.

73!
de K8CG
Carl

879. Re: NOAA & METEOR Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970310161501.LAA25761@ladder01.news.aol.com>
Source record: 19533

Hi

At present, NOAA 12 and 14 are up and running worldwide..
over North America, only meteor 3/5 is running.

I beliebe that SICH is operational over europe..Met 2/21 is on and off
over Europe.

check out
http://members.aol.com/jkktl/ham.htm
for wxsat info

880. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970310125910_515664.456256_IHJ48-16@CompuServe.COM>
Source record: 19534

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #84

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-4.compuserve.com (8.6.10/5.950515)
id HAA01584; Mon, 10 Mar 1997 07:59:03 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA08609 for <ham-space-list@mailbox.ucsd.edu>; Mon, 10 Mar
1997 04:52:14 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05399
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 04:31:08 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05384
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 04:31:05 -0800 (PST)
Message-Id: <199703101231.EAA05384@noc.ucsd.edu>
Date: Mon, 10 Mar 97 04:31:04 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #84
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 10 Mar 97 Volume 97 : Issue 84

Today's Topics:
ANS-068 WEEKLY BULLETINS
Ham Site
Home Page for FO-20, and AO-27 Schedules
NOAA & METEOR Sats (2 msgs)
RS-16 Telemetry format?
Sun and moon Keps
WISP & PK-96?

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 10 Mar 1997 02:05:26 GMT
From: "BJ Arts" <bjarts@uslink.net>
Subject: ANS-068 WEEKLY BULLETINS

SB SAT @ AMSAT $ANS-068.01
PHASE 3-D COMES ALIVE!

HR AMSAT NEWS SERVICE BULLETIN 068.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.01

During the last week of February and the first week of March, major
integration milestones for assembly and checkout of the AMSAT
Phase 3-D satellite were accomplished by members of a combined
international team working at the P3-D Lab in Orlando, Florida.

In a joint statement issued on March 7th, AMSAT-DL Vice President
Werner Haas, DJ5KQ, and AMSAT-NA Executive Vice President Keith
Baker, KB1SF, gave a brief rundown of the team's significant progress
over the past two weeks.

"Phase 3-D is alive and doing very well!" said Werner. "We have now
accomplished all the objectives we had hoped to achieve on this, our
first major joint integration visit in Florida."

During this period, the combined team installed, powered up
and then extensively tested the satellite's main power and computer
(IHU) systems as well as transmitters for X-Band, V-Band and U-
Band. All performed without problem. In addition, all of the
spacecraft's many communications receivers have now been built into
the satellite and they, too, were thoroughly tested and are now working
well.

Likewise, the SCOPE camera experiment built by JAMSAT, the
Japanese AMSAT group, was successfully installed and powered up
while in the spacecraft. "First light" was also received via SCOPE
during this test and the image quality of the initial pictures were
absolutely superb.

Besides installing the various transmitters and receivers, Phase 3-D's
Intermediate Frequency (IF) switching matrix, a device that will allow
most any receiver to be cross linked to any transmitter, as well as the
LEILA experiment (strong signal attenuator) were also successfully

brought on line in the spacecraft.

Another major integration milestone came late Tuesday afternoon, March 4th, when team members Werner Haas (DJ5KQ), Peter Guelzow (DB2OS), Keith Baker (KB1SF), Stan Wood (WA4NFY) and Lou McFadin (W5DID) completed the first QSOs via Phase 3-D's configuration U/V "transponder". For this test, P3-D's U-Band receiver was cross-linked to the V-Band transmitter through the IF Matrix.

What's more, the distinctive "warble" warning tone and notch capabilities of P3-D's LEILA were clearly demonstrated when Stan Wood deliberately overpowered his SSB "uplink" signal, thus triggering LEILA to first superimpose its warning tone on his "downlink" signal. When Stan persisted in overpowering his uplink, team members then watched (in amazement!) as the LEILA cut his downlink signal via P3-D's V-Band amplifier from some 140 watts to about 2 watts! Needless to say, the members of the German communications team were most pleased to finally show their American counterparts the fine quality and function of Phase 3-D's extremely capable communications suite.

On behalf of the P3-D Project Leader, Dr. Karl Meinzer, DJ4ZC, Werner and Peter expressed thanks for the fine hospitality shown by their American hosts. While much work remains to be accomplished, Phase 3-D's final integration and checkout is progressing on schedule for its anticipated launch in July. Stay tuned to ANS for further updates as work on making Phase 3-D "flight ready" continues.

[ANS thanks Keith Baker, KB1SF and Werner Haas, DJ5KQ, for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-068.02
PHASE 3-D FUNDING UPDATE

HR AMSAT NEWS SERVICE BULLETIN 068.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.02

While the Phase 3-D satellite was undergoing final integration in the next room, senior representatives of the Phase 3-D Integration Team also met at the P3-D Integration Lab in Orlando Florida in early March to discuss the latest fund status of the project.

In a joint news release on March 4th, Werner Haas, DJ5KQ, AMSAT-DL's Vice President and Keith Baker, AMSAT-NA's Executive Vice President outlined the success of the project's fund raising so far and the amount expended by each organization to date. In addition, they laid out a revised estimate of the funds that will be needed to finish and launch the satellite.

"The gap is closing, but we aren't out of the woods yet", Keith said.

As of December 31, 1996, the two major spending partners in the Phase 3-D effort, AMSAT-DL and AMSAT-NA, had together expended about $3 Million (US) on the project. This figure included some 2.5 Million Deutsche Marks (or about $1.6 Million (US)) by AMSAT-DL and about $1.4 Million (US) by AMSAT-NA. Assuming the mid-year launch schedule of Phase 3-D holds, ,and no major problems with the satellite or the launch are encountered, the P3-team estimates that another $700,000 to $800,000 will be expended to complete, test and ship the satellite as well as to conduct the launch campaign in Kourou, French Guyana, South America.

"When comparing needed out-of-pocket funding to complete the project with funds currently on hand or expected, the team now projects a combined funding shortfall of about $200,000. Recent contributions have contributed significantly to offsetting this deficit. But, even counting these large and most welcome donations, about $120,000 has yet to be identified to complete the project. "

"Of course, this all assumes an on-time launch from Kourou with no delays or other problems between now and then", Werner said. "If we incur a launch delay, or if the satellite develops problems during final integration and test, the amount of funds needed to finish and launch the satellite could be much greater."

On behalf of the combined P3-D Team, Keith expressed his gratitude to those who have given generously to the project over the years. "Even during our labors to make Phase 3-D a technical reality, we are very grateful for the many sacrifices our donors have made to make the Phase 3-D satellite a fiscal reality as well." Baker went on to note that,

"Each of us on the Team remains ever-mindful that most of the money raised for P3-D came from individual Ham Radio Operators, many of whom have willingly postponed plans to buy one or more major pieces of equipment for their 'Ham Shacks' in exchange for contributions to sustain the project. This is a truly remarkable outpouring of support and is another example of the selfless sprit of Amateur Radio." he said.

The launch of Phase 3-D is now slated for early July aboard the next flight of the European Space Agency's Ariane 5 (Ariane 502) from Kourou, French Guyana.

[ANS thanks Werner Haas, DJ5KQ and Keith Baker, KB1SF, for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-068.03
RS-16 LAUNCHED

HR AMSAT NEWS SERVICE BULLETIN 068.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT

BID: $ANS-068.03

A new Russian Amateur Radio satellite, listed as
RS-16, has been launched from the Russian Cosmodrome
Svobodny as part of a Zeya satellite package. RS-16 reportedly
has an average orbital altitude of 276 miles, producing a footprint
some 2000 miles in diameter on Earth.

On March 4, 1997, 1614 UTC, Jim White, WD0E, reported hearing strong
signals from the RS-16 CW beacon on 29.408 MHz. Others in the US
and Europe have reported strong signals on 10 meters. The
transponders are not yet active. The twice-delayed launch had been
expected as early as December. RS-16 is expected to be a Mode A (2
meters up/10 meters down) satellite, like RS-10 and RS-15. It's the
first Russian satellite to have a 70-cm beacon, but the beacon there
is not yet operational. Beacon frequencies are 29.408, 29.451,
435.504 and 435.548 MHz. The 29.408 MHz beacon is the
435.505 only active beacon on at this time

Andy, RK3KPK, passed along this preliminary frequency and
transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

The following are the latest Keplerian elements for Radio Sputnik 16
(RS-16) from the NASA OIG RAID RBBS:
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

[ANS thanks the ARRL, Andy, RK3KPK, and Ken Ernandes, N2WWD
for this report.]

/EX

SB SAT @ AMSAT $ANS-068.04
STS-83/ SAREX INFO

HR AMSAT NEWS SERVICE BULLETIN 068.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.04

STS-83 is scheduled to launch on April 3rd, 1997 at approximately
2:01 p.m. EST. The launch window is 2 hours 30 minutes long. STS-83
will be a SAREX mission. The following information will aid in
communicating with the shuttle.

The SAREX Working Group has designated the following frequencies
during the STS-83 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz***
FM Packet Uplink: 144.49 MHz***

***If packet is on the air.

CONFIGURATION: Officially, the SAREX hardware will be flown in
configuration B. SAREX configuration B is voice only, battery operation.
The SAREX equipment on-board STS-83 includes the Motorola 2 meter FM
hand-held transceiver, 15 spare batteries, the window antenna, SAREX
headset assembly, personal recorder and the required interconnecting
cables. Since STS-83 is an extended duration flight with power hungry
primary experiments, the power allocated for SAREX is 0 watts. The SAREX
team is also flying the Heathkit Packet Radio TNC for potential use later
in the flight. In the event that power conservation measures are
successful, the mission control team will advise SAREX and the astronauts
to initiate use of the Packet Radio system which also includes one of the
Shuttle Laptop computers. Please stay tuned to ANS and sarex@amsat.org
during the mission for late breaking news regarding packet operation.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1 (If turned on during the flight)

CREW MEMBERS (titles and Amateur Radio call signs):
James D. Halsell, Commander, KC5RNI
Susan L. Still, Pilot
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF
Michael L. Gerhardt, Mission Specialist
Roger Crouch, Payload Specialist
Greg Linteris, Payload Specialist

QSL VIA: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street,
Newington, CT 06111-1494, USA. Include the following information in your
QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or
packet). In addition, you must also include a SASE using a large, business-
sized envelope if you wish to receive a card.

Below is a prelaunch Keplerian element set for STS-83, provided by Gil
Carman, WA5NOM, of the NASA Johnson Space Center.

STS-83
1 99983U 97093.96818645 .00020853 00000-0 62025-4 0 36
2 99983 28.4669 306.6090 0004357 294.3836 65.6533 15.90889019 45

Satellite: STS-83
Catalog number: 99983
Epoch time: 97093.96818645 = (03-Apr-97 23:14:11.309 UTC)

Element set: 003
Inclination: 28.4669 deg
RA of node: 306.6090 deg Space Shuttle Flight STS-83
Eccentricity: .0004357 Prelaunch element set JSC-003
Arg of perigee: 294.3836 deg Launch: 03-Apr-97 19:01:00 UTC
Mean anomaly: 65.6533 deg
Mean motion: 15.90889019 rev/day Gil Carman
Decay rate: 2.0853e-04 rev/day^2 NASA Johnson Space Center
Epoch rev: 4
Checksum: 348

Deorbit: 19-Apr-97 10:37 UTC (orbit 250)
Landing: 19-Apr-97 11:37 UTC (orbit 251)

[ANS thanks the SAREX Working Group for this information.]

/EX

SB SAT @ AMSAT $ANS-068.05
P3D BITS AND PIECES

HR AMSAT NEWS SERVICE BULLETIN 068.05 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.05

There will be coverage of the Amsat P3D satellite project with video from
the
P3D-lab in Orlando Amsat-DL Marburg (Dr. Karl Meinzer) and IRS Stuttgart
(ATHOS plasma motor - prof Messerschmid) on BRTN (Belgian TV Dutch
program) on March, 17 at 2200 local time. The program, from Frank
Debosere, is named "alle vijf". This program can be viewed in central
Europe, Netherlands, Luxembourg Germany and parts of France and the UK.
This program is not on satellite.

[ANS thanks Freddy De Guchteneire, ON6UG, for this information.]

Design News magazine for March 3, 1997 has a one-page article with a
drawing titled "On a wing and a shoestring: Hams design their
next-generation communications satellite". The drawing shows P3D with the
ESA adapter and SBS with a size comparison to AO13. This is in the
Engineering News section, page 42. Dick Jansson, WD4FAB, is quoted several
times in the article.

[ANS thanks Ed Krome, K9EK (ex-KA9LNV), for this report.]

/EX

SB SAT @ AMSAT $ANS-068.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 068.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT

BID: $ANS-068.06

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM
Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode. During the weekend of March 1st, the transponder was
swamped by the exuberant DX-contesters on 15m, thus raising the hopes
of those of us on the east coast of the US for an ionospheric hop into
the sat which may just make possible a QSO with the rare DX of
KH6-land.

[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..

[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
Beacon operational only on 29.408 MHz at this time.
The transponders are not yet active.
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)

KO-23 operating normally.

KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 operating normally.

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Operating normally and lots of activity heard.
As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.

[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in Analog mode at the current time.

/EX

SB SAT @ AMSAT $ANS-068.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 068.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 09, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-068.07

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz

CW/USB)
Operational. Many stations heard using the bird during the past week.
AO-10
1 14129U 83058B 97054.50000000 .00000010 00000-0 57107-5 0 5005
2 14129 25.8792 163.0281 6052907 93.3854 313.1701 2.05882272103000

[ANS thanks Ken Ernandes, N2WWD, for the updated keps.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)
.The last month (14 January - 17 February) has been uneventful for OSCAR-11. Good, steady signals have been received from the 145.826 MHz. beacon. Mirek, OK2AOK reports hearing the mode-S beacon on January 25th. The signals peaked at S6 on a pass when the maximum elevation was 21 degrees.

[ANS thanks Clive Wallis, G3CWV, and Richard W L Limebear, G3RWL, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB, 1200 Baud PSK.)
PACSAT (AO-16)
It is working normally in its orbits on Europe..
The WOD files are active again.
Graphic information about WOD/Telemetry values can be found at:
http://arrakis.es/~ea1bcu/ao16.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
No changes reported during last few weeks

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system crash. The satellite appears to be in good condition broadcasting MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V 10V 14.036V

[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB, 1200 Baud PSK AX.25.)
LUSAT (LO-19)is working excellently in its orbits on Europe.

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.

[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

**Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT
lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.**

BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

Date: Sun, 09 Mar 1997 12:15:16 -0800
From: John Fleenor <johnf@cyberramp.net>
Subject: Ham Site

http://www.cyberramp.net/~johnf

Date: 9 Mar 1997 21:07:11 GMT
From: mbv@flash.net (Ken Durham)
Subject: Home Page for FO-20, and AO-27 Schedules

No, I'm not announcing one. Just want to know if there
is anything like this on the web. We could setup skeds
and maybe even use electronic QSLs if confirmation is
needed for the contacts.
There are several Ham chat groups, but they don't seem
to have any purpose and are usually empty or taken up
by friends having their personal chats.

Ken K5MBV 5mbv@airmail.net and mbv@ti.com

Date: Sun, 09 Mar 1997 09:56:37 -0800
From: "Duco W. Weytze" <dweytze@hookup.net>
Subject: NOAA & METEOR Sats

Could anyone please tell me which NOAA & METEOR weather satellites are
presently active.

Thanks
Duco W. Weytze
dweytze@hookup.net

Date: Mon, 10 Mar 1997 02:43:05 GMT
From: bheaton@txdirect.net (Brian D Heaton)
Subject: NOAA & METEOR Sats

Duco,

NOAA 12 137.5M
NOAA 14 137.62M
METERO 3-5 137.85M
OKEAN 4 137.4M

(From Peter Wekelin's WXSAT status report #173)

"Duco W. Weytze" <dweytze@hookup.net> wrote:

>Could anyone please tell me which NOAA & METEOR weather satellites are
>presently active.
>
>Thanks
>Duco W. Weytze
>dweytze@hookup.net

Date: Sun, 09 Mar 1997 20:01:06 GMT
From: Brian Gibbs <brian@brimar.demon.co.uk>
Subject: RS-16 Telemetry format?

Hi. Having heard the newly launched RS-16 telemetry on its
beacon frequency of 29.408 MHz I wondered if there may be a
standard format for working out the values of transmitted data.

I ask the same question for RS-12, whose TLM appears on about
the same frequency.

I am hoping to write a simple programme to decode the stuff.

TIA for any useful information.....73.....Brian

--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

Date: Sun, 09 Mar 1997 11:35:43 -0500
From: Tone <n2izl@dorsai.org>
Subject: Sun and moon Keps

HI,
Does anyone out there have nasa keps for the sun and moon.
Would like to do some sun noise and EME experiments.
Tnx

Date: Sun, 9 Mar 1997 15:07:21 GMT
From: Charlie Rubenstein <rubenc@iglou.com>
Subject: WISP & PK-96?

Keith Fritzinger wrote:
>
> Which TNC choice works best for the AEA PK-96 with the Windows 95
> version of WISP? I've been using the TNC-2 choice, but was wondering
> if one of the other TNC types is better. Thanks & 73.

I used the TNC-2 selection, worked great.

Charlie kb8bwe@amsat.org

End of Ham-Space Digest V97 #84
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881. Re: FTV = WEFAX-FAX-SSTV-RTTY with SoundBlaster

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <439339989wnr@brimar.demon.co.uk>
Source record: 19535

PLEASE PLEASE DO NOT MAIL BINARIES TO THIS NEWSGROUP!!!!!!

They take a very long time to download, and fill my HDD with
material I did not ask for, or need!

It is much better to use the newsgroup as a place for a pointer
only, which tells us from where we may download the binary
file(s) IF we need them.

Thankyou......

--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
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882. NORAD Two-Line Orbital Element Sets (TLE958)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5g243e$1fd@blackbird.afit.af.mil>
Source record: 19536

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #958 -
Alouette 1
1 00424U 62049A 97065.37059843 .00000024 00000-0 17747-4 0 2727
2 00424 80.4641 25.0427 0024589 79.2092 281.1823 13.67888327718185
ATS 1
1 02608U 66110A 97067.06354389 -.00000131 00000-0 10000-3 0 55
2 02608 14.5487 350.0004 0006806 99.8500 260.2451 1.00287210 27516
ATS 3
1 03029U 67111A 97065.39311494 -.00000122 00000-0 10000-3 0 6291
2 03029 14.8997 356.9899 0011039 273.3355 290.1260 1.00273451107398
Starlette
1 07646U 75010A 97068.53196275 -.00000111 00000-0 26532-4 0 395
2 07646 49.8292 181.6164 0205865 26.7705 334.3643 13.82192517115663
LAGEOS
1 08820U 76039A 97065.67750250 .00000031 00000-0 00000+0 0 2695
2 08820 109.8339 115.9565 0043703 71.6007 288.9543 6.38664560230595
ETS-2
1 09852U 77014A 97065.25027592 -.00000354 00000-0 10000-3 0 1014
2 09852 13.5519 29.9631 0004585 150.6222 209.4423 1.00018410 20269
GOES 2
1 10061U 77048A 97 62.13250291 .00000000 00000-0 10000-3 0 8095
2 10061 12.6842 34.2343 0010310 139.6594 220.4249 1.00251398 17048
IUE
1 10637U 78012A 97064.44988541 .00000030 00000-0 10000-3 0 3681
2 10637 35.8885 79.3880 1348823 64.6543 4.4497 1.00081002 22552
GOES 3
1 10953U 78062A 97065.39521779 -.00000109 00000-0 10000-3 0 7882
2 10953 11.7159 37.1028 0003180 244.2600 278.7822 1.00265139 21685

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SeaSat 1
1 10967U 78064A 97068.79832736 -.00000008 00000-0 41881-4 0 5589
2 10967 107.9969 4.3498 0002996 280.7485 79.3315 14.38155803979634
Nimbus 7
1 11080U 78098A 97067.56998997 -.00000039 00000-0 25392-5 0 6540
2 11080 98.9136 282.4685 0009183 340.5327 19.5478 13.83686117927734
GOES 5
1 12472U 81049A 97067.03556164 .00000031 00000-0 10000-3 0 9850
2 12472 8.6137 47.5452 0004097 77.2390 282.9973 1.00319787 15741
Cosmos 1383
1 13301U 82066A 97065.73859666 .00000017 00000-0 24530-5 0 5709
2 13301 82.9303 301.2937 0026051 235.5131 124.3561 13.68080626733278
LandSat 4
1 13367U 82072A 97066.15756734 .00000026 00000-0 15407-4 0 513
2 13367 98.0383 114.5508 0008193 45.0429 315.1434 14.57195926778835
DMSP B5D2-1
1 13736U 82118A 97065.89352687 .00000028 00000-0 30034-4 0 1889
2 13736 98.6206 256.0345 0008738 347.6838 12.4133 14.25821031738507
IRAS
1 13777U 83004A 97069.07547449 .00000094 00000-0 94206-4 0 6019
2 13777 98.9681 254.9693 0013795 83.7100 276.5636 13.99263063390559
Cosmos 1447
1 13916U 83021A 97066.18317655 .00000034 00000-0 19460-4 0 6626
2 13916 82.9490 356.5165 0038254 136.9422 223.4740 13.74352212699864
TDRS 1
1 13969U 83026B 97069.17116506 -.00000312 00000-0 00000+0 0 7180
2 13969 9.3612 41.1286 0004075 289.7083 209.8251 1.00271887 24058
GOES 6
1 14050U 83041A 97066.40567031 -.00000014 00000-0 10000-3 0 6313
2 14050 7.4613 51.1781 0003788 23.8556 115.9638 1.00225503108832
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97065.68397559 .00000006 00000-0 11505-4 0 5958
2 14780 98.2995 128.9969 0001781 169.1792 190.9444 14.57069212692184
UO-11
1 14781U 84021B 97065.01414004 .00000117 00000-0 27596-4 0 9551
2 14781 97.8231 50.4345 0011648 339.1921 20.8789 14.69529281696105
Cosmos 1574
1 15055U 84062A 97067.22495057 .00000008 00000-0 -70694-5 0 8628
2 15055 82.9530 51.2088 0027502 330.2553 29.7043 13.73645082637231
Cosmos 1602
1 15331U 84105A 97065.87554469 .00000302 00000-0 32543-4 0 5448
2 15331 82.5310 226.8921 0020229 154.9404 205.2806 14.84848871671950
ERBS
1 15354U 84108B 97066.38869729 -.00000119 00000-0 10729-4 0 2605
2 15354 56.9947 46.3518 0004628 52.7515 307.3946 14.95020964676205
NOAA 9
1 15427U 84123A 97068.87964989 .00000065 00000-0 57689-4 0 662
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2 15427 98.9146 139.5021 0014213 283.0206 76.9380 14.13841951631179
Mir
1 16609U 86017A 97069.26079637 .00005978 00000-0 76733-4 0 1132
2 16609 51.6517 223.1392 0011288 161.5708 198.5719 15.60658908631580
SPOT 1
1 16613U 86019A 97066.81777498 -.00000044 00000-0 00000+0 0 416
2 16613 98.8004 139.9354 0001059 151.8072 208.3161 14.19990851257722
Cosmos 1766
1 16881U 86055A 97067.54500042 .00000444 00000-0 50523-4 0 4601
2 16881 82.5177 282.9643 0017781 182.2671 177.8464 14.83822974573045
EGP
1 16908U 86061A 97068.52829238 -.00000083 00000-0 10000-3 0 1598
2 16908 50.0120 261.2360 0011406 329.0693 30.9469 12.44416049149446
NOAA 10
1 16969U 86073A 97068.89380561 .00000008 00000-0 21878-4 0 9959
2 16969 98.5377 64.5394 0012491 302.9678 57.0302 14.25021673544444
MOS-1
1 17527U 87018A 97067.21888618 -.00000043 00000-0 00000+0 0 5215
2 17527 98.8992 128.9597 0020088 319.2596 40.7064 14.00418853511948
GOES 7
1 17561U 87022A 97065.49250052 -.00000179 00000-0 10000-3 0 3113
2 17561 3.5776 67.6125 0005163 317.8874 221.7356 1.00267563 19938
Kvant-1
1 17845U 87030A 97068.87661073 .00005176 00000-0 67308-4 0 9190
2 17845 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926565633
DMSP B5D2-3
1 18123U 87053A 97068.88215713 .00000005 00000-0 24839-4 0 8324
2 18123 98.7659 260.7614 0013521 214.9212 145.1080 14.15467777502083
RS-10/11
1 18129U 87054A 97068.21555861 .00000013 00000-0 -18933-5 0 3312
2 18129 82.9266 312.6376 0012326 132.9491 227.2700 13.72374966486520
Meteor 2-16
1 18312U 87068A 97066.24105404 .00000050 00000-0 31607-4 0 5488
2 18312 82.5587 143.4461 0011394 196.2942 163.7849 13.84092584482563
Meteor 2-17
1 18820U 88005A 97068.43460438 .00000043 00000-0 25002-4 0 1983
2 18820 82.5412 196.0873 0015430 262.3281 97.6127 13.84770047460232
DMSP B5D2-4
1 18822U 88006A 97068.58312363 .00000045 00000-0 38134-4 0 4788
2 18822 98.3810 253.9652 0005823 316.8243 43.2478 14.23219182472328
Glonass 34
1 19163U 88043A 97068.18932234 .00000027 00000-0 10000-3 0 1608
2 19163 65.3657 76.9115 0010555 149.9121 210.1749 2.13102342 67887
Glonass 36
1 19165U 88043C 97068.24662632 .00000026 00000-0 10000-3 0 5691
2 19165 65.3471 76.8584 0004299 326.9091 33.0940 2.13101807 68503
METEOSAT 3
1 19215U 88051A 97067.61689699 -.00000098 00000-0 00000+0 0 3073
2 19215 3.7997 66.4248 0004198 162.8258 197.5435 0.96947336 19741
OKEAN 1
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1 19274U 88056A 97067.35838931 .00000301 00000-0 34386-4 0 1599
2 19274 82.5118 24.3010 0020167 340.5789 19.4656 14.82588072468512
Meteor 3-2
1 19336U 88064A 97066.17631904 .00000051 00000-0 10000-3 0 5555
2 19336 82.5424 340.3285 0016063 302.2075 57.7491 13.16980945414096
Glonass 39
1 19503U 88085C 97066.86978519 -.00000006 00000-0 10000-3 0 4545
2 19503 65.4781 315.8125 0004095 128.1157 231.9869 2.13101693 65969
NOAA 11
1 19531U 88089A 97068.89357648 .00000028 00000-0 39853-4 0 8836
2 19531 99.1637 99.6412 0011159 212.3060 147.7429 14.13123957435976
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97063.15285485 .00000055 00000-0 10000-3 0 6633
2 19749 65.3214 76.5864 0007334 259.1880 100.7725 2.13101525 63392
Glonass 41
1 19750U 89001B 97066.96167162 .00000040 00000-0 10000-3 0 5743
2 19750 65.3308 76.5277 0008967 231.4857 128.4683 2.13101719 63492
GPS BII-01
1 19802U 89013A 97068.39094461 .00000019 00000-0 00000+0 0 3697
2 19802 55.4548 100.0741 0022446 183.0574 177.0065 2.00565291 59035
Akebono
1 19822U 89016A 97067.17157734 .00008492 00000-0 46867-3 0 8840
2 19822 75.1273 330.0209 3719744 266.1810 51.6087 7.96541576187659
Meteor 2-18
1 19851U 89018A 97068.88383516 .00000048 00000-0 29975-4 0 5479
2 19851 82.5167 69.2270 0013737 317.5762 42.4341 13.84427560405594
MOP-1
1 19876U 89020B 97062.98015533 -.00000078 00000-0 00000+0 0 2491
2 19876 2.5066 70.6927 0017745 281.6297 78.6212 0.97108951 9142
TDRS 4
1 19883U 89021B 97065.50468000 -.00000286 00000-0 10000-3 0 3118
2 19883 0.4174 86.8626 0003376 259.8469 318.2585 1.00273708201738
GPS BII-02
1 20061U 89044A 97060.75259359 .00000033 00000-0 00000+0 0 3608
2 20061 54.0172 275.7568 0165223 222.0148 136.7545 2.00562978 56627
Nadezhda 1
1 20103U 89050A 97068.59695594 .00000049 00000-0 35881-4 0 960
2 20103 82.9562 272.9312 0038830 35.7665 324.6078 13.73875089385120
GPS BII-03
1 20185U 89064A 97064.44080534 .00000029 00000-0 00000+0 0 4004
2 20185 55.2513 100.6601 0019050 352.8205 7.2284 2.00556947 55273
GMS 4
1 20217U 89070A 97067.84780317 -.00000390 00000-0 10000-3 0 5301
2 20217 2.3231 73.6480 0001113 96.5245 61.6849 1.00278794 28079
INTERCOSMOS 24
1 20261U 89080A 97067.53781270 .00000124 00000-0 30554-4 0 5712
2 20261 82.5915 101.8845 1242661 160.4766 204.8666 12.47391506338860
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GPS BII-04
1 20302U 89085A 97066.59953140 -.00000002 00000-0 10000-3 0 3802
2 20302 53.1791 215.2289 0030472 186.9455 172.9804 2.00572212 54111
Meteor 3-3
1 20305U 89086A 97069.13060268 .00000044 00000-0 10000-3 0 7684
2 20305 82.5440 300.7194 0007516 27.7808 332.3688 13.04437067352873
COBE
1 20322U 89089A 97068.08436469 -.00000121 00000-0 -49630-4 0 2886
2 20322 98.9344 84.7294 0009294 24.5111 335.6493 14.03464693374085
Kvant-2
1 20335U 89093A 97068.87661073 .00005176 00000-0 67308-4 0 8367
2 20335 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926414645
GPS BII-05
1 20361U 89097A 97067.11996596 -.00000040 00000-0 00000+0 0 1862
2 20361 56.1568 42.8493 0088400 140.8738 219.7571 2.00566438 43605
COSMOS 2054 (Altair-1)
1 20391U 89101A 97064.53400413 -.00000147 00000-0 00000+0 0 5190
2 20391 4.3362 61.8517 0001593 241.3831 36.4811 1.00271414 26611
SPOT 2
1 20436U 90005A 97066.87479209 -.00000044 00000-0 00000+0 0 1960
2 20436 98.7356 142.9471 0000721 57.0491 303.0755 14.20024441369260
UO-14
1 20437U 90005B 97068.17824022 .00000007 00000-0 19266-4 0 2523
2 20437 98.5248 151.9922 0011331 137.7478 222.4582 14.29951449371924
AO-16
1 20439U 90005D 97067.28674713 -.00000024 00000-0 74647-5 0 507
2 20439 98.5419 153.8349 0011291 142.5594 217.6376 14.30000007371810
DO-17
1 20440U 90005E 97066.30325639 .00000008 00000-0 19832-4 0 517
2 20440 98.5435 153.6597 0011574 143.8647 216.3319 14.30142678371702
WO-18
1 20441U 90005F 97067.27833508 -.00000042 00000-0 56544-6 0 549
2 20441 98.5465 154.5330 0011934 141.6838 218.5150 14.30110399371846
LO-19
1 20442U 90005G 97067.32364444 -.00000040 00000-0 13453-5 0 510
2 20442 98.5485 155.1928 0012406 141.2561 218.9455 14.30223357371877
GPS BII-06
1 20452U 90008A 97067.51858702 -.00000000 00000-0 10000-3 0 2847
2 20452 54.0579 155.9981 0069090 97.5946 263.1986 2.00556544 52112
MOS-1B
1 20478U 90013A 97069.20684597 -.00000040 00000-0 31544-5 0 310
2 20478 99.1016 141.0524 0004753 244.3701 115.6972 13.93971107281616
DEBUT
1 20479U 90013B 97063.88756723 -.00000021 00000-0 32783-4 0 482
2 20479 99.0285 45.3991 0539738 252.9835 101.1477 12.83349440331340
FO-20
1 20480U 90013C 97068.00050976 -.00000028 00000-0 15873-4 0 9500
2 20480 99.0310 48.4882 0540341 244.2498 110.1892 12.83236815331853
MOS-1B R/B
1 20491U 90013D 97068.20296617 .00000814 00000-0 15925-2 0 3252
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2 20491 99.0473 122.1174 0470574 33.8572 329.1658 13.03012686336379
LACE
1 20496U 90015A 97065.54497743 .00001632 00000-0 52916-4 0 7342
2 20496 43.1015 144.8900 0012238 317.8812 42.1102 15.36459864394174
Nadezhda 2
1 20508U 90017A 97068.87102014 .00000066 00000-0 54843-4 0 952
2 20508 82.9506 47.1846 0044975 348.5774 11.4359 13.73519235352365
OKEAN 2
1 20510U 90018A 97067.23060886 .00000131 00000-0 14651-4 0 5675
2 20510 82.5254 340.4789 0018479 168.1694 191.9960 14.78672130378692
GPS BII-07
1 20533U 90025A 97061.89524668 .00000040 00000-0 00000+0 0 3010
2 20533 54.4568 276.8773 0310375 89.8836 267.4615 1.90032860 50700
PegSat
1 20546U 90028A 97069.24823532 .00007513 00000-0 12320-3 0 400
2 20546 94.1211 144.4473 0056805 54.5550 306.0991 15.50632202386182
HST
1 20580U 90037B 97065.21818653 .00000355 00000-0 22798-4 0 9372
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2 20608 89.9288 171.1273 0103430 218.5199 140.8579 14.64980213364678
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2 20619 65.0628 314.9531 0026660 210.8064 149.0943 2.13102472 52902
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2 20621 65.0932 315.0203 0011239 193.4867 166.5524 2.13102730 52922
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2 20635 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926385476
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1 20638U 90049A 97067.43882661 .00000321 00000-0 39659-4 0 6391
2 20638 52.9919 188.9034 0012425 201.7575 158.2884 15.07564992372174
Meteor 2-19
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2 20670 82.5479 136.5950 0014484 225.9970 133.9992 13.84124865338547
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1 20712U 90065A 97065.70643059 .00000073 00000-0 34717-3 0 4005
2 20712 17.7393 143.1683 7181175 216.1341 62.2392 2.35850347 49316
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1 20724U 90068A 97068.24065359 .00000019 00000-0 00000+0 0 1858
2 20724 55.0954 98.0041 0141664 189.9301 169.8875 2.00563957 46764
Feng Yun1-2
1 20788U 90081A 97068.55065034 .00000109 00000-0 10000-3 0 2718
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Meteor 2-20
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2 20959 55.2851 100.0958 0113279 243.0240 115.8811 2.00570864 46012
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1 20978U 90105A 97068.83499594 .00000053 00000-0 34019-4 0 9902
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2 21006 65.2993 75.8157 0057030 189.2158 170.7200 2.13102444 48614
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2 21007 65.3230 75.9652 0033015 180.7988 179.2633 2.13101107 48568
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2 21152 82.9259 309.0853 0041866 326.1626 33.6858 13.73543951300206
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2 21216 64.8238 314.3482 0009100 205.7405 154.2782 2.13103350 46156
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2 21217 64.7998 314.3540 0012060 223.6712 136.3301 2.13101959 46143
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2 21218 64.8007 314.5099 0008257 326.9851 33.0210 2.13102545 46033
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2 21232 82.5391 187.3803 0012325 225.7762 134.2346 13.16475065282041
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2 21263 98.5432 86.1305 0011855 220.2569 139.7731 14.22693506302235
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2 21578 98.3535 140.7573 0004710 176.8955 183.2262 14.39335148296460
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2 21639 0.0676 95.9703 0001521 256.1151 255.2074 1.00270330 20457
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1 21655U 91056A 97068.22203197 .00000051 00000-0 10000-3 0 9615
2 21655 82.5545 133.2909 0012436 226.6862 133.3227 13.16851234267555
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2 21701 56.9860 135.8942 0005427 100.3023 259.8622 14.96574714299738
DMSP B5D2-6
1 21798U 91082A 97068.88114262 .00000091 00000-0 71575-4 0 6580
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1 21853U 92005A 97065.54927284 .00000051 00000-0 10000-4 0 1626
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Glonass 54
1 21854U 92005B 97067.71019219 .00000030 00000-0 00000+0 0 4228
2 21854 65.2546 75.3989 0016063 9.7179 350.3512 2.13104790 39749
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JERS-1
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2 21890 53.7377 215.7901 0055697 200.5978 159.1217 2.00553584 36920
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1 22012U 92038A 97067.88155228 .00000473 00000-0 38551-4 0 7883
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FREJA
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Glonass 59
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Glonass 61
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2 22514 65.2880 75.2811 0010242 200.7111 159.2816 2.13101564 31526
ASTRO-D
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2 22581 55.1404 337.3340 0060539 52.2757 308.2894 2.00569720 28929
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NOAA 13
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2 22739 99.0804 31.9333 0009550 196.6978 163.3874 14.10986522184454
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2 22779 54.2006 276.4340 0008562 58.3293 301.5073 2.00559630 25795
Meteor 2-21
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2 22782 82.5506 137.5301 0021558 321.3083 38.6533 13.83070270177699
UFO F2
1 22787U 93056A 97065.70731957 -.00000092 00000-0 00000+0 0 7095
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SPOT 3
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2 22823 98.7264 144.0694 0016581 359.4159 0.6993 14.16989147178867
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IO-26
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METEOSAT 6
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TUBSAT-B
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GOES 8
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Nadezhda 4
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OKEAN 1-7
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RESURS 1-3
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LUCH (Altair-2)
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RS-15
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GFZ-1
1 23558U 86017JE 97064.90752793 .00003863 00000-0 45777-4 0 2158
2 23558 51.6508 231.3879 0006098 127.6865 232.4688 15.64001228630945
ERS-2
1 23560U 95021A 97068.81944473 -.00000031 00000-0 46224-5 0 3423
2 23560 98.5503 145.0523 0001333 119.9227 240.2089 14.32247521 98596
Spektr
1 23579U 95024A 97068.87661073 .00005176 00000-0 67308-4 0 5896
2 23579 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926102956
GOES 9
1 23581U 95025A 97068.75488547 .00000062 00000-0 10000-3 0 3220
2 23581 0.1464 94.5513 0002147 256.2210 312.8584 1.00274349 6585
Helios 1A
1 23605U 95033A 97068.90774170 .00000094 00000-0 27148-4 0 4513
2 23605 98.1466 7.1332 0001573 72.5428 287.5945 14.63820555 89435
UPM SAT 1
1 23606U 95033B 97066.88378070 .00000204 00000-0 44736-4 0 2577
2 23606 98.1269 7.0615 0008723 70.8071 289.4055 14.67359812 89383
CERISE
1 23607U 95033C 97066.18922053 .00000181 00000-0 40959-4 0 1595
2 23607 98.1290 6.1388 0007474 70.4157 289.7851 14.67005710 89290
TDRS 7
1 23613U 95035B 97068.14814001 .00000073 00000-0 00000+0 0 3090
2 23613 1.2209 81.8697 0003142 259.6738 67.5109 1.00272347 6033
Glonass 74
1 23620U 95037A 97068.57689152 .00000007 00000-0 00000+0 0 2584
2 23620 64.8173 195.0920 0018484 165.7465 194.2773 2.13102900 12665
Glonass 75
1 23621U 95037B 97065.93940403 -.00000000 00000-0 00000+0 0 2642
2 23621 64.8307 195.1833 0017749 176.2109 183.7713 2.13102192 12608
Glonass 76
1 23622U 95037C 97066.93583017 -.00000001 00000-0 00000+0 0 2694
2 23622 64.8189 195.1499 0036775 164.3327 195.7413 2.13102513 12624
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Prognoz-M2
1 23632U 95039A 97068.95002340 -.00000447 00000-0 00000+0 0 1194
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SICH-1
1 23657U 95046A 97066.20292172 .00000202 00000-0 27618-4 0 1512
2 23657 82.5348 318.4648 0026349 278.5437 81.2790 14.73536626 81569
RADARSAT
1 23710U 95059A 97066.56994016 .00000142 00000-0 72025-4 0 2450
2 23710 98.5813 75.4996 0001225 61.5744 298.5562 14.29982879 69883
Glonass 79
1 23734U 95068A 97066.11551450 -.00000001 00000-0 00000+0 0 2531
2 23734 64.8163 195.0956 0017625 325.8691 33.9873 2.13101944 9578
Glonass 78
1 23735U 95068B 97068.17677726 .00000004 00000-0 00000+0 0 2380
2 23735 64.8251 195.0171 0006572 207.0942 152.8416 2.13124874 9611
Glonass 77
1 23736U 95068C 97067.28843736 -.00000000 00000-0 00000+0 0 2251
2 23736 64.8068 195.0599 0006719 190.9047 169.0453 2.13102109 9596
XTE
1 23757U 95074A 97065.20232855 .00000655 00000-0 25685-4 0 1261
2 23757 22.9810 68.0551 0013191 316.1447 43.7988 14.97784176 64793
Polar
1 23802U 96013A 97061.73534345 .00000147 00000-0 00000+0 0 1107
2 23802 86.3737 23.2219 6541860 273.4134 19.4301 1.36265298 5087
1996010E
1 23824U 96010E 97068.02496197 .00058947 00000-0 13664-1 0 1843
2 23824 47.4078 173.4818 6857435 101.0399 337.0139 2.82906517 8907
GPS BIIA-25
1 23833U 96019A 97068.64070184 -.00000068 00000-0 00000+0 0 1563
2 23833 54.6295 337.1808 0029191 143.6219 216.6120 2.00564190 7002
Priroda
1 23848U 96023A 97068.87661073 .00005176 00000-0 67308-4 0 2780
2 23848 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926 50047
MSX
1 23851U 96024A 97068.57187432 -.00000837 00000-0 -56253-3 0 2051
2 23851 99.4111 59.7559 0008973 143.3455 216.8325 13.97385619 44566
SAX
1 23857U 96027A 97065.20115127 .00001286 00000-0 51404-4 0 553
2 23857 3.9579 1.2582 0014020 196.8945 163.0808 14.91747106 46339
MSTI 3
1 23868U 96031A 97067.56751061 .00001378 00000-0 29274-4 0 1210
2 23868 97.1156 259.4377 0008808 296.3245 63.7101 15.46717327 45673
TOMS-EP
1 23940U 96037A 97066.76012355 .00002421 00000-0 10868-3 0 929
2 23940 97.4242 334.9641 0012998 134.2840 225.9464 15.22072158 37712
GPS BIIA-26
1 23953U 96041A 97068.06020459 .00000020 00000-0 00000+0 0 1193
2 23953 55.1508 97.6994 0022882 58.0953 302.0767 2.00546611 4783
ADEOS
1 24277U 96046A 97066.55933256 -.00000044 00000-0 00000+0 0 1498
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2 24277 98.6084 145.6832 0002572 105.2829 254.8636 14.27644091 28867
FO-29
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2 24278 98.5554 120.3985 0352261 93.1066 271.0439 13.52628998 27191
Soyuz TM-24
1 24280U 96047A 97059.91170272 -.00002321 00000-0 -21150-4 0 1772
2 24280 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514 30549
FAST
1 24285U 96049A 97069.18352129 .00001730 00000-0 17054-3 0 702
2 24285 82.9823 85.0646 2207061 167.7750 198.7290 10.81871909 21716
1996049B
1 24286U 96049B 97065.51221242 .00001435 00000-0 13745-3 0 803
2 24286 82.9995 86.8937 2207516 173.9177 189.4261 10.82269980 21318
Microsat
1 24291U 96050A 97067.21797492 .00044356 64363-5 31237-3 0 1516
2 24291 62.7908 111.7589 0572615 135.0169 229.8811 14.74809345 28001
MO-30
1 24305U 96052B 97068.46277175 .00000204 00000-0 20364-3 0 800
2 24305 82.9344 68.2805 0031462 121.2037 239.2204 13.73089245 25378
GPS BIIA-27
1 24320U 96056A 97064.92757585 .00000035 00000-0 00000+0 0 663
2 24320 54.6357 277.8300 0047987 92.9812 267.6616 2.00572392 3384
SAC-B/HETE
1 24645U 96061A 97066.23999200 .00000549 00000-0 34593-4 0 509
2 24645 37.9739 111.4989 0047826 199.2811 160.6144 15.14893218 18599
Progress M-33
1 24663U 96066A 97068.67039730 .00006325 00000-0 68824-4 0 1195
2 24663 51.6515 225.9282 0019502 203.8176 156.1907 15.64751057 17154
Soyuz TM-25
1 24717U 97003A 97068.87661073 .00005176 00000-0 67308-4 0 154
2 24717 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926631521
1997003B
1 24718U 97003B 97044.09270681 .22144272 12761-4 19081-3 0 244
2 24718 51.6110 348.9966 0007906 69.9357 290.4334 16.51368987 418
Haruka
1 24720U 97005A 97066.83934563 -.00000084 00000-0 48659-4 0 120
2 24720 31.3385 237.6720 5997333 124.4613 307.3107 3.79358719 909
1997005B
1 24721U 97005B 97068.65438474 .00022287 00000-0 20089-2 0 182
2 24721 31.3178 235.3789 6153137 127.5935 305.7555 3.85065115 987
Cosmos 2337
1 24725U 97006A 97068.86134102 .00000011 00000-0 00000+0 0 168
2 24725 82.5976 212.9467 0006696 165.3147 194.8139 12.61216511 2984
Cosmos 2338
1 24726U 97006B 97068.87439677 .00000011 00000-0 00000+0 0 143
2 24726 82.6071 212.9802 0010884 169.1102 191.0226 12.60520908 2985
Cosmos 2339
1 24727U 97006C 97069.22927245 .00000011 00000-0 00000+0 0 136
2 24727 82.5957 212.6689 0003010 38.2822 321.8485 12.62724180 3044
Gonets-D1 4
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1 24728U 97006D 97069.13236054 .00000011 00000-0 00000+0 0 161
2 24728 82.6038 212.7156 0006834 359.2628 0.8452 12.63657010 2992
Gonets-D1 5
1 24729U 97006E 97069.23966303 .00000011 00000-0 00000+0 0 160
2 24729 82.6037 212.6897 0002004 176.1322 183.9789 12.62177574 3005
Gonets-D1 6
1 24730U 97006F 97066.46475791 .00000011 00000-0 00000+0 0 115
2 24730 82.6053 214.4575 0002163 106.9362 253.1966 12.62210261 2657
1997006G
1 24731U 97006G 97067.93881249 .00000010 00000-0 00000+0 0 140
2 24731 82.5973 213.6879 0041690 184.6954 175.3748 12.55181488 2837
JCSAT 4
1 24732U 97007A 97066.23415448 -.00000304 00000-0 00000+0 0 145
2 24732 0.0564 322.1010 0003891 152.8713 274.6232 1.00270199 108
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97066.42952550 -.00000123 00000-0 10000-3 0 222
2 24742 0.0340 277.9240 0110180 242.9220 194.5820 1.30956410 122
1997009B
1 24743U 97009B 97067.91825219 .00086246 17160-5 49468-2 0 69
2 24743 6.8682 350.3184 7348726 183.5311 166.9778 2.22903156 177
ZEYA
1 24744U 97010A 97069.22099973 .00002874 00000-0 98710-4 0 104
2 24744 97.2820 336.1316 0009332 82.2607 277.9693 15.30895373 946
1997010B
1 24745U 97010B 97068.76239534 .00001064 00000-0 37816-4 0 56
2 24745 97.2820 335.7000 0008276 84.5974 275.6212 15.31168458 872
1997010C
1 24746U 97010C 97067.23497573 .00012222 00000-0 30120-3 0 77
2 24746 97.2800 334.3290 0031754 239.2969 120.5146 15.40178171 649
1997010D
1 24747U 97010D 97067.17590510 .00012678 00000-0 33910-3 0 59
2 24747 97.2827 334.2056 0021157 250.6292 109.2791 15.37959730 543
TEMPO 2
1 24748U 97011A 97068.93473861 .00001515 00000-0 39359-3 0 102
2 24748 25.2352 79.0311 6676069 180.3535 217.8677 3.06943782 68
1997011B
1 24749U 97011B 97067.90795289 .00009679 -60810-6 85748-4 0 48
2 24749 25.7011 79.0231 6156379 179.6773 181.0292 3.91208152 29
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

883. sun and moon keps maybe

Newsgroup: rec.radio.amateur.space
Date: 1997-03-10 00:00:00 UTC
From: Tone <n2izl@dorsai.org>
Message-ID: <3324B0D6.45BA@dorsai.org>
Source record: 19537

HI,
Got these keps for the sun and moon from a prgram called moonkeps.exe
thanks to Bruce Beford KA1ORB.
Have several problems though.
1 Instant Track accepts the moon kep and tracked ok.
but not the sun says numeric value out of range
2 WISP accepts both keps and works ok
3 Track-Box accepts moon kep but when you tell it to track it displays
AZ N EL N apparently not able to make the caculations.

MOON
1 00002U 9741.368723666 0.00000000 0.000000 0 12
2 00002 18.28970 0.231700 0584000 326.3632 29.68450 0.036600996 7
SUN
1 00001U 9580.092361111 0.00000000 0.000000 0 19
2 00001 23.44000 0.000000 0000000 282.8700 75.28030 0.002737909 5

884. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970311012409_515664.456256_IHO96-39@CompuServe.COM>
Source record: 19538

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #87

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
dub-img-2.compuserve.com (8.6.10/5.950515)
id UAA14771; Mon, 10 Mar 1997 20:23:50 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id RAA13514 for <ham-space-list@mailbox.ucsd.edu>; Mon, 10 Mar
1997 17:22:09 -0800 (PST)
Received: by noc.ucsd.edu; id RAA23424
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 17:01:42 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id RAA23401
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 17:01:37 -0800 (PST)
Message-Id: <199703110101.RAA23401@noc.ucsd.edu>
Date: Mon, 10 Mar 97 17:01:34 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #87
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 10 Mar 97 Volume 97 : Issue 87

Today's Topics:
NORAD Two-Line Orbital Element Sets (TLE958)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.

Date: 10 Mar 1997 23:05:18 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE958)

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #958 -
Alouette 1
1 00424U 62049A 97065.37059843 .00000024 00000-0 17747-4 0 2727
2 00424 80.4641 25.0427 0024589 79.2092 281.1823 13.67888327718185
ATS 1
1 02608U 66110A 97067.06354389 -.00000131 00000-0 10000-3 0 55
2 02608 14.5487 350.0004 0006806 99.8500 260.2451 1.00287210 27516
ATS 3
1 03029U 67111A 97065.39311494 -.00000122 00000-0 10000-3 0 6291
2 03029 14.8997 356.9899 0011039 273.3355 290.1260 1.00273451107398
Starlette
1 07646U 75010A 97068.53196275 -.00000111 00000-0 26532-4 0 395
2 07646 49.8292 181.6164 0205865 26.7705 334.3643 13.82192517115663
LAGEOS
1 08820U 76039A 97065.67750250 .00000031 00000-0 00000+0 0 2695
2 08820 109.8339 115.9565 0043703 71.6007 288.9543 6.38664560230595
ETS-2
1 09852U 77014A 97065.25027592 -.00000354 00000-0 10000-3 0 1014
2 09852 13.5519 29.9631 0004585 150.6222 209.4423 1.00018410 20269
GOES 2
1 10061U 77048A 97 62.13250291 .00000000 00000-0 10000-3 0 8095
2 10061 12.6842 34.2343 0010310 139.6594 220.4249 1.00251398 17048
IUE
1 10637U 78012A 97064.44988541 .00000030 00000-0 10000-3 0 3681
2 10637 35.8885 79.3880 1348823 64.6543 4.4497 1.00081002 22552
GOES 3
1 10953U 78062A 97065.39521779 -.00000109 00000-0 10000-3 0 7882
2 10953 11.7159 37.1028 0003180 244.2600 278.7822 1.00265139 21685

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SeaSat 1
1 10967U 78064A 97068.79832736 -.00000008 00000-0 41881-4 0 5589
2 10967 107.9969 4.3498 0002996 280.7485 79.3315 14.38155803979634
Nimbus 7
1 11080U 78098A 97067.56998997 -.00000039 00000-0 25392-5 0 6540
2 11080 98.9136 282.4685 0009183 340.5327 19.5478 13.83686117927734
GOES 5
1 12472U 81049A 97067.03556164 .00000031 00000-0 10000-3 0 9850
2 12472 8.6137 47.5452 0004097 77.2390 282.9973 1.00319787 15741
Cosmos 1383
1 13301U 82066A 97065.73859666 .00000017 00000-0 24530-5 0 5709
2 13301 82.9303 301.2937 0026051 235.5131 124.3561 13.68080626733278
LandSat 4
1 13367U 82072A 97066.15756734 .00000026 00000-0 15407-4 0 513
2 13367 98.0383 114.5508 0008193 45.0429 315.1434 14.57195926778835
DMSP B5D2-1
1 13736U 82118A 97065.89352687 .00000028 00000-0 30034-4 0 1889
2 13736 98.6206 256.0345 0008738 347.6838 12.4133 14.25821031738507
IRAS
1 13777U 83004A 97069.07547449 .00000094 00000-0 94206-4 0 6019
2 13777 98.9681 254.9693 0013795 83.7100 276.5636 13.99263063390559
Cosmos 1447
1 13916U 83021A 97066.18317655 .00000034 00000-0 19460-4 0 6626
2 13916 82.9490 356.5165 0038254 136.9422 223.4740 13.74352212699864
TDRS 1
1 13969U 83026B 97069.17116506 -.00000312 00000-0 00000+0 0 7180
2 13969 9.3612 41.1286 0004075 289.7083 209.8251 1.00271887 24058
GOES 6
1 14050U 83041A 97066.40567031 -.00000014 00000-0 10000-3 0 6313
2 14050 7.4613 51.1781 0003788 23.8556 115.9638 1.00225503108832
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97065.68397559 .00000006 00000-0 11505-4 0 5958
2 14780 98.2995 128.9969 0001781 169.1792 190.9444 14.57069212692184
UO-11
1 14781U 84021B 97065.01414004 .00000117 00000-0 27596-4 0 9551
2 14781 97.8231 50.4345 0011648 339.1921 20.8789 14.69529281696105
Cosmos 1574
1 15055U 84062A 97067.22495057 .00000008 00000-0 -70694-5 0 8628
2 15055 82.9530 51.2088 0027502 330.2553 29.7043 13.73645082637231
Cosmos 1602
1 15331U 84105A 97065.87554469 .00000302 00000-0 32543-4 0 5448
2 15331 82.5310 226.8921 0020229 154.9404 205.2806 14.84848871671950
ERBS
1 15354U 84108B 97066.38869729 -.00000119 00000-0 10729-4 0 2605
2 15354 56.9947 46.3518 0004628 52.7515 307.3946 14.95020964676205
NOAA 9
1 15427U 84123A 97068.87964989 .00000065 00000-0 57689-4 0 662
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2 15427 98.9146 139.5021 0014213 283.0206 76.9380 14.13841951631179
Mir
1 16609U 86017A 97069.26079637 .00005978 00000-0 76733-4 0 1132
2 16609 51.6517 223.1392 0011288 161.5708 198.5719 15.60658908631580
SPOT 1
1 16613U 86019A 97066.81777498 -.00000044 00000-0 00000+0 0 416
2 16613 98.8004 139.9354 0001059 151.8072 208.3161 14.19990851257722
Cosmos 1766
1 16881U 86055A 97067.54500042 .00000444 00000-0 50523-4 0 4601
2 16881 82.5177 282.9643 0017781 182.2671 177.8464 14.83822974573045
EGP
1 16908U 86061A 97068.52829238 -.00000083 00000-0 10000-3 0 1598
2 16908 50.0120 261.2360 0011406 329.0693 30.9469 12.44416049149446
NOAA 10
1 16969U 86073A 97068.89380561 .00000008 00000-0 21878-4 0 9959
2 16969 98.5377 64.5394 0012491 302.9678 57.0302 14.25021673544444
MOS-1
1 17527U 87018A 97067.21888618 -.00000043 00000-0 00000+0 0 5215
2 17527 98.8992 128.9597 0020088 319.2596 40.7064 14.00418853511948
GOES 7
1 17561U 87022A 97065.49250052 -.00000179 00000-0 10000-3 0 3113
2 17561 3.5776 67.6125 0005163 317.8874 221.7356 1.00267563 19938
Kvant-1
1 17845U 87030A 97068.87661073 .00005176 00000-0 67308-4 0 9190
2 17845 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926565633
DMSP B5D2-3
1 18123U 87053A 97068.88215713 .00000005 00000-0 24839-4 0 8324
2 18123 98.7659 260.7614 0013521 214.9212 145.1080 14.15467777502083
RS-10/11
1 18129U 87054A 97068.21555861 .00000013 00000-0 -18933-5 0 3312
2 18129 82.9266 312.6376 0012326 132.9491 227.2700 13.72374966486520
Meteor 2-16
1 18312U 87068A 97066.24105404 .00000050 00000-0 31607-4 0 5488
2 18312 82.5587 143.4461 0011394 196.2942 163.7849 13.84092584482563
Meteor 2-17
1 18820U 88005A 97068.43460438 .00000043 00000-0 25002-4 0 1983
2 18820 82.5412 196.0873 0015430 262.3281 97.6127 13.84770047460232
DMSP B5D2-4
1 18822U 88006A 97068.58312363 .00000045 00000-0 38134-4 0 4788
2 18822 98.3810 253.9652 0005823 316.8243 43.2478 14.23219182472328
Glonass 34
1 19163U 88043A 97068.18932234 .00000027 00000-0 10000-3 0 1608
2 19163 65.3657 76.9115 0010555 149.9121 210.1749 2.13102342 67887
Glonass 36
1 19165U 88043C 97068.24662632 .00000026 00000-0 10000-3 0 5691
2 19165 65.3471 76.8584 0004299 326.9091 33.0940 2.13101807 68503
METEOSAT 3
1 19215U 88051A 97067.61689699 -.00000098 00000-0 00000+0 0 3073
2 19215 3.7997 66.4248 0004198 162.8258 197.5435 0.96947336 19741
OKEAN 1
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1 19274U 88056A 97067.35838931 .00000301 00000-0 34386-4 0 1599
2 19274 82.5118 24.3010 0020167 340.5789 19.4656 14.82588072468512
Meteor 3-2
1 19336U 88064A 97066.17631904 .00000051 00000-0 10000-3 0 5555
2 19336 82.5424 340.3285 0016063 302.2075 57.7491 13.16980945414096
Glonass 39
1 19503U 88085C 97066.86978519 -.00000006 00000-0 10000-3 0 4545
2 19503 65.4781 315.8125 0004095 128.1157 231.9869 2.13101693 65969
NOAA 11
1 19531U 88089A 97068.89357648 .00000028 00000-0 39853-4 0 8836
2 19531 99.1637 99.6412 0011159 212.3060 147.7429 14.13123957435976
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97063.15285485 .00000055 00000-0 10000-3 0 6633
2 19749 65.3214 76.5864 0007334 259.1880 100.7725 2.13101525 63392
Glonass 41
1 19750U 89001B 97066.96167162 .00000040 00000-0 10000-3 0 5743
2 19750 65.3308 76.5277 0008967 231.4857 128.4683 2.13101719 63492
GPS BII-01
1 19802U 89013A 97068.39094461 .00000019 00000-0 00000+0 0 3697
2 19802 55.4548 100.0741 0022446 183.0574 177.0065 2.00565291 59035
Akebono
1 19822U 89016A 97067.17157734 .00008492 00000-0 46867-3 0 8840
2 19822 75.1273 330.0209 3719744 266.1810 51.6087 7.96541576187659
Meteor 2-18
1 19851U 89018A 97068.88383516 .00000048 00000-0 29975-4 0 5479
2 19851 82.5167 69.2270 0013737 317.5762 42.4341 13.84427560405594
MOP-1
1 19876U 89020B 97062.98015533 -.00000078 00000-0 00000+0 0 2491
2 19876 2.5066 70.6927 0017745 281.6297 78.6212 0.97108951 9142
TDRS 4
1 19883U 89021B 97065.50468000 -.00000286 00000-0 10000-3 0 3118
2 19883 0.4174 86.8626 0003376 259.8469 318.2585 1.00273708201738
GPS BII-02
1 20061U 89044A 97060.75259359 .00000033 00000-0 00000+0 0 3608
2 20061 54.0172 275.7568 0165223 222.0148 136.7545 2.00562978 56627
Nadezhda 1
1 20103U 89050A 97068.59695594 .00000049 00000-0 35881-4 0 960
2 20103 82.9562 272.9312 0038830 35.7665 324.6078 13.73875089385120
GPS BII-03
1 20185U 89064A 97064.44080534 .00000029 00000-0 00000+0 0 4004
2 20185 55.2513 100.6601 0019050 352.8205 7.2284 2.00556947 55273
GMS 4
1 20217U 89070A 97067.84780317 -.00000390 00000-0 10000-3 0 5301
2 20217 2.3231 73.6480 0001113 96.5245 61.6849 1.00278794 28079
INTERCOSMOS 24
1 20261U 89080A 97067.53781270 .00000124 00000-0 30554-4 0 5712
2 20261 82.5915 101.8845 1242661 160.4766 204.8666 12.47391506338860
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2 20302 53.1791 215.2289 0030472 186.9455 172.9804 2.00572212 54111
Meteor 3-3
1 20305U 89086A 97069.13060268 .00000044 00000-0 10000-3 0 7684
2 20305 82.5440 300.7194 0007516 27.7808 332.3688 13.04437067352873
COBE
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2 20322 98.9344 84.7294 0009294 24.5111 335.6493 14.03464693374085
Kvant-2
1 20335U 89093A 97068.87661073 .00005176 00000-0 67308-4 0 8367
2 20335 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926414645
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2 20361 56.1568 42.8493 0088400 140.8738 219.7571 2.00566438 43605
COSMOS 2054 (Altair-1)
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2 20391 4.3362 61.8517 0001593 241.3831 36.4811 1.00271414 26611
SPOT 2
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2 20436 98.7356 142.9471 0000721 57.0491 303.0755 14.20024441369260
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AO-16
1 20439U 90005D 97067.28674713 -.00000024 00000-0 74647-5 0 507
2 20439 98.5419 153.8349 0011291 142.5594 217.6376 14.30000007371810
DO-17
1 20440U 90005E 97066.30325639 .00000008 00000-0 19832-4 0 517
2 20440 98.5435 153.6597 0011574 143.8647 216.3319 14.30142678371702
WO-18
1 20441U 90005F 97067.27833508 -.00000042 00000-0 56544-6 0 549
2 20441 98.5465 154.5330 0011934 141.6838 218.5150 14.30110399371846
LO-19
1 20442U 90005G 97067.32364444 -.00000040 00000-0 13453-5 0 510
2 20442 98.5485 155.1928 0012406 141.2561 218.9455 14.30223357371877
GPS BII-06
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2 20452 54.0579 155.9981 0069090 97.5946 263.1986 2.00556544 52112
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1 20478U 90013A 97069.20684597 -.00000040 00000-0 31544-5 0 310
2 20478 99.1016 141.0524 0004753 244.3701 115.6972 13.93971107281616
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2 20479 99.0285 45.3991 0539738 252.9835 101.1477 12.83349440331340
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1 20480U 90013C 97068.00050976 -.00000028 00000-0 15873-4 0 9500
2 20480 99.0310 48.4882 0540341 244.2498 110.1892 12.83236815331853
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1 20491U 90013D 97068.20296617 .00000814 00000-0 15925-2 0 3252
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2 20496 43.1015 144.8900 0012238 317.8812 42.1102 15.36459864394174
Nadezhda 2
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2 20508 82.9506 47.1846 0044975 348.5774 11.4359 13.73519235352365
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1 20510U 90018A 97067.23060886 .00000131 00000-0 14651-4 0 5675
2 20510 82.5254 340.4789 0018479 168.1694 191.9960 14.78672130378692
GPS BII-07
1 20533U 90025A 97061.89524668 .00000040 00000-0 00000+0 0 3010
2 20533 54.4568 276.8773 0310375 89.8836 267.4615 1.90032860 50700
PegSat
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2 20546 94.1211 144.4473 0056805 54.5550 306.0991 15.50632202386182
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MACSAT 2
1 20608U 90043B 97065.37732360 .00000099 00000-0 14382-4 0 2522
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Glonass 44
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2 20619 65.0628 314.9531 0026660 210.8064 149.0943 2.13102472 52902
Glonass 45
1 20620U 90045B 97067.86172488 -.00000010 00000-0 10000-3 0 3520
2 20620 65.0658 314.8697 0008394 49.3270 310.7907 2.13102467 52986
Glonass 46
1 20621U 90045C 97065.11367414 -.00000005 00000-0 10000-3 0 9678
2 20621 65.0932 315.0203 0011239 193.4867 166.5524 2.13102730 52922
Kristall
1 20635U 90048A 97068.87661073 .00005176 00000-0 67308-4 0 6281
2 20635 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926385476
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1 20638U 90049A 97067.43882661 .00000321 00000-0 39659-4 0 6391
2 20638 52.9919 188.9034 0012425 201.7575 158.2884 15.07564992372174
Meteor 2-19
1 20670U 90057A 97069.21486706 -.00000005 00000-0 -17335-4 0 2309
2 20670 82.5479 136.5950 0014484 225.9970 133.9992 13.84124865338547
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1 20712U 90065A 97065.70643059 .00000073 00000-0 34717-3 0 4005
2 20712 17.7393 143.1683 7181175 216.1341 62.2392 2.35850347 49316
GPS BII-08
1 20724U 90068A 97068.24065359 .00000019 00000-0 00000+0 0 1858
2 20724 55.0954 98.0041 0141664 189.9301 169.8875 2.00563957 46764
Feng Yun1-2
1 20788U 90081A 97068.55065034 .00000109 00000-0 10000-3 0 2718
2 20788 98.8188 70.9315 0014512 114.1345 246.1533 14.01413701333269
Meteor 2-20
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GPS BII-09
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2 20830 56.0851 40.8471 0065926 94.7815 265.9579 2.00570602 47349
GPS BIIA-10
1 20959U 90103A 97069.19770350 .00000010 00000-0 00000+0 0 1566
2 20959 55.2851 100.0958 0113279 243.0240 115.8811 2.00570864 46012
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1 20978U 90105A 97068.83499594 .00000053 00000-0 34019-4 0 9902
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AO-21
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2 21087 82.9423 127.0560 0034403 190.7624 169.2799 13.74578565306140
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1 21089U 91007A 97065.91084122 -.00000018 00000-0 -35065-4 0 9614
2 21089 82.9225 354.4972 0027355 222.6789 137.2234 13.74076832305115
MOP-2
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2 21140 1.0726 78.8881 0001076 214.7343 349.5951 1.00285504 24225
Nadezhda 3
1 21152U 91019A 97068.75651457 .00000024 00000-0 10375-4 0 7827
2 21152 82.9259 309.0853 0041866 326.1626 33.6858 13.73543951300206
Glonass 50
1 21216U 91025A 97067.50119472 -.00000007 00000-0 10000-3 0 5838
2 21216 64.8238 314.3482 0009100 205.7405 154.2782 2.13103350 46156
Glonass 51
1 21217U 91025B 97067.57398615 -.00000008 00000-0 10000-3 0 9918
2 21217 64.7998 314.3540 0012060 223.6712 136.3301 2.13101959 46143
Glonass 52
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2 21218 64.8007 314.5099 0008257 326.9851 33.0210 2.13102545 46033
GRO
1 21225U 91027B 97065.45412791 .00002364 00000-0 43021-4 0 4377
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Meteor 3-4
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2 21232 82.5391 187.3803 0012325 225.7762 134.2346 13.16475065282041
NOAA 12
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2 21576 98.3139 127.2374 0002774 202.1812 157.9259 14.36477511295618
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2 21577 98.3051 130.3144 0005828 188.7612 171.3509 14.36542086296015
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TDRS 5
1 21639U 91054B 97062.72265565 .00000071 00000-0 10000-3 0 1479
2 21639 0.0676 95.9703 0001521 256.1151 255.2074 1.00270330 20457
Meteor 3-5
1 21655U 91056A 97068.22203197 .00000051 00000-0 10000-3 0 9615
2 21655 82.5545 133.2909 0012436 226.6862 133.3227 13.16851234267555
UARS
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2 21701 56.9860 135.8942 0005427 100.3023 259.8622 14.96574714299738
DMSP B5D2-6
1 21798U 91082A 97068.88114262 .00000091 00000-0 71575-4 0 6580
2 21798 98.9296 92.1367 0012212 192.9963 167.0896 14.14025211272477
Glonass 53
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2 21853 65.2520 75.4830 0007080 212.2866 147.7140 2.13102237 39715
Glonass 54
1 21854U 92005B 97067.71019219 .00000030 00000-0 00000+0 0 4228
2 21854 65.2546 75.3989 0016063 9.7179 350.3512 2.13104790 39749
Glonass 55
1 21855U 92005C 97068.24977495 .00000024 00000-0 00000+0 0 3926
2 21855 65.2539 75.3858 0007938 207.1921 152.7996 2.13102065 39740
JERS-1
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GPS BIIA-13
1 21930U 92019A 97068.09597083 -.00000065 00000-0 00000+0 0 8717
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1 22012U 92038A 97067.88155228 .00000473 00000-0 38551-4 0 7883
2 22012 81.6713 199.7042 0118487 27.0806 333.6524 14.91877559254697
GPS BIIA-14
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Glonass 56
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Glonass 58
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S80/T
1 22078U 92052C 97067.31339938 -.00000037 00000-0 10000-3 0 6447
2 22078 66.0780 354.6618 0013838 236.5970 123.3725 12.86585044214874
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2 22108 53.9513 216.7699 0121767 169.5262 190.6608 2.00550506 32846
FREJA
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GPS BIIA-17
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TDRS 6
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GPS BIIA-18
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2 22446 54.0638 276.3526 0102058 9.6430 350.5676 2.00567137 29841
Glonass 59
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Glonass 61
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ASTRO-D
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UFO F1
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2 22700 54.1097 217.4603 0063208 5.7361 354.2840 2.00564003 27075
NOAA 13
1 22739U 93050A 97068.41306481 .00000050 00000-0 53303-4 0 2825
2 22739 99.0804 31.9333 0009550 196.6978 163.3874 14.10986522184454
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2 22779 54.2006 276.4340 0008562 58.3293 301.5073 2.00559630 25795
Meteor 2-21
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2 22782 82.5506 137.5301 0021558 321.3083 38.6533 13.83070270177699
UFO F2
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2 22787 3.8736 328.5647 0004840 314.2354 208.8828 1.00275095 11465
SPOT 3
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2 22823 98.7264 144.0694 0016581 359.4159 0.6993 14.16989147178867
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AO-27
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IO-26
1 22826U 93061D 97065.72114226 .00000018 00000-0 24884-4 0 5390
2 22826 98.5538 142.4026 0008885 177.6993 182.4228 14.27828392179460
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HEATHSAT
1 22827U 93061E 97065.19323469 .00000012 00000-0 22139-4 0 6029
2 22827 98.5532 141.7648 0009077 165.2164 194.9290 14.27969693179405
KO-25
1 22828U 93061F 97067.25123439 .00000044 00000-0 34795-4 0 5186
2 22828 98.5486 143.9732 0010177 157.2808 202.8824 14.28170321147805
POSAT
1 22829U 93061G 97068.74250322 .00000010 00000-0 21163-4 0 5340
2 22829 98.5527 145.5207 0009852 154.1455 206.0221 14.28153177179935
GPS BIIA-23
1 22877U 93068A 97064.93724986 -.00000030 00000-0 00000+0 0 5625
2 22877 55.8012 38.7235 0047014 305.9992 53.5486 2.00556747 24643
METEOSAT 6
1 22912U 93073B 97065.29473594 -.00000025 00000-0 00000+0 0 6004
2 22912 0.2138 317.7652 0000355 319.6524 352.8675 1.00275910 10480
HST Array
1 22920U 90037C 97065.49565337 .00008396 00000-0 52794-3 0 6064
2 22920 28.4619 209.2853 0003057 69.5927 290.4914 15.07495347179000
Meteor 3-6
1 22969U 94003A 97067.49772092 .00000051 00000-0 10000-3 0 3278
2 22969 82.5583 74.0172 0014424 301.6969 58.2750 13.16743493149834
TUBSAT-B
1 22970U 94003B 97069.08761188 .00000051 00000-0 10000-3 0 3170
2 22970 82.5559 72.7666 0015078 296.3200 63.6369 13.16829005150052
GPS BIIA-24
1 23027U 94016A 97068.00597442 -.00000067 00000-0 00000+0 0 4993
2 23027 55.0168 339.1232 0061745 198.4480 161.3018 2.00572602 22010
Glonass 62
1 23043U 94021A 97065.39065490 -.00000005 00000-0 00000+0 0 4801
2 23043 64.5402 314.7327 0004284 191.5425 168.5075 2.13102882 22594
Glonass 63
1 23044U 94021B 97065.74232399 -.00000005 00000-0 00000+0 0 4467
2 23044 64.5346 314.7188 0028871 204.0781 155.8416 2.13102411 22608
Glonass 64
1 23045U 94021C 97066.38964595 -.00000005 00000-0 00000+0 0 4447
2 23045 64.5235 314.6954 0012124 28.8151 331.3174 2.13102568 22619
GOES 8
1 23051U 94022A 97066.32281451 -.00000276 00000-0 10000-3 0 6449
2 23051 0.1948 266.9866 0000849 35.7805 263.8280 1.00273707 18002
MSTI 2
1 23101U 94028A 97067.53424795 .00006757 00000-0 95250-4 0 4173
2 23101 97.0713 264.3242 0011878 61.0022 299.2426 15.56857473160388
STRV-1A
1 23125U 94034B 97065.39494294 .00001531 00000-0 42536-3 0 4093
2 23125 7.0078 123.8034 7241084 285.1735 10.7399 2.33091575 22238
STRV-1B
1 23126U 94034C 97068.37012950 .00002021 00000-0 51463-3 0 3644
2 23126 7.0228 122.2174 7243684 288.1506 10.0388 2.33280489 22348
Nadezhda 4
1 23179U 94041A 97066.91245419 .00000073 00000-0 58884-4 0 2623
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2 23179 82.9427 41.1303 0037862 105.2770 255.2579 13.75691370133055
Glonass 65
1 23203U 94050A 97066.99614519 -.00000001 00000-0 00000+0 0 4109
2 23203 64.7638 195.2718 0007258 141.2693 218.7472 2.13101786 20021
Glonass 66
1 23204U 94050B 97067.22953335 -.00000000 00000-0 00000+0 0 4322
2 23204 64.7529 195.2800 0014676 352.0727 7.8714 2.13102444 20023
Glonass 67
1 23205U 94050C 97068.05025088 .00000003 00000-0 00000+0 0 4119
2 23205 64.7593 195.2414 0001152 329.5593 30.3968 2.13102371 20044
DMSP B5D2-7
1 23233U 94057A 97068.88121470 .00000006 00000-0 26454-4 0 1442
2 23233 98.7928 129.2857 0013089 143.5111 216.6943 14.12783166130340
OKEAN 1-7
1 23317U 94066A 97065.39834652 .00000207 00000-0 27914-4 0 2256
2 23317 82.5448 177.7956 0025650 311.7023 48.1991 14.74080757129160
ELEKTRO (GOMS)
1 23327U 94069A 97068.75306405 -.00000129 00000-0 00000+0 0 2552
2 23327 0.5693 95.6746 0001723 335.6162 83.6361 1.00271233 8664
RESURS 1-3
1 23342U 94074A 97068.63626630 .00000012 00000-0 10000-4 0 6984
2 23342 97.9284 124.8369 0001288 92.6348 267.5007 14.69904661125808
Glonass 68
1 23396U 94076A 97065.54844663 .00000050 00000-0 00000+0 0 3871
2 23396 65.2010 75.3843 0028934 195.5909 164.3691 2.13102447 17836
Glonass 69
1 23397U 94076B 97067.60210601 .00000031 00000-0 00000+0 0 3846
2 23397 65.1873 75.3163 0014427 312.6381 47.2758 2.13101315 17876
Glonass 70
1 23398U 94076C 97068.89369074 .00000016 00000-0 00000+0 0 3942
2 23398 65.1775 75.2392 0005415 288.0951 71.8732 2.13101850 17911
LUCH (Altair-2)
1 23426U 94082A 97067.71735691 -.00000297 00000-0 00000+0 0 4924
2 23426 0.9016 261.3852 0002283 88.1272 170.1659 1.00263650 8151
RS-15
1 23439U 94085A 97068.20416013 -.00000039 00000-0 10000-3 0 2039
2 23439 64.8164 314.5199 0151880 151.1283 209.8151 11.27525437 90662
NOAA 14
1 23455U 94089A 97068.87124471 .00000073 00000-0 64680-4 0 9654
2 23455 98.9783 19.9929 0008607 210.4678 149.5994 14.11651443112930
Glonass 71
1 23511U 95009A 97068.38130734 -.00000014 00000-0 00000+0 0 3083
2 23511 64.5578 314.9077 0004979 225.4981 134.5288 2.13103682 15621
Glonass 72
1 23512U 95009B 97068.50280850 -.00000015 00000-0 00000+0 0 3129
2 23512 64.5478 314.9057 0007132 330.4748 29.5496 2.13101446 15621
Glonass 73
1 23513U 95009C 97065.97773748 -.00000005 00000-0 00000+0 0 3388
2 23513 64.5606 315.0110 0011558 204.1619 155.8465 2.13103281 15570
GMS 5
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1 23522U 95011B 97059.48587513 -.00000290 00000-0 10000-3 0 2080
2 23522 0.4371 8.7335 0001082 180.9468 283.5029 1.00270147 7024
DMSP B5D2-8
1 23533U 95015A 97068.88060601 .00000065 00000-0 58583-4 0 8954
2 23533 98.8467 73.9913 0007950 27.9974 332.1623 14.12778803101149
OSC 1
1 23545U 95017A 97065.09835925 .00000164 00000-0 63519-4 0 2058
2 23545 69.9744 282.3246 0014380 188.7681 171.3202 14.45482832101506
OSC 2
1 23546U 95017B 97066.03119171 .00000275 00000-0 94884-4 0 2391
2 23546 69.9775 280.3947 0013438 178.8589 181.2562 14.45507974101646
Microlab 1
1 23547U 95017C 97065.68280924 .00000143 00000-0 57400-4 0 1775
2 23547 69.9781 280.8497 0013898 180.3075 179.8051 14.45662032101606
OFEQ 3
1 23549U 95018A 97068.57129209 .00010168 00000-0 22143-3 0 4818
2 23549 143.3600 53.3981 0200944 224.1554 134.2969 15.22453376106710
GFZ-1
1 23558U 86017JE 97064.90752793 .00003863 00000-0 45777-4 0 2158
2 23558 51.6508 231.3879 0006098 127.6865 232.4688 15.64001228630945
ERS-2
1 23560U 95021A 97068.81944473 -.00000031 00000-0 46224-5 0 3423
2 23560 98.5503 145.0523 0001333 119.9227 240.2089 14.32247521 98596
Spektr
1 23579U 95024A 97068.87661073 .00005176 00000-0 67308-4 0 5896
2 23579 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926102956
GOES 9
1 23581U 95025A 97068.75488547 .00000062 00000-0 10000-3 0 3220
2 23581 0.1464 94.5513 0002147 256.2210 312.8584 1.00274349 6585
Helios 1A
1 23605U 95033A 97068.90774170 .00000094 00000-0 27148-4 0 4513
2 23605 98.1466 7.1332 0001573 72.5428 287.5945 14.63820555 89435
UPM SAT 1
1 23606U 95033B 97066.88378070 .00000204 00000-0 44736-4 0 2577
2 23606 98.1269 7.0615 0008723 70.8071 289.4055 14.67359812 89383
CERISE
1 23607U 95033C 97066.18922053 .00000181 00000-0 40959-4 0 1595
2 23607 98.1290 6.1388 0007474 70.4157 289.7851 14.67005710 89290
TDRS 7
1 23613U 95035B 97068.14814001 .00000073 00000-0 00000+0 0 3090
2 23613 1.2209 81.8697 0003142 259.6738 67.5109 1.00272347 6033
Glonass 74
1 23620U 95037A 97068.57689152 .00000007 00000-0 00000+0 0 2584
2 23620 64.8173 195.0920 0018484 165.7465 194.2773 2.13102900 12665
Glonass 75
1 23621U 95037B 97065.93940403 -.00000000 00000-0 00000+0 0 2642
2 23621 64.8307 195.1833 0017749 176.2109 183.7713 2.13102192 12608
Glonass 76
1 23622U 95037C 97066.93583017 -.00000001 00000-0 00000+0 0 2694
2 23622 64.8189 195.1499 0036775 164.3327 195.7413 2.13102513 12624
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Prognoz-M2
1 23632U 95039A 97068.95002340 -.00000447 00000-0 00000+0 0 1194
2 23632 70.2770 248.3910 7566339 327.7200 22.8250 0.26341100 1555
SICH-1
1 23657U 95046A 97066.20292172 .00000202 00000-0 27618-4 0 1512
2 23657 82.5348 318.4648 0026349 278.5437 81.2790 14.73536626 81569
RADARSAT
1 23710U 95059A 97066.56994016 .00000142 00000-0 72025-4 0 2450
2 23710 98.5813 75.4996 0001225 61.5744 298.5562 14.29982879 69883
Glonass 79
1 23734U 95068A 97066.11551450 -.00000001 00000-0 00000+0 0 2531
2 23734 64.8163 195.0956 0017625 325.8691 33.9873 2.13101944 9578
Glonass 78
1 23735U 95068B 97068.17677726 .00000004 00000-0 00000+0 0 2380
2 23735 64.8251 195.0171 0006572 207.0942 152.8416 2.13124874 9611
Glonass 77
1 23736U 95068C 97067.28843736 -.00000000 00000-0 00000+0 0 2251
2 23736 64.8068 195.0599 0006719 190.9047 169.0453 2.13102109 9596
XTE
1 23757U 95074A 97065.20232855 .00000655 00000-0 25685-4 0 1261
2 23757 22.9810 68.0551 0013191 316.1447 43.7988 14.97784176 64793
Polar
1 23802U 96013A 97061.73534345 .00000147 00000-0 00000+0 0 1107
2 23802 86.3737 23.2219 6541860 273.4134 19.4301 1.36265298 5087
1996010E
1 23824U 96010E 97068.02496197 .00058947 00000-0 13664-1 0 1843
2 23824 47.4078 173.4818 6857435 101.0399 337.0139 2.82906517 8907
GPS BIIA-25
1 23833U 96019A 97068.64070184 -.00000068 00000-0 00000+0 0 1563
2 23833 54.6295 337.1808 0029191 143.6219 216.6120 2.00564190 7002
Priroda
1 23848U 96023A 97068.87661073 .00005176 00000-0 67308-4 0 2780
2 23848 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926 50047
MSX
1 23851U 96024A 97068.57187432 -.00000837 00000-0 -56253-3 0 2051
2 23851 99.4111 59.7559 0008973 143.3455 216.8325 13.97385619 44566
SAX
1 23857U 96027A 97065.20115127 .00001286 00000-0 51404-4 0 553
2 23857 3.9579 1.2582 0014020 196.8945 163.0808 14.91747106 46339
MSTI 3
1 23868U 96031A 97067.56751061 .00001378 00000-0 29274-4 0 1210
2 23868 97.1156 259.4377 0008808 296.3245 63.7101 15.46717327 45673
TOMS-EP
1 23940U 96037A 97066.76012355 .00002421 00000-0 10868-3 0 929
2 23940 97.4242 334.9641 0012998 134.2840 225.9464 15.22072158 37712
GPS BIIA-26
1 23953U 96041A 97068.06020459 .00000020 00000-0 00000+0 0 1193
2 23953 55.1508 97.6994 0022882 58.0953 302.0767 2.00546611 4783
ADEOS
1 24277U 96046A 97066.55933256 -.00000044 00000-0 00000+0 0 1498
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2 24277 98.6084 145.6832 0002572 105.2829 254.8636 14.27644091 28867
FO-29
1 24278U 96046B 97065.17624868 -.00000030 00000-0 20473-5 0 623
2 24278 98.5554 120.3985 0352261 93.1066 271.0439 13.52628998 27191
Soyuz TM-24
1 24280U 96047A 97059.91170272 -.00002321 00000-0 -21150-4 0 1772
2 24280 51.6510 270.1912 0011267 124.9854 235.2199 15.60583514 30549
FAST
1 24285U 96049A 97069.18352129 .00001730 00000-0 17054-3 0 702
2 24285 82.9823 85.0646 2207061 167.7750 198.7290 10.81871909 21716
1996049B
1 24286U 96049B 97065.51221242 .00001435 00000-0 13745-3 0 803
2 24286 82.9995 86.8937 2207516 173.9177 189.4261 10.82269980 21318
Microsat
1 24291U 96050A 97067.21797492 .00044356 64363-5 31237-3 0 1516
2 24291 62.7908 111.7589 0572615 135.0169 229.8811 14.74809345 28001
MO-30
1 24305U 96052B 97068.46277175 .00000204 00000-0 20364-3 0 800
2 24305 82.9344 68.2805 0031462 121.2037 239.2204 13.73089245 25378
GPS BIIA-27
1 24320U 96056A 97064.92757585 .00000035 00000-0 00000+0 0 663
2 24320 54.6357 277.8300 0047987 92.9812 267.6616 2.00572392 3384
SAC-B/HETE
1 24645U 96061A 97066.23999200 .00000549 00000-0 34593-4 0 509
2 24645 37.9739 111.4989 0047826 199.2811 160.6144 15.14893218 18599
Progress M-33
1 24663U 96066A 97068.67039730 .00006325 00000-0 68824-4 0 1195
2 24663 51.6515 225.9282 0019502 203.8176 156.1907 15.64751057 17154
Soyuz TM-25
1 24717U 97003A 97068.87661073 .00005176 00000-0 67308-4 0 154
2 24717 51.6503 225.0742 0011351 159.1349 201.0682 15.60648926631521
1997003B
1 24718U 97003B 97044.09270681 .22144272 12761-4 19081-3 0 244
2 24718 51.6110 348.9966 0007906 69.9357 290.4334 16.51368987 418
Haruka
1 24720U 97005A 97066.83934563 -.00000084 00000-0 48659-4 0 120
2 24720 31.3385 237.6720 5997333 124.4613 307.3107 3.79358719 909
1997005B
1 24721U 97005B 97068.65438474 .00022287 00000-0 20089-2 0 182
2 24721 31.3178 235.3789 6153137 127.5935 305.7555 3.85065115 987
Cosmos 2337
1 24725U 97006A 97068.86134102 .00000011 00000-0 00000+0 0 168
2 24725 82.5976 212.9467 0006696 165.3147 194.8139 12.61216511 2984
Cosmos 2338
1 24726U 97006B 97068.87439677 .00000011 00000-0 00000+0 0 143
2 24726 82.6071 212.9802 0010884 169.1102 191.0226 12.60520908 2985
Cosmos 2339
1 24727U 97006C 97069.22927245 .00000011 00000-0 00000+0 0 136
2 24727 82.5957 212.6689 0003010 38.2822 321.8485 12.62724180 3044
Gonets-D1 4
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1 24728U 97006D 97069.13236054 .00000011 00000-0 00000+0 0 161
2 24728 82.6038 212.7156 0006834 359.2628 0.8452 12.63657010 2992
Gonets-D1 5
1 24729U 97006E 97069.23966303 .00000011 00000-0 00000+0 0 160
2 24729 82.6037 212.6897 0002004 176.1322 183.9789 12.62177574 3005
Gonets-D1 6
1 24730U 97006F 97066.46475791 .00000011 00000-0 00000+0 0 115
2 24730 82.6053 214.4575 0002163 106.9362 253.1966 12.62210261 2657
1997006G
1 24731U 97006G 97067.93881249 .00000010 00000-0 00000+0 0 140
2 24731 82.5973 213.6879 0041690 184.6954 175.3748 12.55181488 2837
JCSAT 4
1 24732U 97007A 97066.23415448 -.00000304 00000-0 00000+0 0 145
2 24732 0.0564 322.1010 0003891 152.8713 274.6232 1.00270199 108
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97066.42952550 -.00000123 00000-0 10000-3 0 222
2 24742 0.0340 277.9240 0110180 242.9220 194.5820 1.30956410 122
1997009B
1 24743U 97009B 97067.91825219 .00086246 17160-5 49468-2 0 69
2 24743 6.8682 350.3184 7348726 183.5311 166.9778 2.22903156 177
ZEYA
1 24744U 97010A 97069.22099973 .00002874 00000-0 98710-4 0 104
2 24744 97.2820 336.1316 0009332 82.2607 277.9693 15.30895373 946
1997010B
1 24745U 97010B 97068.76239534 .00001064 00000-0 37816-4 0 56
2 24745 97.2820 335.7000 0008276 84.5974 275.6212 15.31168458 872
1997010C
1 24746U 97010C 97067.23497573 .00012222 00000-0 30120-3 0 77
2 24746 97.2800 334.3290 0031754 239.2969 120.5146 15.40178171 649
1997010D
1 24747U 97010D 97067.17590510 .00012678 00000-0 33910-3 0 59
2 24747 97.2827 334.2056 0021157 250.6292 109.2791 15.37959730 543
TEMPO 2
1 24748U 97011A 97068.93473861 .00001515 00000-0 39359-3 0 102
2 24748 25.2352 79.0311 6676069 180.3535 217.8677 3.06943782 68
1997011B
1 24749U 97011B 97067.90795289 .00009679 -60810-6 85748-4 0 48
2 24749 25.7011 79.0231 6156379 179.6773 181.0292 3.91208152 29
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

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End of Ham-Space Digest V97 #87
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885. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970311050659_515664.456256_IHO96-60@CompuServe.COM>
Source record: 19539
Body handling: Inline uuencoded payload not displayed: Inst222k.exe

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #85

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
dub-img-3.compuserve.com (8.6.10/5.950515)
id IAA04389; Mon, 10 Mar 1997 08:26:23 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id FAA09433 for <ham-space-list@mailbox.ucsd.edu>; Mon, 10 Mar
1997 05:22:05 -0800 (PST)
Received: by noc.ucsd.edu; id FAA10351
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 05:18:14 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id FAA10267
sendmail 8.8.5/UCSD8.3
Mon, 10 Mar 1997 05:17:54 -0800 (PST)
Message-Id: <199703101317.FAA10267@noc.ucsd.edu>
Date: Mon, 10 Mar 97 05:17:51 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #85
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 10 Mar 97 Volume 97 : Issue 85

Today's Topics:
WeFAX program: WXSat for Windows with soundcard, for both HF and SAT (AM and FM) -
Inst222k.exe

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 10 Mar 1997 03:09:10 GMT
From: Bonkers@tooncity.net (Bonkers)
Subject: WeFAX program: WXSat for Windows with soundcard, for both HF and SAT (AM and FM) - Inst222k.exe

[Inline uuencoded payload not displayed: Inst222k.exe]

End of Ham-Space Digest V97 #85
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886. WTB: 144/432 transverter

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: CrAcKeD <sputnik@seaside.net>
Message-ID: <33253627.0@scipio.cyberstore.ca>
Source record: 19540

Hi.. I am looking for a transverter to use on my 2m all mode to transvert to 432 for satellite operations so the kids across the street at the school where I live can get a taste of satellite work. Can anyone help??

thanks...

887. Re: WeFAX program: WXSat for Windows with soundcard, for both HF and SAT (AM and FM) - Inst222k.exe

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: boyer@rd.bbc.co.uk
Message-ID: <5g3gfa$31d@bbcnews.rd.bbc.co.uk>
Source record: 19541
Cross-posted to: rec.radio.amateur.space,alt.ham-radio.fax

Bonkers (Bonkers@tooncity.net) wrote:

He sent up inst222k.zip.

The latest is available as http://members.aol.com/hffax2/fax/INST230E.EXE

J.

888. Re: bincancel:14 large binaries:AR960:@@NCM

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: red@redpoll.mrfs.oh.us
Message-ID: <ARMM-Report-960.a@redpoll.mrfs.oh.us>
Source record: 19542
Cross-posted to: alt.retromod,comp.os.ms-windows.win95.misc,comp.publish.cdrom.software,rec.arts.drwho,rec.arts.sf.starwars.games,rec.games.chess.computer,rec.music.hip-hop,rec.radio.amateur.space,soc.culture.iranian

Large binary posts do not belong in unmoderated discussion groups.

Please read this entire message, the Bincancel FAQ, and the complete
report (see below) before following up to or responding to this article.

As a service to, and with the cooperation of, other news administrators,
I run a program that searches for, and issues advisory cancels for,
large binaries in the akr, biz, comp, humanities, misc, news, nz, rec,
sci, soc, and talk hierarchies.

I have issued 14 cancels for large binary files (average size 451,610
characters - total size 6,322,543 characters) posted to 8 different
unmoderated discussion groups in the comp, rec, and soc hierarchies
as follows:
5 rec.games.chess.computer
2 rec.arts.drwho
2 comp.publish.cdrom.software
1 soc.culture.iranian
1 rec.radio.amateur.space
1 rec.music.hip-hop
1 rec.arts.sf.starwars.games
1 comp.os.ms-windows.win95.misc

This pointer is being posted to each affected group listed above.
Follow-ups are directed to news.admin.net-abuse.usenet.

If you want to see exactly which file was deleted from a particular
group, read the full report in news.admin.net-abuse.bulletins. The
full report can also be found in news.lists.filters and alt.retromod.
Look for AR960 in the subject, or, if your reader supports it,
use <URL:news:ARMM-Report-960@redpoll.mrfs.oh.us>.

The criteria used to search for this batch of large binaries were:
NEWSGROUPS: Unmoderated groups in the akr, biz, comp, humanities,
misc, news, rec, nz, sci, soc, and talk hierarchies
(except for comp.binaries.apple2, comp.bugs.2bsd, and
rec.games.bolo)
BINARY: base64, binhex, uuencode, and xbtoa encoded files, etc.
SIZE: > 100,000 characters [(size * (# of parts - .5)), if multi-part]

For more information about binary cancels, see the bincancel FAQ,
<URL:http://www.southcom.com.au/~geniac/binfaq.txt>.

Please direct public feedback to news.admin.net-abuse.usenet and private
feedback to red@redpoll.mrfs.oh.us. In the interests of preventing

cross-posted flame wars, please honor the followup-to header and do
not cross-post your reply to multiple groups. Thank you for your
cooperation.

Best wishes,
Dick
--
Richard E. Depew, Munroe Falls, OH red@redpoll.mrfs.oh.us (home)
It's over, and can't be helped, and that's one consolation, as they
always say in Turkey, when they cut the wrong man's head off''
-- Charles Dickens, _The Pickwick Papers_

889. WxSat, English version now available!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970311150600.KAA26596@ladder01.news.aol.com>
Source record: 19543

The new version of WxSat, v 2.3, is now available.

There are several improvements as well!

you can get it at:

http://members.aol.com/jkktl/ham.htm

Thank you to Christian Block, the author, for such an outstanding program!

890. G5400B/Fiberglass Boom

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: JAM <bmyers@primenet.com>
Message-ID: <3325A196.7DC9@primenet.com>
Source record: 19544

For Sale:

Yaesu G-5400B az/el rotor. Brand new, box never opened. $479.00 plus shipping.

ALSO:

Fiberglass 1-1/2 inch X 8 foot "solid" crossboom, new. Perfect for OSCAR Satellite Antenna setup. Consists of 1 eight-foot piece 1-1/2 inch diameter, 1/4 inch wall (1-1/4 inch I.D.) with 1 eight-foot piece of 1-1/4 inch solid fiberglass rod inserted in it (tight fit). That makes, for all practical purposes, an 8 foot solid fiberglass crossboom to nicely fit your G-5400 rotor. Strong.

Price: $79.00 plus shipping UPS (it meets UPS requirements for length) in U.S.A.

Please reply to Bob: bmyers@primenet.com

891. Re: WxSat, English version now available!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5g49cc$i5@freenet-news.carleton.ca>
Source record: 19545

Jkktl (jkktl@aol.com) writes:
> The new version of WxSat, v 2.3, is now available.
>
> There are several improvements as well!
>
> you can get it at:
>
> http://members.aol.com/jkktl/ham.htm
>
> Thank you to Christian Block, the author, for such an outstanding
> program!

Thank you for posting the info, as well!

892. Want - Fiberglass Pole for Rotor

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <3325B7B7.7A4C@ibag.com>
Source record: 19546

I'm looking for a 6 - 6.5 foot long 1 1/2" OD fiberglass pole for my elevation rotor. Should be metal reinforced on ends. Will pay shipping.

Call after 6 PM MST to (602) 435-9584, or e-mail rickw7rt@ibag.com, to rickw7rt@aztec.asu.edu, or packet to kc7y.az.usa.na

Rick T. - W7RT

893. Keps for RS-16???

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: jrybak@MesaState.EDU
Message-ID: <5g4cm4$8nn@mesa7.mesa.colorado.edu>
Source record: 19547

Does anyone know where I can get the keps for the new RS-16? They don't seem to be included in the new ARRL keps postings nor in that posted by Kelso.

Thanks.

Jim Rybak

894. Information about RS-15 and RS-16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: Bart Hackemack <hackembl@ix.netcom.com>
Message-ID: <33263BA3.7E0C@ix.netcom.com>
Source record: 19548

Okay, where can I get it?

Keps, modes, etc?

895. ARLK020 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk020.1997@arrl.org>
Source record: 19549
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK020
ARLK020 Keplerian data

ZCZC SK20
QST de W1AW
Keplerian Bulletin 20 ARLK020
From ARRL Headquarters
Newington, CT March 11, 1997
To all radio amateurs

SB KEP ARL ARLK020
ARLK020 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97070.11115089 .00000035 00000-0 21415-4 0 03421
2 18129 82.9268 311.2372 0012318 127.6303 232.5976 13.72375240486785
UO-11
1 14781U 84021B 97069.98471201 .00000121 00000-0 28295-4 0 09612
2 14781 97.8239 55.2000 0011551 323.7103 36.3318 14.69531102696833
RS-12/13
1 21089U 91007A 97070.13424015 .00000033 00000-0 19522-4 0 09641
2 21089 82.9215 351.3665 0027759 209.4492 150.5101 13.74077780305698
UO-14
1 20437U 90005B 97070.13747072 .00000000 00000-0 16734-4 0 02622
2 20437 98.5246 153.9099 0011270 132.3494 227.8646 14.29951556372201
RS-15
1 23439U 94085A 97070.15542537 -.00000039 00000-0 10000-3 0 02150
2 23439 64.8177 311.3659 0151903 150.7301 210.2240 11.27525576090887
AO-16
1 20439U 90005D 97070.15552207 .00000000 00000-0 16736-4 0 00675
2 20439 98.5371 156.6455 0011501 134.1941 226.0191 14.30000418372224
DO-17
1 20440U 90005E 97070.15123014 -.00000016 00000-0 10440-4 0 00749
2 20440 98.5436 157.4375 0011715 132.6753 227.5421 14.30142722372259
```

```
WO-18
1 20441U 90005F 97070.14688943 -.00000025 00000-0 68766-5 0 00718
2 20441 98.5456 157.3466 0011970 133.2958 226.9227 14.30110706372253
LO-19
1 20442U 90005G 97070.12201075 .00000014 00000-0 22106-4 0 00639
2 20442 98.5480 157.9402 0012596 133.3558 226.8639 14.30224241372277
FO-20
1 20480U 90013C 97069.94971013 -.00000028 00000-0 15761-4 0 09661
2 20480 99.0305 50.0674 0540344 239.8348 114.8171 12.83236871332104
AO-21
1 21087U 91006A 97070.15151131 .00000094 00000-0 82657-4 0 08001
2 21087 82.9419 124.1468 0034731 179.5563 180.5629 13.74578811306682
UO-22
1 21575U 91050B 97070.14207409 .00000037 00000-0 26515-4 0 07806
2 21575 98.3153 134.0915 0006610 181.1218 178.9958 14.37060308296409
KO-23
1 22077U 92052B 97069.85726853 -.00000037 00000-0 10000-3 0 06634
2 22077 66.0851 351.1166 0013252 237.9934 121.9792 12.86301132215106
KO-25
1 22828U 93061F 97070.12368276 .00000018 00000-0 24591-4 0 05326
2 22828 98.5486 146.7855 0010252 148.6084 211.5713 14.28170442148210
IO-26
1 22826U 93061D 97070.20603505 .00000009 00000-0 21005-4 0 5406
2 22826 98.5536 146.7935 0009014 164.7475 195.3972 14.27828728180106
AO-27
1 22825U 93061C 97070.16000562 -.00000033 00000-0 40020-5 0 05490
2 22825 98.5542 146.5277 0008427 162.5667 197.5808 14.27719081180085
FO-29
1 24278U 96046B 97070.13218370 .00000003 00000-0 36603-4 0 00655
2 24278 98.5550 124.6868 0352189 80.3068 283.7662 13.52629483027865
MO-30
1 24305U 96052B 97069.99303446 .00000204 00000-0 20364-3 0 00866
2 24305 82.9344 67.1495 0031567 116.8430 243.5932 13.73089551025583
Mir
1 16609U 86017A 97070.54145337 .00004684 00000-0 61477-4 0 1149
2 16609 51.6506 216.6927 0011252 164.7639 195.3680 15.60666855631782

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
March 15, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

896. Click here for Extreme Net Toolz

Newsgroup: rec.radio.amateur.space
Date: 1997-03-11 00:00:00 UTC
From: goextreme@hotmail.com
Message-ID: <3325edc1.1@news1.betacom.net>
Source record: 19550

WELCOME And Go To
www.GoExtreme.com

The Premiere Site on the Internet for EXTREME NET TOOLZ,
Internet Relay Chat (IRC) help, and Newsgroup help without
the clutter!

A large group of irc operators and newsgroup gurus
have tested and evaluated the best internet toolz
and HERE are their choices to become
an EXTREME Net user!

All of this software is FREE!!
It is either shareware or freeware!
Enjoy!

Best newsgroup reader: Free Agent!...Freeware!!!
Best chat software: mIRC 4.72!...Shareware!!!
Become your own FTP site! WAR-FTP 1.55 ....Freeware!!!!
Fastest jpeg\gif viewer ACDSEE!...Shareware!!!
Best E-Mail Program Eudora Lite 3.01!...Freeware!!!
Winzip 6.2 takes the chore out of these zip
files!...Shareware!!!
CuteFTP 1.8 makes "browsing" FTP sites a
snap!...Shareware!!!
Fastest Web Browser Netscape 3.01!...Shareware!!!

(`.(`.!BOSnet: Voted The MOST EXTREME Internet
Provider!!.).)

Great Page for Extreme Net Toolz! All listed software
here!
Get Extreme `Net Toolz here!

Great Help Page for IRC!!! Fserve, Flood Protection, New
IRC Servers!
IRC Help here!

Great Help Page for News Groups! How To Do It! Big List of
Public Servers!
Newsgroup Help here!

This information provided so that we may all enjoy the
Internet, IRC, and Newsgroups better!

!We receive no money!!

Members of
[freespeech]
Campaign

and

[AOL SUX Get a REAL ISP Campaign]

897. RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: abarrese@vivanet.com
Message-ID: <33260e4f.1832137@news.vivanet.com>
Source record: 19551

I'm new at using amateur satellites. What I need to know is how do I go about using RS-10. What I already know is that I could use my hand held for the up-link and my shortwave for down-link. Are amatuer's only allowed to use cw, but not voice.

Thanks,

Anthony
KB2YZV

898. Re: Keps for RS-16???

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <33269600.63A2@muenster.de>
Source record: 19552

James P. Rybak wrote:
>
> Does anyone know where I can get the keps for the new RS-16? They don't
> seem to be included in the new ARRL keps postings nor in that posted by
> Kelso.

RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

source: AMSAT bulletin ANS-068

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
phone/fax: +49-2533-7312]

899. RS-15 alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5g59mergd1@independence.ecn.ou.edu>
Source record: 19553

I've been tracking a few birds to get the hang of the QSOs... but whenever RS-15 comes by, I can never here it! I can here RS-10's beacon.... Has RS-15's orbit moved? Do I need new keps? What's the best 10m receive antenna for _INDOORS_ for the easy sats?

I'm hoping that the sats will be interesting!

73,
John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

900. Re: Keps for RS-16???

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <332b73df.965704029@news.sci.fi>
Source record: 19554

Oliver Welp <welp@muenster.de> wrote:

>James P. Rybak wrote:
>>
>> Does anyone know where I can get the keps for the new RS-16? They don't
>> seem to be included in the new ARRL keps postings nor in that posted by
>> Kelso.
>
>RS-16
>1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
>2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474
>
>source: AMSAT bulletin ANS-068
>

The Keps are definitely listed by T.S. Kelso, the problem is that you
have to know where to look :-). As with AO-21, the RS-16 is a package
bolted to a big satellite, in this case the main satellite is called
Zeya and the NORAD number is 24744.

In TLE958.txt by T.S. Kelso, you will find

ZEYA
1 24744U 97010A 97069.22099973 .00002874 00000-0 98710-4 0 104
2 24744 97.2820 336.1316 0009332 82.2607 277.9693 15.30895373 946

Paul OH3LWR

901. Re: RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: Keith Erskine <kerskine@fetchsoft.com>
Message-ID: <3326B099.64A6@fetchsoft.com>
Source record: 19555

Hi Anthony:
>
> I'm new at using amateur satellites. What I need to know is how do I
> go about using RS-10. What I already know is that I could use my hand
> held for the up-link and my shortwave for down-link. Are amatuer's
> only allowed to use cw, but not voice.

You've got the downlink part ready, as long as your shortwave receiver can receive single sideband (SSB), or has a BFO (Beat Frequency Oscillator). It should also be able to tune the 29 MHz range.

Now the uplink is going to be a little more complicated. The prefered modes for using RS-10/11 is SSB for voice, and CW for CW. A 2-M handheld typically transmits FM only (OK - PM if you really want to get technical). I've tried to work RS-10/11 when someone's tried to make contacts running 100 watts from their 2M FM rigs - its not a pretty picture.

Don't be discouraged! Somewhere out there are modifications that you can make to your 2M handheld to send CW, or something close to it. Maybe someone here knows.

73....KA1RHO

Keith H. Erskine
Fetch Software, Inc.
Tel:(508) 250-4246
Fax:(508) 250-4249
Email: kerskine@fetchsoft.com
http://www.fetchsoft.com
----

902. Re: RS-15 alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: Jeff Griffin <kb2wqm@amsat.org>
Message-ID: <3326A7E8.445A@amsat.org>
Source record: 19556

John Stephen Patrick wrote:
>
> I've been tracking a few birds to get the hang of the QSOs... but
> whenever RS-15 comes by, I can never here it! I can here RS-10's
> beacon.... Has RS-15's orbit moved? Do I need new keps? What's the
> best 10m receive antenna for _INDOORS_ for the easy sats?
>

John,good morning. RS-15 is alive and well. Orbit is the same. I made a few QSO's night before last. Last night I didn't hear much on the 8:48 PM pass (EST), signal was a little weak, didn't hear any QSO's although I could hear my CW, signal was down. Keep tuning up, and hope to hear from you on the bird's

73 Jeff kb2wqm@juno.com

903. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970312125454_515664.456256_BHG9-7@CompuServe.COM>
Source record: 19557

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #91

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-7.compuserve.com (8.6.10/5.950515)
id HAA07058; Wed, 12 Mar 1997 07:54:40 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA17670 for <ham-space-list@mailbox.ucsd.edu>; Wed, 12 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA14967
sendmail 8.8.5/UCSD8.3
Wed, 12 Mar 1997 04:30:52 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA14953
sendmail 8.8.5/UCSD8.3
Wed, 12 Mar 1997 04:30:50 -0800 (PST)
Message-Id: <199703121230.EAA14953@noc.ucsd.edu>
Date: Wed, 12 Mar 97 04:30:48 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #91
To: Ham-Space@ucsd.edu

Ham-Space Digest Wed, 12 Mar 97 Volume 97 : Issue 91

Today's Topics:
G5400B/Fiberglass Boom
Information about RS-15 and RS-16
Keps for RS-16??? (3 msgs)
RS-10/11
RS-15 alive?
Want - Fiberglass Pole for Rotor (2 msgs)
WxSat, English version now available! (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Mar 1997 11:17:01 -0700
From: JAM <bmyers@primenet.com>
Subject: G5400B/Fiberglass Boom

For Sale:

Yaesu G-5400B az/el rotor. Brand new, box never opened. $479.00 plus
shipping.

ALSO:

Fiberglass 1-1/2 inch X 8 foot solid crossboom, new. Perfect for
OSCAR Satellite Antenna setup. Consists of 1 eight-foot piece 1-1/2
inch diameter, 1/4 inch wall (1-1/4 inch I.D.) with 1 eight-foot piece
of 1-1/4 inch solid fiberglass rod inserted in it (tight fit). That
makes, for all practical purposes, an 8 foot solid fiberglass crossboom
to nicely fit your G-5400 rotor. Strong.

Price: $79.00 plus shipping UPS (it meets UPS requirements for length)
in U.S.A.

Please reply to Bob: bmyers@primenet.com

Date: Tue, 11 Mar 1997 21:14:11 -0800
From: Bart Hackemack <hackembl@ix.netcom.com>
Subject: Information about RS-15 and RS-16

Okay, where can I get it?

Keps, modes, etc?

Date: 11 Mar 1997 19:44:04 GMT
From: jrybak@MesaState.EDU (James P. Rybak)
Subject: Keps for RS-16???

Does anyone know where I can get the keps for the new RS-16? They don't
seem to be included in the new ARRL keps postings nor in that posted by
Kelso.

Thanks.

Jim Rybak

Date: Wed, 12 Mar 1997 03:39:44 -0800
From: Oliver Welp <welp@muenster.de>
Subject: Keps for RS-16???

James P. Rybak wrote:
>
> Does anyone know where I can get the keps for the new RS-16? They don't
> seem to be included in the new ARRL keps postings nor in that posted by
> Kelso.

RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

source: AMSAT bulletin ANS-068

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
phone/fax: +49-2533-7312]

Date: Wed, 12 Mar 1997 09:15:37 GMT
From: keinanen@sci.fi (Paul Keinanen)
Subject: Keps for RS-16???

Oliver Welp <welp@muenster.de> wrote:

>James P. Rybak wrote:
>>
>> Does anyone know where I can get the keps for the new RS-16? They don't
>> seem to be included in the new ARRL keps postings nor in that posted by
>> Kelso.
>
>RS-16
>1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
>2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474
>
>source: AMSAT bulletin ANS-068
>

The Keps are definitely listed by T.S. Kelso, the problem is that you
have to know where to look :-). As with AO-21, the RS-16 is a package
bolted to a big satellite, in this case the main satellite is called
Zeya and the NORAD number is 24744.

In TLE958.txt by T.S. Kelso, you will find

ZEYA
1 24744U 97010A 97069.22099973 .00002874 00000-0 98710-4 0 104
2 24744 97.2820 336.1316 0009332 82.2607 277.9693 15.30895373 946

Paul OH3LWR

Date: Wed, 12 Mar 1997 02:00:54 GMT
From: abarrese@vivanet.com (Anthony)
Subject: RS-10/11

I'm new at using amateur satellites. What I need to know is how do I go about using RS-10. What I already know is that I could use my hand held for the up-link and my shortwave for down-link. Are amatuer's only allowed to use cw, but not voice.

Thanks,

Anthony
KB2YZV

Date: 12 Mar 1997 03:59:10 GMT
From: jspatric@mailhost.ecn.uoknor.edu (John Stephen Patrick)
Subject: RS-15 alive?

I've been tracking a few birds to get the hang of the QSOs... but whenever RS-15 comes by, I can never here it! I can here RS-10's beacon.... Has RS-15's orbit moved? Do I need new keps? What's the best 10m receive antenna for _INDOORS_ for the easy sats?

I'm hoping that the sats will be interesting!

73,
John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

Date: Tue, 11 Mar 1997 12:51:19 -0700
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Subject: Want - Fiberglass Pole for Rotor

I'm looking for a 6 - 6.5 foot long 1 1/2" OD fiberglass pole for my elevation rotor. Should be metal reinforced on ends. Will pay shipping.

Call after 6 PM MST to (602) 435-9584, or e-mail rickw7rt@ibag.com, to rickw7rt@aztec.asu.edu, or packet to kc7y.az.usa.na

Rick T. - W7RT

Date: Wed, 12 Mar 1997 04:28:37 GMT
From: ooraargg@fznegg.pbz (Oevna)
Subject: Want - Fiberglass Pole for Rotor

On Tue, 11 Mar 1997 12:51:19 -0700, "Richard L. Tannehill, P.E."
<rickw7rt@ibag.com> wrote:

>I'm looking for a 6 - 6.5 foot long 1 1/2" OD fiberglass pole for my
>elevation rotor.
Uh,..if you want the cheap route ...
I used a 6 1/2' piece of 1 1/2" OD plastic (pvc?) electrical conduit
with a 6 1/2' piece of ~1 to1 1/4" OD(?) wooden dowel on the inside
SLATHERED in fiberglass resin. I've bounced on this wonderful
kendo-stick without it snapping...it does flex somewhat though.....
(with 180 lbs. o' lard on it!!) ;-)

Oevna VE7IJQ
(name in ROT13 to stifle e-mail spam)

Date: 11 Mar 1997 15:06:29 GMT
From: jkktl@aol.com (Jkktl)
Subject: WxSat, English version now available!

The new version of WxSat, v 2.3, is now available.

There are several improvements as well!

you can get it at:

http://members.aol.com/jkktl/ham.htm

Thank you to Christian Block, the author, for such an outstanding
program!

Date: 11 Mar 1997 18:47:40 GMT
From: ae517@FreeNet.Carleton.CA (Russ Renaud)
Subject: WxSat, English version now available!

Jkktl (jkktl@aol.com) writes:
> The new version of WxSat, v 2.3, is now available.
>
> There are several improvements as well!
>
> you can get it at:
>
> http://members.aol.com/jkktl/ham.htm
>
> Thank you to Christian Block, the author, for such an outstanding
> program!

Thank you for posting the info, as well!

End of Ham-Space Digest V97 #91
****

904. Re: RS-15 alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: jpbialas@mtu.edu
Message-ID: <slrn5ids1k.61m.jpbialas@veggie.csl.mtu.edu>
Source record: 19558

In article <5g59mergd1@independence.ecn.ou.edu>, John Stephen Patrick wrote:
>I've been tracking a few birds to get the hang of the QSOs... but
>whenever RS-15 comes by, I can never here it! I can here RS-10's
>beacon.... Has RS-15's orbit moved? Do I need new keps? What's the
>best 10m receive antenna for _INDOORS_ for the easy sats?

I just listened in on rs-15 recently, so as far as I know it should
still be alive. One thing to consider, rs-15 has a _very_ high orbit.
This makes receiving somewhat difficult, I use a large outdoor tri-band
beam for 10,15,and 20 meters and I still have trouble getting a good
signal sometimes. Also, due to its altitude, the more popular mode is CW,
listen for that instead of voice.

Good Luck, and listen for the MTU club station, w8yy, on the birds!

--

James Bialas, jpbialas@mtu.edu, kb8ynf, MTU ACM Vice President
---

905. Re: RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: jpbialas@mtu.edu
Message-ID: <slrn5idsau.61m.jpbialas@veggie.csl.mtu.edu>
Source record: 19559

>Don't be discouraged! Somewhere out there are modifications that you
>can make to your 2M handheld to send CW, or something close to it.
>Maybe someone here knows.

In the "something close to it" category, just use the PTT swith on your
HT for sending CW. Personally, I've never seen it done, but I've heard
claims that people have worked the satellites using this psuedo-CW and a
5/8 wave whip mounted on their HT.

Something to try at least.

--

James Bialas, jpbialas@mtu.edu, kb8ynf, MTU ACM Vice President
---

906. Re: RS-15 alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: "Matthew T. Jachimstal" <mtjachim@mtu.edu>
Message-ID: <01bc2f12$d1836fa0$7c51db8d@jachim.resnet.mtu.edu>
Source record: 19560

> I just listened in on rs-15 recently, so as far as I know it should
> still be alive. One thing to consider, rs-15 has a _very_ high orbit.
> This makes receiving somewhat difficult, I use a large outdoor tri-band
> beam for 10,15,and 20 meters and I still have trouble getting a good
> signal sometimes. Also, due to its altitude, the more popular mode is
CW,
> listen for that instead of voice.
>
> Good Luck, and listen for the MTU club station, w8yy, on the birds!

Hi James,

Over our spring break I worked Belgium on RS-15. There's quite a bit of
fading, but it is workable. I don't think 2000 km is _very_ high. Phase 3D
will be even higher.

Matthew
--

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtjachim@mtu.edu Voice: 906-487-0899 Pager: 906-222-9880
| WWW: http://jachsys.resnet.mtu.edu
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

907. Re: Want - Fiberglass Pole for Rotor

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: Gary Watts <gwatts@bensoft.com>
Message-ID: <Pine.LNX.3.95.970312153811.1021B-100000@bensoft.com>
Source record: 19561

I was able to locate fiberglass poles in the 1 1/4 to 1 1/2 in range
in 20' lengths for about 20.00 from
a flag pole dealer.
That is what I used..
The length I used was about 7'
ran a 28 elememt 19 ft boom 440mhz antenna on one side
and on the other had a 22 element 21ft boom RHC 144 mhz antenna on the
other

only problem that I had was that the antennas would still slip out of
alignment. I did not want to tighten down to much on the fiberglass..

Good luck with your search

Gary Watts de N0OXV
Kansas CIty Mo
81 GL!100I

On Wed, 12 Mar 1997, Oevna wrote:

> On Tue, 11 Mar 1997 12:51:19 -0700, "Richard L. Tannehill, P.E."
> <rickw7rt@ibag.com> wrote:
>
> >I'm looking for a 6 - 6.5 foot long 1 1/2" OD fiberglass pole for my
> >elevation rotor.
> Uh,..if you want the cheap route ...
> I used a 6 1/2' piece of 1 1/2" OD plastic (pvc?) electrical conduit
> with a 6 1/2' piece of ~1 to1 1/4" OD(?) wooden dowel on the inside
> SLATHERED in fiberglass resin. I've bounced on this wonderful
> kendo-stick without it snapping...it does flex somewhat though.....
> (with 180 lbs. o' lard on it!!) ;-)
>
>
> Oevna VE7IJQ
> (name in ROT13 to stifle e-mail spam)
>
>

908. Re: RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-03-12 00:00:00 UTC
From: Gary Watts <gwatts@bensoft.com>
Message-ID: <Pine.LNX.3.95.970312154638.1021C-100000@bensoft.com>
Source record: 19562

Anthony,
I dont want to spoil your fun but here are a few problems that you will
have.
1. you will most likely chirp while the pll in your ht locks up
on your transmit frequency
2. correct procedure is to STAY on one receive frequency and and vary your
transmit frequency to compsate for doppler shift to stay on your downlink
frequency.. With a ht you will be all over the the place?
3. Make sure the mic is disabled since any audio getting into the
mic/transmitter will cause fm'ing of the downlink signal
4. low transmit power level.. granted it dont take a lot of power to work
RS-10 but 10 - 25 watts would be more reliable

Yes.. US Hams can do CW and SSB thru the RS-10 Satellite
Check out www.amsat.org
they have a LOT of good information there

Good luck.
Give it a try.. see if you can at leat hear yourself
:-)

for example
145.850 up
29.385 down
+ or - for doppler

I hope I have the freqs right.. it has been a few years
:-)

Gary Watts de N0OXV
Kansas City Mo
81 GL1100I

On Wed, 12 Mar 1997, Anthony wrote:

> I'm new at using amateur satellites. What I need to know is how do I
> go about using RS-10. What I already know is that I could use my hand
> held for the up-link and my shortwave for down-link. Are amatuer's
> only allowed to use cw, but not voice.
>
> Thanks,
>
> Anthony
> KB2YZV
>
>

909. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: iw3rlb@s55tcp.ampr.ORG
Message-ID: <14020@s55tcp.ampr.org>
Source record: 19563

```
subscribe iw3rlb@ljutcp.hamradio.si
```

910. WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: Mike <Mike@miti.demon.co.uk>
Message-ID: <QOXRrDAML8JzEweg@miti.demon.co.uk>
Source record: 19564

Hi,

I have just downloaded WXSAT and am trying to set it up. I am getting good signals from NOAA-12 on 137.500 but I have been unable to decode any pictures yet.

My RX is an Icom R7000. The FM bandwidth is either 15kHz or 6 kHz. Is this OK?

I have checked the levels going into the mic input on my PC and they look OK.

I would appreciate any help/advise anyone can offer.

Thanks in advance

Mike
****

mike@miti.demon.co.uk

Buckinghamshire, U.K.

911. Re: WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: boyer@rd.bbc.co.uk
Message-ID: <5g8rrr$db5@bbcnews.rd.bbc.co.uk>
Source record: 19565

Mike (Mike@miti.demon.co.uk) wrote:
:
: My RX is an Icom R7000. The FM bandwidth is either 15kHz or 6
: kHz. Is this OK?
:
No.

You need 38-50kHz. Depending on doppler.

J.

912. Help for RS-15 D/L

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: dbcntcas@teleport.com
Message-ID: <dbcntcas-1303970928300001@ip-pdx21-05.teleport.com>
Source record: 19566

Since there has been some discussion on this satellite, I thought I would mention what I use out here. Besides a homebrew 3el (about 10 ft up) I also use a MOSFET preamp I made back in the 70's. This was in the VHF section of the '76 ARRL Handbook. Sure makes a difference on receiving the downlink on 10M for me.
CUL de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

913. Re: RS-15 alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <78997.s8804028@mail.student.utwente.nl>
Source record: 19567

On 12 Mar 1997 03:59:10 GMT,
John Stephen Patrick <jspatric@mailhost.ecn.uoknor.edu> wrote:

>I've been tracking a few birds to get the hang of the QSOs... but
>whenever RS-15 comes by, I can never here it! I can here RS-10's
>beacon.... Has RS-15's orbit moved? Do I need new keps? What's the
>best 10m receive antenna for _INDOORS_ for the easy sats?
>
>I'm hoping that the sats will be interesting!
>
>73,
>John
>--
> John Patrick (jpatrick@ou.edu) - KC5VEI
> Electrical/Computer Engineering Grad @ The University of Oklahoma
> * John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *
>
RS 15 is in a higher orbit, probably at lower power and thus has a much
weaker signal than RS-10. I use a 20 m groundpalne for listening to the HF
sats and RS-10 is easy, but RS-15 can only be heard at the higher
frequencies. If you have problems with outdoor antenna's try something
small, a car CB antenna e.g. with a preamp. (the noise from the galaxy is
quite high at 30 MHz, only most HF sets already recon on that!) As the
sky temperature (noise, not physical) is probably above 1000K a 5 dB preamp
would suffice for a full groundplane, thus a good Si dual gate preamp with
a noise figure of 1 to 2 dB will probably suffice for a 1m rod.
73 Johan packet pa3fpj@pi8daz.#twe.nld.eu
email pa3fpj@amsat.org

914. 16 bit card+4IO Ports

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33282AC5.127@apollo.wes.army.mil>
Source record: 19568
Cross-posted to: misc.forsale.computers.net-hardware,rec.radio.swap,rec.radio.amateur.howmbrew,rec.radio.amateur.digital,rec.radio.amateur.misc,rec.radio.amateur.space

Modular Circuit Technology 16 bit card with four high-speed serial ports
that are NS 16550compatible. In addition the card has two parallel
ports and extended K/O address and IRQ settings.

New and never removed from box. I bought 2 and only going to use 1.
very reasonably priced at 75.00 shipped CONUS.

Butch KF5DE

915. 2 mtr. OSCAR antenna circular polarizing switch

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: sufana@ceco.ceco.com
Message-ID: <E6zxI0.Ayw@ceco.ceco.com>
Source record: 19569

Hi,

Does anyone have a recommendation as to what circular polarizing switch (to switch from RHCP to LHCP) is usuable with an older Cushcraft 2 meter OSCAR antenna? I have a Cushcraft A144-20T and a Cushcraft A144-10T.

Thanks for the help in advance.

73s,

Charlie Sufana AJ9N Internet sufana@ceco.ceco.com (preferred)
tsdys@ccmail.ceco.com (secondary)

ComEd - A Div. of Unicom (formerly Commonwealth Edison Co.)
Work address: ComEd, System Protection Dept. 1039E, 125 S. Clark St.,
P.O. Box 767, Chicago, Il. 60690
Work phone: (312) 394-2815, work fax: (312) 394-4583

Who are you going to call? Fault busters!

916. Alliance Tenna Rotor setup

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: cjeffers@luminet.net
Message-ID: <5g9kih$ehr@lois.zippo.com>
Source record: 19570

Hello Everyone!

I recently aquired an Allinace Tenna rotor for free. I'm hoping to use it as a elevation rotor by sliding a peice of renforced PVC through it then placing a 9 element 70cm quagi on one end and a 4 element 2 meter quad on the other.

I'd like any suggestions on this type of setup specificly a more accurate way of controling the rotor besides that old rotor control box that looks as if it will melt!

Thanks and 73's de
Jim Jefferson KB0THN
http://www.luminet.net/~cjeffers/

917. Dish Feed Conversion

Newsgroup: rec.radio.amateur.space
Date: 1997-03-13 00:00:00 UTC
From: Michael Wallace <mewalla@worldnet.att.net>
Message-ID: <3328D81F.5B81@worldnet.att.net>
Source record: 19571

I was told that it is possible to convert Vert./Horz. polarization to
Left/Right Circular. Possibly with the use of diodes. Is this TRUE???
I've come up empty handed so far.

I'd really appreciate any info you can provide! Thank you.

Michael Wallace
N
3
Low
Flying
Ham
mewalla@worldnet.att.net

918. WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: Mike <Mike@miti.demon.co.uk>
Message-ID: <dnz7GDA6jRKzEwUB@miti.demon.co.uk>
Source record: 19472

Hi,

I am just getting into WXSAT reception and would appreciate any
help.

I am using the WXSAT programme, which utilises the PC's
soundcard to decode the pictures. I am using 137 MHz and have
had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
any other sats that I should be looking for in this band?

Also, re. the WXSAT prog; I can get it to produce a live picture
OK, but if I try to auto record it doesn't want to know. Also, in the
parameters window there are many different parameters to
adjust...can anyone give me a rundown of the optimum settings
please? Do any of the sats available on 137 MHz send colour pics,
or are they all monochrome.

Thanks in advance for any help

Mike
(G0UOH)
****

mike@miti.demon.co.uk

Buckinghamshire, U.K.

919. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <3329484A.1CE1@ix.netcom.com>
Source record: 19473

Mike wrote:
>
> Hi,
>
> I am just getting into WXSAT reception and would appreciate any
> help.
>
> I am using the WXSAT programme, which utilises the PC's
> soundcard to decode the pictures. I am using 137 MHz and have
> had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
> any other sats that I should be looking for in this band?
>

<snip>

Mike,
Sats in the band are:
NOAA 12_____137.5Mhz.
NOAA 14_____137.62Mhz.
OKEAN 4____137.4Mhz.
Sich -1_______137.4Mhz.
Meteor 3-5___137.85Mhz.
Meteor 3-6___137.30Mhz?? (inactive)
Meteor 2-21__137.85Mhz. (inactive)

Since you're in the UK you might be able to pick up SICH and
OKEAN. (Unfortunatly for us folks in the US they only transmit over
Russia.) None of the sats transmit in color, but WXSAT program will
generate pseudo-color images from the NOAA IR/VIS transmissions.
What type of problem are you having with the auto record? Is it not
responding at all or won't it auto sync....?

A good source for WX sat info in the UK is the Remote Imaging Group
(http:\\www.rig.org.uk)

Regards,

Rolf

920. Satellite Antenna/Rotor

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: jtpjatae@bicc00.bi.ehu.ES
Message-ID: <3.0.1.32.19970314153327.007c4e20@bicc00.bi.ehu.es>
Source record: 19474

I am considering to purchase a rotor and antennas for satellite operation:=
Here are some of my caveats (I am not an expert):

1) Antenna Choice: I have been searching for antennas for satellite=
operation and I have found these posibilities:

Cushcraft: $200+$190=3D$390 (no crossboom included)

22XB 144-148Mhz 22el. 14dB

738XB 432-448Mhz 38el. 15.5dB

With built-in polarity switch.

Boom of 6063-T832 =BF? Aluminium

Stainless Steel Hardware

No crossboom

Hygain Telex: $400

Oscar Link with

216AT 144-148Mhz 16el 11.5dB=09

7030AT 432-448Mhz 30el 14dB=09

With built-in polarity switch.

Boom of =BFAluminium?

Stainless Steel Hardware

Fiber Glass crossboom included

KLM

Small Oscar Set: $400

2M-14C 144-150Mhz 14el 11dB

435-18C 420-450Mhz 18el 12dB

With built-in polarity switch.

All stainless steel

Fiber Glass crossboom included

Large Oscar Set: $500

2M-22C 144-148Mhz 22el 13dB

435-40C 420-440Mhz 40el 15dB

With built-in polarity switch.

All stainless steel

Fiber Glass crossboom included

My conclussions are:

-There is little difference in price...

-Cushcraft seems to have the highest gain.

-I have not VSWR data for all the antennas/band

-KLM is the only one with a steel boom, is this a real important point?

-Not all the systems covers the Spanish (European) whole bands:=
144-146Mhz/430-440Mhz. Only KLM...

So the best purchase should be the KLM small set (in it's price category) or=
perhaps the Cushcraft.

Any comments, advices or (good or bad) experiences with these antennas?

2) Rotor Choice

This is simpler, the only (I haven't found other) possibility in=
azimut/elev. is the Yaesu 5600B. I have been told that sometimes it is=
possible to get almost the same thing with Kempro (is this rigth?). There=
are sometimes bargains with Yaesu 5400. Which are the differences with the=
5600B?

Any comments, advices or (good or bad) experiences about rotors?

Best regards

Eduardo/EA2BAJ

PD: I haven't been able to get information about maspro antennas. Any=
kludges

<paraindent><param>out</param>--=

</paraindent>Eduardo Jacob - Area de Ingenier'ia Telem'atica

Departamento de Electr'onica y Telecomunicaciones

ETSII y de IT Tel: +34-(9)4-427 8055

UPV / EHU Fax: +34-(9)4-441 4041

Alda Urquijo s/n E-mail: jtpjatae@bi.ehu.es

E-48013 - Bilbao (Spain) : 100021,2212 Compuserve

Ham: EA2BAJ VHF PACKET: EA2BAJ @ EA2URV

PGP Key available: Send email w/subject: PGPKEY

fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD

921. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970314125900_515664.456256_IHO34-40@CompuServe.COM>
Source record: 19475

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #93

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-2.compuserve.com (8.6.10/5.950515)
id HAA03165; Fri, 14 Mar 1997 07:58:45 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA28299 for <ham-space-list@mailbox.ucsd.edu>; Fri, 14 Mar
1997 04:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id EAA03834
sendmail 8.8.5/UCSD8.3
Fri, 14 Mar 1997 04:31:14 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA03819
sendmail 8.8.5/UCSD8.3
Fri, 14 Mar 1997 04:31:12 -0800 (PST)
Message-Id: <199703141231.EAA03819@noc.ucsd.edu>
Date: Fri, 14 Mar 97 04:31:11 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #93
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 14 Mar 97 Volume 97 : Issue 93

Today's Topics:
2 mtr. OSCAR antenna circular polarizing switch
Alliance Tenna Rotor setup
Dish Feed Conversion
Help for RS-15 D/L
RS-10/11
RS-15 alive?
Want - Fiberglass Pole for Rotor
WXSAT reception

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 13 Mar 1997 19:15:35 GMT
From: sufana@ceco.ceco.com (Charles R. Sufana)
Subject: 2 mtr. OSCAR antenna circular polarizing switch

Hi,

Does anyone have a recommendation as to what circular polarizing switch
(to switch from RHCP to LHCP) is usuable with an older Cushcraft 2 meter
OSCAR antenna? I have a Cushcraft A144-20T and a Cushcraft A144-10T.

Thanks for the help in advance.

73s,

Charlie Sufana AJ9N Internet sufana@ceco.ceco.com (preferred)
tsdys@ccmail.ceco.com (secondary)

ComEd - A Div. of Unicom (formerly Commonwealth Edison Co.)
Work address: ComEd, System Protection Dept. 1039E, 125 S. Clark St.,
P.O. Box 767, Chicago, Il. 60690
Work phone: (312) 394-2815, work fax: (312) 394-4583

Who are you going to call? Fault busters!

Date: Thu, 13 Mar 97 19:29:12 GMT
From: cjeffers@luminet.net (Jim)
Subject: Alliance Tenna Rotor setup

Hello Everyone!

I recently aquired an Allinace Tenna rotor for free. I'm hoping to use it as a
elevation rotor by sliding a peice of renforced PVC through it then placing a
9 element 70cm quagi on one end and a 4 element 2 meter quad on the other.

I'd like any suggestions on this type of setup specificly a more accurate way
of controling the rotor besides that old rotor control box that looks as if it
will melt!

Thanks and 73's de
Jim Jefferson KB0THN
http://www.luminet.net/~cjeffers/

Date: Thu, 13 Mar 1997 22:46:23 -0600
From: Michael Wallace <mewalla@worldnet.att.net>
Subject: Dish Feed Conversion

I was told that it is possible to convert Vert./Horz. polarization to
Left/Right Circular. Possibly with the use of diodes. Is this TRUE???
I've come up empty handed so far.

I'd really appreciate any info you can provide! Thank you.

Michael Wallace
N
3
Low
Flying
Ham
mewalla@worldnet.att.net

Date: 13 Mar 1997 17:27:14 GMT
From: dbcntcas@teleport.com (Dave Bernhardt)
Subject: Help for RS-15 D/L

Since there has been some discussion on this satellite, I thought I would
mention what I use out here. Besides a homebrew 3el (about 10 ft up) I
also use a MOSFET preamp I made back in the 70's. This was in the VHF
section of the '76 ARRL Handbook. Sure makes a difference on receiving
the downlink on 10M for me.
CUL de Dave, N7DB (CN85)

--
Dave Bernhardt dbcntcas@teleport.com

Date: Wed, 12 Mar 1997 16:02:01 -0600
From: Gary Watts <gwatts@bensoft.com>
Subject: RS-10/11

Anthony,
I dont want to spoil your fun but here are a few problems that you will
have.
1. you will most likely chirp while the pll in your ht locks up
on your transmit frequency
2. correct procedure is to STAY on one receive frequency and and vary your
transmit frequency to compsate for doppler shift to stay on your downlink
frequency.. With a ht you will be all over the the place?
3. Make sure the mic is disabled since any audio getting into the
mic/transmitter will cause fm'ing of the downlink signal
4. low transmit power level.. granted it dont take a lot of power to work
RS-10 but 10 - 25 watts would be more reliable

Yes.. US Hams can do CW and SSB thru the RS-10 Satellite
Check out www.amsat.org

they have a LOT of good information there

Good luck.
Give it a try.. see if you can at leat hear yourself
:-)

for example
145.850 up
29.385 down
+ or - for doppler

I hope I have the freqs right.. it has been a few years
:-)

Gary Watts de N0OXV
Kansas City Mo
81 GL1100I

On Wed, 12 Mar 1997, Anthony wrote:

> I'm new at using amateur satellites. What I need to know is how do I
> go about using RS-10. What I already know is that I could use my hand
> held for the up-link and my shortwave for down-link. Are amatuer's
> only allowed to use cw, but not voice.
>
> Thanks,
>
> Anthony
> KB2YZV
>
>

Date: Thu, 13 Mar 97 19:00:52 CST
From: "Johan Dijkhuis" <s8804028@driene.student.utwente.nl>
Subject: RS-15 alive?

On 12 Mar 1997 03:59:10 GMT,
John Stephen Patrick <jspatric@mailhost.ecn.uoknor.edu> wrote:

>I've been tracking a few birds to get the hang of the QSOs... but
>whenever RS-15 comes by, I can never here it! I can here RS-10's
>beacon.... Has RS-15's orbit moved? Do I need new keps? What's the
>best 10m receive antenna for _INDOORS_ for the easy sats?
>
>I'm hoping that the sats will be interesting!
>
>73,
>John
>--
> John Patrick (jpatrick@ou.edu) - KC5VEI
> Electrical/Computer Engineering Grad @ The University of Oklahoma

> * John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *
>
RS 15 is in a higher orbit, probably at lower power and thus has a much
weaker signal than RS-10. I use a 20 m groundpalne for listening to the HF
sats and RS-10 is easy, but RS-15 can only be heard at the higher
frequencies. If you have problems with outdoor antenna's try something
small, a car CB antenna e.g. with a preamp. (the noise from the galaxy is
quite high at 30 MHz, only most HF sets already recon on that!) As the
sky temperature (noise, not physical) is probably above 1000K a 5 dB preamp
would suffice for a full groundplane, thus a good Si dual gate preamp with
a noise figure of 1 to 2 dB will probably suffice for a 1m rod.
73 Johan packet pa3fpj@pi8daz.#twe.nld.eu
email pa3fpj@amsat.org

Date: Wed, 12 Mar 1997 15:44:07 -0600
From: Gary Watts <gwatts@bensoft.com>
Subject: Want - Fiberglass Pole for Rotor

I was able to locate fiberglass poles in the 1 1/4 to 1 1/2 in range
in 20' lengths for about 20.00 from
a flag pole dealer.
That is what I used..
The length I used was about 7'
ran a 28 elememt 19 ft boom 440mhz antenna on one side
and on the other had a 22 element 21ft boom RHC 144 mhz antenna on the
other

only problem that I had was that the antennas would still slip out of
alignment. I did not want to tighten down to much on the fiberglass..

Good luck with your search

Gary Watts de N0OXV
Kansas CIty Mo
81 GL!100I

On Wed, 12 Mar 1997, Oevna wrote:

> On Tue, 11 Mar 1997 12:51:19 -0700, "Richard L. Tannehill, P.E."
> <rickw7rt@ibag.com> wrote:
>
> >I'm looking for a 6 - 6.5 foot long 1 1/2" OD fiberglass pole for my
> >elevation rotor.
> Uh,..if you want the cheap route ...
> I used a 6 1/2' piece of 1 1/2" OD plastic (pvc?) electrical conduit
> with a 6 1/2' piece of ~1 to1 1/4" OD(?) wooden dowel on the inside
> SLATHERED in fiberglass resin. I've bounced on this wonderful
> kendo-stick without it snapping...it does flex somewhat though.....
> (with 180 lbs. o' lard on it!!) ;-)
>
>

> Oevna VE7IJQ
> (name in ROT13 to stifle e-mail spam)
>
>

Date: Fri, 14 Mar 1997 09:23:06 +0000
From: Mike <Mike@miti.demon.co.uk>
Subject: WXSAT reception

Hi,

I am just getting into WXSAT reception and would appreciate any
help.

I am using the WXSAT programme, which utilises the PC's
soundcard to decode the pictures. I am using 137 MHz and have
had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
any other sats that I should be looking for in this band?

Also, re. the WXSAT prog; I can get it to produce a live picture
OK, but if I try to auto record it doesn't want to know. Also, in the
parameters window there are many different parameters to
adjust...can anyone give me a rundown of the optimum settings
please? Do any of the sats available on 137 MHz send colour pics,
or are they all monochrome.

Thanks in advance for any help

Mike
(G0UOH)
****

mike@miti.demon.co.uk

Buckinghamshire, U.K.

End of Ham-Space Digest V97 #93
****

922. Space Related poststamps

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: maury <i121171@amsat.org>
Message-ID: <01bc308c$3c99d340$2f0274c2@bertolino>
Source record: 19476

I'm lookin' for any kind of space related
post stamps (used or mint)..
Please answer to my e-mail, thanks
Maurizio Bertolino
i121171@amsat.org

923. SARA

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <73305.s8804028@mail.student.utwente.nl>
Source record: 19477

Does anyone know what happened to SARA, the french amateur radio astronomy satellite? As it is not in the regular kepler files i suppose its dead.
73 Johan pa3fpj@amsat.org
packet pa3fpj@pi8daz.#twe.nld.eu

924. Re: Dish Feed Conversion

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <73294.s8804028@mail.student.utwente.nl>
Source record: 19478

>I was told that it is possible to convert Vert./Horz. polarization to
>Left/Right Circular. Possibly with the use of diodes. Is this TRUE???
>I've come up empty handed so far.
>
It is possible with a device called a 90 degree hybrid coupler (or magic
tee if you use waveguide). This is a four port device, and if you put
horizontal / vertical on two ports you get circulair left /right on the
other two. Don't forget to put a dummy on the other side!
If you've got enough money you can buy one from mini-circuits for low power
work, or make one from coax for high power low price (but a small bandwidth)
If you can't find any articles about making one, mail me.
73 Johan pa3fpj@amsat.org
packet pa3fpj@pi8daz.#twe.nld.eu

925. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-14 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <332A50EF.7D38@Rworld.com>
Source record: 19479

Mike wrote:
>
> Hi,
>
> I am just getting into WXSAT reception and would appreciate any
> help.
>
> I am using the WXSAT programme, which utilises the PC's
> soundcard to decode the pictures. I am using 137 MHz and have
> had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
> any other sats that I should be looking for in this band?
>
> Also, re. the WXSAT prog; I can get it to produce a live picture
> OK, but if I try to auto record it doesn't want to know. Also, in the
> parameters window there are many different parameters to
> adjust...can anyone give me a rundown of the optimum settings
> please? Do any of the sats available on 137 MHz send colour pics,
> or are they all monochrome.
>
> Thanks in advance for any help
>
> Mike
> (G0UOH)
> **********
>
> mike@miti.demon.co.uk
>
> Buckinghamshire, U.K.

This isnt a reply to Mike (sorry Mike) but where can i get a copy of the WXSAT program that is being discussed? Thanks for the help!

926. NEW webpage !

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: kf4hyb@totally_useless.com
Message-ID: <5gel8o$eav@camel2.mindspring.com>
Source record: 19480
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.policy,rec.radio.amateur.space

http://www.geocities.com/SouthBeach/Sands/1961
Lots of info-links, monthly update features page

927. ARLK021 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk021.1997@arrl.org>
Source record: 19481
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK021
ARLK021 Keplerian data

ZCZC SK21
QST de W1AW
Keplerian Bulletin 21 ARLK021
From ARRL Headquarters
Newington, CT March 15, 1997
To all radio amateurs

SB KEP ARL ARLK021
ARLK021 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

RS-16
1 24744U 97010A 97064.31868795 -.00005782 00000-0 -19153-3 0 77
2 24744 97.2810 331.3169 0009653 97.8509 262.3741 15.30859907 199
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97073.17326094 .00000057 00000-0 45754-4 0 03369
2 18129 82.9252 308.9724 0012508 119.5842 240.6562 13.72375532487204
UO-11
1 14781U 84021B 97073.52539147 .00000048 00000-0 15901-4 0 9574
2 14781 97.8244 58.5941 0011228 311.1624 48.8570 14.69531389697352
RS-12/13
1 21089U 91007A 97073.84791958 .00000018 00000-0 27160-5 0 9635
2 21089 82.9218 348.6137 0027877 198.3470 161.6600 13.74077885306208
UO-14
1 20437U 90005B 97073.14628773 -.00000004 00000-0 15194-4 0 02570
2 20437 98.5239 156.8542 0011333 123.9659 236.2604 14.29951928372635
RS-15
1 23439U 94085A 97073.17101725 -.00000039 00000-0 10000-3 0 02098
2 23439 64.8166 306.4893 0151895 150.1872 210.7810 11.27525510091222
AO-16
1 20439U 90005D 97073.16423616 -.00000016 00000-0 10610-4 0 00617
2 20439 98.5372 159.5975 0011593 125.3594 234.8677 14.30000584372658
```

```
DO-17
1 20440U 90005E 97073.15964359 .00000013 00000-0 21741-4 0 00637
2 20440 98.5437 160.3914 0011787 124.1143 236.1163 14.30143317372687
WO-18
1 20441U 90005F 97071.82604182 -.00000043 00000-0 61133-7 0 552
2 20441 98.5458 158.9959 0012096 128.8109 231.4121 14.30110576372492
LO-19
1 20442U 90005G 97073.20021316 .00000038 00000-0 31485-4 0 00602
2 20442 98.5475 160.9626 0012730 124.6124 235.6265 14.30224932372714
FO-20
1 20480U 90013C 97072.99047736 -.00000036 00000-0 -31914-5 0 09564
2 20480 99.0316 52.5332 0540387 232.9403 122.1113 12.83236771332496
AO-21
1 21087U 91006A 97073.20872737 .00000094 00000-0 82657-4 0 08013
2 21087 82.9411 121.8836 0035028 170.9874 189.1872 13.74578933307105
UO-22
1 21575U 91050B 97073.20565775 -.00000022 00000-0 68071-5 0 07730
2 21575 98.3154 137.0521 0006930 170.8911 189.2403 14.37059941296845
KO-23
1 22077U 92052B 97073.12277467 -.00000037 00000-0 10000-3 0 06552
2 22077 66.0816 344.2785 0013545 235.8973 124.0760 12.86300747215528
KO-25
1 22828U 93061F 97072.71589124 .00000005 00000-0 19271-4 0 05246
2 22828 98.5485 149.3236 0010386 141.3699 218.8231 14.28170571148589
IO-26
1 22826U 93061D 97073.14924555 .00000028 00000-0 28590-4 0 05602
2 22826 98.5535 149.6754 0009279 155.6132 204.5493 14.27829081180528
AO-27
1 22825U 93061C 97073.66409407 .00000018 00000-0 24661-4 0 5437
2 22825 98.5529 149.9553 0008592 152.1218 208.0426 14.27719901180584
FO-29
1 24278U 96046B 97073.16490031 -.00000019 00000-0 13906-4 0 00836
2 24278 98.5541 127.3082 0352145 72.4796 291.4493 13.52629510028270
Mir
1 16609U 86017A 97073.80708694 .00004157 00000-0 55213-4 0 1227
2 16609 51.6511 200.2558 0011493 176.9595 183.1435 15.60692398632291

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 18, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

928. Re: WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970315223900.RAA03686@ladder01.news.aol.com>
Source record: 19482

The bandwidth needs to be at least 35 45 Khz..otherwise you are clipping
off about half of the signal data.

There are ways to easily modify a scanner for this bandwidth.

Jim

929. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970315223801.RAA03591@ladder01.news.aol.com>
Source record: 19483

you can get some tips on using WXSAT at:

http://members.aol.com/jkktl/ham.htm

WXSAT is THE BEST system out there for weather satellite reception!!

Better than any commercial hardware system!

It takes a little patience to set it up..but more importantly..what is
your receiver, antenna, computer graphics capability?

E me and check into the above web site!

930. Re: Want - Fiberglass Pole for Rotor

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <332B2B9D.7B1B@arrl.org>
Source record: 19484

Gary Watts wrote:

> only problem that I had was that the antennas would still slip out of
> alignment. I did not want to tighten down to much on the fiberglass..

Many "one size fits all" saddles offer very little surface
contact. I've gotten much better results by machining
my own out of square aluminum tubing to match the mast/boom
size I use--so I can tighten the antennas down by hand with
wing nuts. The EME types use milled blocks of aluminum to
do even better.--Zack Lau W1VT

931. Internet in the Sky from a Big LEO

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <332B56CE.FBA@ix.netcom.com>
Source record: 19485
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

I read the following in a Reuter's story today. Note that Teledesic is a Big LEO, not a Little LEO. These are not the guys trying to steal amateur spectrum.

The FCC granted a license to offer Internet and telephone services over the airwaves to Teledesic, a company backed by Bill Gates of Microsoft and Craig McCaw (former chairman of McCaw Cellular Communications.)

The company will launch and operate a satellite constellation carrying broadband communications of Internet, video-conferencing, interactive multimedia, etc.

This is the first time that the FCC has granted this type of license.

McCaw claims that service will begin in 2002. (Saves them from that pesky year 2000 problem, eh :-)

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html
--

932. What`s up with rs-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: n4zo@sccoast.net
Message-ID: <332b2062.36883343@news.sccoast.net>
Source record: 19486

What does it take to get anything going on that bird? Unless the pass is almost directly overhead, no luck here. Occasionally there is a sig to be heard, but never anything as loud as the .4 w beacon. the max for the beacon is 1.2 w, and it is loud and clear. What does it take to hit it consistently? I know it takes more than 100w and ten elements.

Gus, N4ZO

933. Re: Need Packet Radio info in Houston

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <332b1c57.32272346@news.sprynet.com>
Source record: 19487

On 14 Feb 1997 16:07:37 GMT, cmainz@aol.com (CMAINZ) wrote:

>I am a Ham operator working as a maritime mobile. I'm looking for
>information on Packet Radio (ie benefits, costs etc). I am currently
>staying in NW Houston and would like to make a local contact. I will be
>leaving on an extended sea trip later this year. Thanks,
greetings
I am from canada, but i suspect the information, you are looking for,
could come from anyone.
packet radio is something like the internet, however there are two
disctinct comparisons/differences. the internet is fast and more
efficient but packet radio is wireless.
With packet radio you need a tnc. you can probably get lots of
information if you type tnc or packet radio on your
internet search engine.
For packet you will need your computer, thats obvious, a tnc and a two
meter radio.
tncs generally cost around $150 to $450, again i am canadian and our
prices tend to be higher.
The general frequencies used tend to be around the 145 mhz, plus or
minus .1 mhz, area.
In terms of international boating, you might consider investingating
the use of the amateur digital, packet, satellites which are up.
Again, use you search engine and look for amsat and see what
they have to say about packet and amateur satellites.
With just about any mode/band of amateur radio, you can find lots of
information and activity just by doing research, looking around. I,
as i am sure you have found, the internet offers scads of information
on just about any topic, someone has already inputted into the system.

Larry ve3fxq

934. What are the frequencies used in radio astronomy?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-15 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <332b1c93.32332732@news.sprynet.com>
Source record: 19488

greetings
I realise that this is not an amateur radio related question. I did ask this question in a more appropriate usenet group title but i got no information back.
Does anyone know what frequencies are currently being used to look at the cosmos and what frequencies the ufo research groups are using to look for signs of intelligent life. p.s. i have not jumped off the deep end.
Larry ve3fxq

935. Re: WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5gfso6$amb@library.airnews.net>
Source record: 19489

I modified my scanner for 40Khz BW and am having
a lot of pager and police radio type of interference.
Not using a pre-amp yet. Wonder if a pre-amp with a
couple of extra tuned LCs for 137Mhz would solve this?
Ken K5MBV

936. Re: WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: g1gsw@titanic.u-net.com
Message-ID: <332bd15b.6614401@news.u-net.com>
Source record: 19490

On Thu, 13 Mar 1997 09:03:08 +0000, Mike <Mike@miti.demon.co.uk>
wrote:

>Hi,
>
>I have just downloaded WXSAT and am trying to set it up. I am
>getting good signals from NOAA-12 on 137.500 but I have been
>unable to decode any pictures yet.
>
>My RX is an Icom R7000. The FM bandwidth is either 15kHz or 6
>kHz. Is this OK?
>
>I have checked the levels going into the mic input on my PC and
>they look OK.
>
>I would appreciate any help/advise anyone can offer.
>
>Thanks in advance
>
>Mike
>**
>
>mike@miti.demon.co.uk
>
>Buckinghamshire, U.K.

Try my homepages for the latest English version 2.3 of WxSat.

www.titanic.u-net.com
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

937. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: g1gsw@titanic.u-net.com
Message-ID: <332cd18a.6661869@news.u-net.com>
Source record: 19491

On Fri, 14 Mar 1997 09:23:06 +0000, Mike <Mike@miti.demon.co.uk>
wrote:

>Hi,
>
>I am just getting into WXSAT reception and would appreciate any
>help.
>
>I am using the WXSAT programme, which utilises the PC's
>soundcard to decode the pictures. I am using 137 MHz and have
>had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
>any other sats that I should be looking for in this band?
>
>Also, re. the WXSAT prog; I can get it to produce a live picture
>OK, but if I try to auto record it doesn't want to know. Also, in the
>parameters window there are many different parameters to
>adjust...can anyone give me a rundown of the optimum settings
>please? Do any of the sats available on 137 MHz send colour pics,
>or are they all monochrome.
>
>Thanks in advance for any help
>
>Mike
>(G0UOH)
>**
>
>mike@miti.demon.co.uk
>
>Buckinghamshire, U.K.

Try my Homepages for the latest English Version of WXSat.

www.titanic.u-net.com
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

938. Looking for keplerian elements on the Net.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc3206$93f79480$6fb630ce@pass>
Source record: 19492

Hello

I'm looking for keplerian elements ofr amateur sat's and weather sat's and
TV sat's

Can someone tell me where I can find it on the Net?

Thanks for ya help!

Pirens G. ONL2057

939. Re: What`s up with rs-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: jpbialas@spinach.csl.mtu.edu
Message-ID: <slrn5iogih.f5l.jpbialas@spinach.csl.mtu.edu>
Source record: 19493

In article <332b2062.36883343@news.sccoast.net>, n4zo@sccoast.net wrote:
> What does it take to get anything going on that bird? Unless the pass
>is almost directly overhead, no luck here. Occasionally there is a sig
>to be heard, but never anything as loud as the .4 w beacon. the max
>for the beacon is 1.2 w, and it is loud and clear. What does it take
>to hit it consistently? I know it takes more than 100w and ten
>elements.
>
>Gus, N4ZO

I guess it really depends on how patient you are. The Michigan Tech ARC, w8yy, has had some success with rs-15. We have a 25W radio and a directional satellite antenna (about 10 or so elements). CW is really easy, that'd be your best bet. SSB is a a tad more difficult. Most of the trouble with SSB comes from the bird's spin, your signal will phase in and out. With good antennas, a reasonable amount of power (100 watts should be plenty), and a good sense of timing to deal with rs-15's spin, you should have no trouble working this satellite.

n9lmw will probably follow-up and correct any mistakes and perhaps give us a recount of his last experience with rs-15.

--

James Bialas, jpbialas@mtu.edu, kb8ynf, MTU ACM Vice President
---

940. Sat tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: sco@mindspring.com
Message-ID: <332c457e.4910836@news.mindspring.com>
Source record: 19494

Does anyone have any experience using the Sat Tracker rotor controller? I am considering buying one for the first time.

Reply by email only: sco@sco-inc.com

941. Re: What`s up with rs-15?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: "Matthew T. Jachimstal" <mtjachim@mtu.edu>
Message-ID: <01bc323e$68d238e0$7c51db8d@jachim.resnet.mtu.edu>
Source record: 19495

-----BEGIN PGP SIGNED MESSAGE-----

> I guess it really depends on how patient you are. The Michigan Tech
> ARC, w8yy, has had some success with rs-15. We have a 25W radio and a
> directional satellite antenna (about 10 or so elements). CW is really
> easy, that'd be your best bet. SSB is a a tad more difficult. Most of the
> trouble with SSB comes from the bird's spin, your signal will phase in
and
> out. With good antennas, a reasonable amount of power (100 watts should
> be plenty), and a good sense of timing to deal with rs-15's spin, you
> should have no trouble working this satellite.
>
> n9lmw will probably follow-up and correct any mistakes and perhaps give
us
> a recount of his last experience with rs-15.

Well, since you asked me to James, here I go.

Actually, you're almost perfectly correct. I think the satellite antennas
are something like 20 elements though. 10 pairs of crossed elements. :)

As for the fading, just repeating yourself till you get through works
pretty well.

Matthew
- --

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtjachim@mtu.edu Voice: 906-487-0899 Pager: 906-222-9880
| WWW: http://jachsys.resnet.mtu.edu
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

-----BEGIN PGP SIGNATURE-----
Version: 2.6.2
Comment: Encrypted Email Vastly Preferred

iQEVAwUBMywqpQGqm95oP3QdAQESqQf+LxWSuhRmSm1dFXzOoIXNn1EDxYgBmDDO
Zgo5QgwJBLFVk+Iz5WQ8964rNXAm236yQpowDKH50FMKwrq5sDmzRKDeoeAulfPt
2fF8qGA15KOl4KBMzugZ31WVpjXeLvrJDEb77BkxS/fhm4ACrfRLQGPSdH9rGXzU
As4DklsvcLlT8XhmeHcIdLZHdUUmBWwbYnwqvSGPyPeZiinNCnN3Zt/bX2VHDJpr
RNowXTnkDlQsM5x2BQCeFWDV+mhA1HmUdQtZsnv4MXD8W8+77Ujs6cH+KXdbJnZQ
CzFv/09yhVT347py+l9x6tmni2t7WJFXfQyJWC53pbLIRyCS5QqvaQ==
=YwwQ
-----END PGP SIGNATURE-----

942. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970316210800.QAA02438@ladder01.news.aol.com>
Source record: 19496

There are some good wxsat links and FAQ at:

http://members.aol.com/jkktl/ham/htm

943. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: Brian Burke <burkefam@icss.net>
Message-ID: <332C1A03.7200@icss.net>
Source record: 19497

Rolf Mathson wrote:
>
> Mike wrote:
> >
> > Hi,
> >
> > I am just getting into WXSAT reception and would appreciate any
> > help.
> >
> > I am using the WXSAT programme, which utilises the PC's
> > soundcard to decode the pictures. I am using 137 MHz and have
> > had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
> > any other sats that I should be looking for in this band?
> >
>
> <snip>
>
> Mike,
> Sats in the band are:
> NOAA 12_____137.5Mhz.
> NOAA 14_____137.62Mhz.
> OKEAN 4____137.4Mhz.
> Sich -1_______137.4Mhz.
> Meteor 3-5___137.85Mhz.
> Meteor 3-6___137.30Mhz?? (inactive)
> Meteor 2-21__137.85Mhz. (inactive)
>
> Since you're in the UK you might be able to pick up SICH and
> OKEAN. (Unfortunatly for us folks in the US they only transmit over
> Russia.) None of the sats transmit in color, but WXSAT program will
> generate pseudo-color images from the NOAA IR/VIS transmissions.
> What type of problem are you having with the auto record? Is it not
> responding at all or won't it auto sync....?
>
> A good source for WX sat info in the UK is the Remote Imaging Group
> (http:\\www.rig.org.uk)
>
> Regards,
>
> Rolf
The Chinese Fen Yung used to transmit in color. Don't know if its still
around. Brian

944. Amateur Analog (Voice) Satellite Frequencies FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1603971934120001@cqtlm-ppp051.dowco.com>
Source record: 19498

```
Analog (Voice) Satellite Frequencies as of March 17, 1997
Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.908 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

--------------------------------------------------------------------------------
* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. The
ground controlers seem to be experimenting with the various beacons,
therefore it is difficult to predict which will be on, 29.408 seems to be
on most passes.
```

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely
uplinked to it with a handheld on low power. On the other hand reception
of the 70cm downlink signal is more difficult without a directional antenna
most of the time. Therefore it is important to make sure
that you can hear the satellite downlink before you transmit therefor
avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time
of writing this satellite was reported to be in Analog mode.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time
of writing this satellite was reported by Jalsat to be in Analog mode
until March 21.

This FAQ is constantly being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

- errors or omissions to ve7vdx@dowco.com

945. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970316125527_515664.456256_JHO51-35@CompuServe.COM>
Source record: 19499

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #95

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-5.compuserve.com (8.6.10/5.950515)
id HAA07903; Sun, 16 Mar 1997 07:55:04 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA23449 for <ham-space-list@mailbox.ucsd.edu>; Sun, 16 Mar
1997 04:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id EAA28329
sendmail 8.8.5/UCSD8.3
Sun, 16 Mar 1997 04:31:09 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA28312
sendmail 8.8.5/UCSD8.3
Sun, 16 Mar 1997 04:31:06 -0800 (PST)
Message-Id: <199703161231.EAA28312@noc.ucsd.edu>
Date: Sun, 16 Mar 97 04:31:05 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #95
To: Ham-Space@ucsd.edu

Ham-Space Digest Sun, 16 Mar 97 Volume 97 : Issue 95

Today's Topics:
ARLK021 Keplerian data
NEW webpage !

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 15 Mar 1997 13:34:53 -0500
From: w1aw@arrl.org
Subject: ARLK021 Keplerian data

SB KEP @ ARL $ARLK021
ARLK021 Keplerian data

ZCZC SK21
QST de W1AW
Keplerian Bulletin 21 ARLK021

Date: Sat, 15 Mar 1997 16:20:59 GMT
From: kf4hyb@totally_useless.com (kf4hyb)
Subject: NEW webpage !

http://www.geocities.com/SouthBeach/Sands/1961
Lots of info-links, monthly update features page

Date: (null)
From: (null)

SB KEP ARL ARLK021
ARLK021 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

RS-16
1 24744U 97010A 97064.31868795 -.00005782 00000-0 -19153-3 0 77
2 24744 97.2810 331.3169 0009653 97.8509 262.3741 15.30859907 199
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97073.17326094 .00000057 00000-0 45754-4 0 03369
2 18129 82.9252 308.9724 0012508 119.5842 240.6562 13.72375532487204
UO-11
1 14781U 84021B 97073.52539147 .00000048 00000-0 15901-4 0 9574
2 14781 97.8244 58.5941 0011228 311.1624 48.8570 14.69531389697352
RS-12/13
1 21089U 91007A 97073.84791958 .00000018 00000-0 27160-5 0 9635

```
2 21089 82.9218 348.6137 0027877 198.3470 161.6600 13.74077885306208
UO-14
1 20437U 90005B 97073.14628773 -.00000004 00000-0 15194-4 0 02570
2 20437 98.5239 156.8542 0011333 123.9659 236.2604 14.29951928372635
RS-15
1 23439U 94085A 97073.17101725 -.00000039 00000-0 10000-3 0 02098
2 23439 64.8166 306.4893 0151895 150.1872 210.7810 11.27525510091222
AO-16
1 20439U 90005D 97073.16423616 -.00000016 00000-0 10610-4 0 00617
2 20439 98.5372 159.5975 0011593 125.3594 234.8677 14.30000584372658
DO-17
1 20440U 90005E 97073.15964359 .00000013 00000-0 21741-4 0 00637
2 20440 98.5437 160.3914 0011787 124.1143 236.1163 14.30143317372687
WO-18
1 20441U 90005F 97071.82604182 -.00000043 00000-0 61133-7 0 552
2 20441 98.5458 158.9959 0012096 128.8109 231.4121 14.30110576372492
LO-19
1 20442U 90005G 97073.20021316 .00000038 00000-0 31485-4 0 00602
2 20442 98.5475 160.9626 0012730 124.6124 235.6265 14.30224932372714
FO-20
1 20480U 90013C 97072.99047736 -.00000036 00000-0 -31914-5 0 09564
2 20480 99.0316 52.5332 0540387 232.9403 122.1113 12.83236771332496
AO-21
1 21087U 91006A 97073.20872737 .00000094 00000-0 82657-4 0 08013
2 21087 82.9411 121.8836 0035028 170.9874 189.1872 13.74578933307105
UO-22
1 21575U 91050B 97073.20565775 -.00000022 00000-0 68071-5 0 07730
2 21575 98.3154 137.0521 0006930 170.8911 189.2403 14.37059941296845
KO-23
1 22077U 92052B 97073.12277467 -.00000037 00000-0 10000-3 0 06552
2 22077 66.0816 344.2785 0013545 235.8973 124.0760 12.86300747215528
KO-25
1 22828U 93061F 97072.71589124 .00000005 00000-0 19271-4 0 05246
2 22828 98.5485 149.3236 0010386 141.3699 218.8231 14.28170571148589
IO-26
1 22826U 93061D 97073.14924555 .00000028 00000-0 28590-4 0 05602
2 22826 98.5535 149.6754 0009279 155.6132 204.5493 14.27829081180528
AO-27
1 22825U 93061C 97073.66409407 .00000018 00000-0 24661-4 0 5437
2 22825 98.5529 149.9553 0008592 152.1218 208.0426 14.27719901180584
FO-29
1 24278U 96046B 97073.16490031 -.00000019 00000-0 13906-4 0 00836
2 24278 98.5541 127.3082 0352145 72.4796 291.4493 13.52629510028270
Mir
1 16609U 86017A 97073.80708694 .00004157 00000-0 55213-4 0 1227
2 16609 51.6511 200.2558 0011493 176.9595 183.1435 15.60692398632291
```

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 18, 1997, at 2330z on Baudot and AMTOR.

NNNN
/EX

End of Ham-Space Digest V97 #95
****

946. DSP-2232

Newsgroup: rec.radio.amateur.space
Date: 1997-03-16 00:00:00 UTC
From: "Melvin C. Vye" <mvye@uakron.edu>
Message-ID: <332C7894.27A6@uakron.edu>
Source record: 19500

I'm using an AEA DSP-2232 with Vers 7-gateway roms. Now I'm interested in pacsats with my IC-821. I can decode anything I hear, both in 9600 FSK and 1200 BPSK, but need the satellite up/down function on the 2232, primarily for the 1200 BPSK modem. AEA manual for this version states that the up/down function is currently not functional for either of these modems.

Does anyone know if the 2232 has later version roms which support the up/down function for 1200 BPSK and 9600 FSK or do I have an orphan which I'll have to replace?

73 - Mel W8MV mvye@uakron.edu

947. Re: NOAA & METEOR Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5gid8u$u5e@library.airnews.net>
Source record: 19501

In article <19970310161501.LAA25761@ladder01.news.aol.com>, jkktl@aol.com says...
>
>Hi
>
>At present, NOAA 12 and 14 are up and running worldwide..
>over North America, only meteor 3/5 is running.
>
>I beliebe that SICH is operational over europe..Met 2/21 is on and off
>over Europe.
>
>check out
>http://members.aol.com/jkktl/ham.htm
>for wxsat info
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
NOAA 12 and 14 working OK, but the first time
I tried to hear Meteor 3-5 (9:00Pm CST AOS Dallas, TX)
there wasn't a peep. This would have been a 55 Deg pass.
Is there some known sked for this sat?

Ken K5MBV 5mbv@airmail.net and mbv@ti.com
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

948. IRCI filters WWW..site ANYONE ???? HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: mdim@intranet.GR
Message-ID: <9703171242.AA02957@lotos>
Source record: 19502

Dear friends

I am looking for the IRCI filters web site so I can order some filters
for my transceiver.(Any other manufacturer will be wellcome too).

If there is no www... site a fax number will be good enough too.
Any other suggestions will be accepted.

Thank you in advance

73 Michael SV1CVY
Electrical Engineer
email mdim@intranet.gr

949. $$ REAL MONEY, it works $$

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: sparkie@yellowhead16.NET
Message-ID: <199703171412.GAA07586@okjunc.junction.net>
Source record: 19503

$$$ READ THIS $$$

NEW VERSION FOR 1997!! (Legal questions addressed!!)

In late October of 1996, I saw an article in an internet
newsgroup telling me that I could make $50,000.00 within a month
for an investment of only $5.00. I thought, "OH YEAH!!! I'VE
GOT A BRIDGE I'LL SELL YOU TOO!!!"
It sounded like all the rest of the "get rich quick" schemes and
scams I've seen over the past few years.

I spoke to my attorney, a few friends and my wife about
it, and they all agreed it was some kind of scam. I can't stand
scams, because usually someone gets burned, and I didn't want it
to be me. After rejecting the idea at first, it kind of played
on my mind and I thought, "What if it really worked?" I realized
all I had to lose was $5.00, I usually blow that much on the
lottery every week anyway, so I figured what the heck, and
decided to give it a shot.

Within two weeks I began receiving money in the mail!
Soon, hundreds, and then thousands of dollars began to roll in.
Within 4 weeks, I had received a total of $41,219.00! It came
from everywhere in the world. Lately, I've doubled my efforts
and the money is rolling in even faster. I would tell you how
much but then the IRS would know also, let's just say it's a VERY
comfortable living. Now, I am really going to work! Anybody can
afford to gamble $5.00 on a chance to make $35,000.00 or more in
a month, especially when the business has already proven itself.

If you follow the three steps below, there is no reason why
the same shouldn't happen to you! This is a legitimate investment
opportunity. You invest $5.00, and you receive a return on your
investment. So does the next investor. THIS IS NOT ILLEGAL!
THIS IS NOT A CHAIN LETTER! THIS IS PERFECTLY LEGITIMATE!
(See additional legal details below.)

THE PROCEDURE IS SIMPLE:

1) Invest your $5.00 by writing your name and address on five
seperate pieces of paper along with the words: "PLEASE ADD ME TO YOUR
MAILING LIST." (In this way, you're not just sending a dollar to
someone; you're paying for a legitimate service.) Fold on $1.00 U.S.
Treasury bill, money order, or bank note inside each piece of paper,
and mail them by standard U.S. Mail to the following five addresses:

1. J. Russell
872 W. Bigelow
Findlay, OH 45840

2. Silvestre Domingo Magos
1833 Vicente Dr.
San Luis Obispo, CA 93405

3. L. Lehr
329 Lafayette Rd.
Carneys Point, NJ 08069-2543

4. G. Seidler
379 Walnut St.
Stoughton, MA 02072

5. K. Wade
2349 Thornhill st.
Terrace, BC. CAN
V8G 4Z5

2) Now remove the top name from the list, and move
the other four names up. In other words, #5 becomes #4 and
so on. Put your name as the fifth one on the list. You can
do this by simply retyping the article or reposting it to
other newsgroups with the edited addresses.

3) Post the article to at least 200 newsgroups.
There are 22,000, so it shouldn't be hard to find that many.
Remember, there are no "Free Lunches" in this world and so the
harder you work the more money you will make.

You are now in the mail order investment business, and
should start seeing returns within a week or two. Of course,
the more newsgroups you post to, the greater your return will be.
If you wish to remain anonymous, you may use a pseudonym, but
make sure address is correct.

LEGAL ???

People have asked me if this is really legal, and it is.
You are using the Internet to advertise your business. What is
that business? You are assembling a mailing list of people who
are interested in home based computer and online businesses and
methods of generating income at home. REMEMBER - people send you
small fee to be added to your list. It is legal. What will you
do with your list of thousands of names? That's up to you.

HERE IS WHY THE SYSTEM WORKS:

The internet is growing at a tremendous rate - it doubles
in size every 4 months. Think about it. You see those "Make Money
Fast" posts more and more. All that growth means profits for
everyone who participates. There are no losers.

Of every 200 posts I made, I received roughly 5 responses.
That probably doesn't seem like much. You make $5.00 for every 200
posts with your name at #5.

Each person who sent you $1.00 now also makes 200 additional
postings with your name at #4. i.e. 1000 postings. On average, 50
people will send you $1.00 with your name at #4. That's $50.00

Your 50 new agents make 200 postings each with your name
at #3 or 10,000 postings. Average return 500 people=$500.00.
They make 200 postings each with your name at #2=100,000
postings=5000 returns at $1.00 each=$5,000.

Finally, 5,000 people make 200 postings with your name
at #1 and you get a return of $50,000 before your name drops off
the list. AND THAT'S IF EVERYONE DOWN THE LINE MAKES ONLY 200
POSTINGS! Total income in one cycle = $50,000.

From time to time, when you see your name no longer on the
list, you take the latest posting that appears in the newsgroups,
and send out another $5.00, and put your name at #5, and start
posting again. Remember, 200 postings is only a guideline. The
more you post, the greater the return.

Lets review why you should do this. THE ONLY COST IS $5.00,
5 STAMPS, AND 5 ENVELOPES. Anyone can afford $5.00 for such an
effortless investment with such SPECTACULAR RETURNS.

Some people have said to me, "What happens if the scheme is
played out and no one sends me any money?" BIG DEAL, so you lose
$5.00. But what are the chances of that happening? SINCE THIS IS
A BRAND NEW PROGRAM AS OF JANUARY 1997, YOU'RE IN ON THE GROUND FLOOR!

There are millions of internet users, and millions of new
net surfers every month. REMEMBER - read the instructions carefully,
and play fairly. THAT'S the only way this will work. Get a printout
so you can refer back to this article easily.

Keep a list of everyone that sends you money, keep good books,
pay your taxes, and always keep an eye on the postings to make sure
everyone is playing fairly. You know where your name should be.

If you're really not sure or still think this can't be for real,
then don't do it. But please print this article and pass it along to
someone you know who really needs the bucks, and see what happens.

REMEMBER - HONESTY IS THE BEST POLICY. WHAT IS $5.00 TO YOU?
YOU DON'T NEED TO CHEAT THIS IDEA TO MAKE MONEY!!! (We will monitor
the program and if we find you have cheated by not sending your money
to your five recipients, we will just dump you out of the system.)
This is the easiest way that you can make a buck. Think how excited
you'll be to open up your mailbox day after day! Will it be $50.00 or
$5,000.00?? Start making your plans, because it can happen to you.

DON'T PASS UP THIS ONCE IN A LIFETIME OPPORTUNITY!!!

****

EXTRA SECTION:

HOW TO POST TO NEWSGROUPS FAST WITH YOUR WEB BROWSER:

The fastest way to post to a Newsgroup:

Simply highlight and COPY (Control-C for copy) the text this e-mail message and PASTE it into a text editor such as Notepad and SAVE it (as a .txt file).

After you have made the necessary changes that are outlined above, simply COPY and PASTE the text into the message section of the message composition window and to be posted to the Newsgroup and post it.!

****

If you have Netscape 3.0 follow these simple steps:

1) Click on any Newsgroup like normal, THEN click on 'TO NEWS', which is on the far left when you're in the Newsgroup page. This will bring up a box to type a message in.

2) Leave the Newsgroup box like it is, CHANGE the subject box to something flashy like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH"!!!

3) Tab once and you should be ready to type. Now, retype (only once) THIS entire article WORD FOR WORD, except insert your name at #5, and remove #1 off the list, plus anyother small changes you think you need to make. Keep almost all of it the SAME!

4) When you're done typing the WHOLE article, click on FILE in THIS BOX, RIGHT ABOVE SEND, NOT WHERE IT SAYS NETSCAPE NEWS ON THE FIRST BOX.

Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIl YOU DO THIS. Once saved, move on to number 5 below.

NOTE: If you don't want to type in the whole article by hand, AND you know how to use a plain text editor (like NOTEPAD), you can edit the file ahead of time, then attach it as shown in step 6.

5) If you still have all of your text, send or post to this Newsgroup now just by clicking send, which is right below FILE, and right above Cc:.

6) Here's where you're going to post to all 200. OK, click on any Newsgroup then click on 'TO NEWS' , again in the top left corner. Leave the NEWSGROUPS BOX alone again, put a flashy subject title in the SUBJECT BOX, hit TAB once you're in the body of the message. Click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find YOUR file that you saved; click on the file, and then click 'OPEN' now click on OK; if you did this right, you should see your

file name in the attachments box, and it wil be shaded green.

Note: If you don't want to type in the whole article and you know how to use a plain text editor (Notepad), you can edit the file ahead of time, then attach it.

QUICK TIP!!!

You can post this message to many Newsgroups at a time by simply selecting a Newsgroup near the top of the screen, hold down the SHIFT key, and then select a Newsgroup near the bottom of the screen. All of the Newsgroups in between will also be selected.

IF YOU USE INTERNET EXPLORER IT'S JUST AS EASY...HOLDING DOWN THE LEFT MOUSE BUTTON, highlight this article. Then press the "control" and the "c" key at the same time to copy this article. Then print this article for your records, to have the names of those you will be sending $1.00 bills.

Go to the Newsgroup and press "post an article". A window will open. Type in your headline in the subject area then click in the large window below. Press "control" and the "v" keys and the article will be placed in the window.

If you want to edit the article, do so and then highlight and copy it again. Now every time you post the article in a new Newsgroup all you have to do is press "control" and "v" and press post.

That's all there is to it. Each time you do this, all you have to do is type in a different Newsgroup, until you have posted it to 200 or more DIFFERENT Newsgroups.

You see? Now you just have 199 more to go!!! (Don't worry each one takes about 30 seconds, once you get used to it.)

REMEMBER 200 IS THE MINIMUM. The more you post the more money you will receive. AND THAT'S ALL THERE IS TO IT!!!

DON'T LET THIS ONCE IN A LIFETIME OPPORTUNITY PASS YOU BY!!! START ENJOYING THE GOOD LIFE, YOU DESERVE IT!!!

950. Re: What are the frequencies used in radio astronomy?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <67650.s8804028@mail.student.utwente.nl>
Source record: 19504

On Sat, 15 Mar 1997 22:07:01 GMT,
larry <lar01@sprynet.com> wrote:

>greetings
>I realise that this is not an amateur radio related question. I did
>ask this question in a more appropriate usenet group title but i got
>no information back.
>Does anyone know what frequencies are currently being used to look at
>the cosmos and what frequencies the ufo research groups are using to
>look for signs of intelligent life. p.s. i have not jumped off the
>deep end.
>Larry ve3fxq
>
>
You'd probably best look at www.nfra.nl, they/ve got a quite extensive site.
73 Johan pa3fpj@amsat.org

951. Re: $$ REAL MONEY, it works $$

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <68395.s8804028@mail.student.utwente.nl>
Source record: 19505

My advise:
take a newspaper, take the international section and look for " Albania".
have fun! (and a newspaper is less than $5 too)
73 Johan pa3fpj@amsat.org
packet radio pa3fpj@pi8daz.#twe.nld.eu

952. Re: Looking for keplerian elements on the Net.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: Harbin Osteen <hosteen@ptw.com>
Message-ID: <332D100B.1923@ptw.com>
Source record: 19506

Geert PIRENS wrote:
>
> Hello
>
> I'm looking for keplerian elements ofr amateur sat's and weather sat's and
> TV sat's
>
> Can someone tell me where I can find it on the Net?
>
> Thanks for ya help!
>
> Pirens G. ONL2057

Howdy Pirens:
You can get TLE's from these sites, and while you are at the RPV site,
download STS PLUS. You can track 32 sat's with this program, and it will
correct for dopler shift.

http://www.mindspring.com/~dransom/stsplus.html
http://www.grove.net/~tkelso/

SeeYaa: Harbin

953. ANS-075 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc32fc$6410c7e0$1bbc92ce@bjarts.uslink.net>
Source record: 19507

SB SAT @ AMSAT $ANS-075.01
SECOND CALL FOR PAPERS

HR AMSAT NEWS SERVICE BULLETIN 075.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.01

The 1997 Amsat-NA annual meeting and space symposium will be held
October 17-19 1997 at the Airport Delta Hotel in Toronto, Ontario
Canada.

This is the Second Call for Papers - Those who wish to present papers at
this event, should forward their request together with a title by April
1 1997. Topics may include all relevant Amateur Satellite disciplines.

Abstracts are required by June 1 1997 with final versions by August 1
1997 (so that they may be printed in the proceedings).

We also encourage those not able to attend to send papers for inclusion
in the proceedings of the symposium

Submissions and esquires should be made to:-

Wayne Chandler, VE3WHC

by internet: ve3whc@amsat.org (apologies to those who tried and
could not get in earlier)
By Mail Wayne Chandler
Box 6, Carlisle, Ontario
Canada. L0R 1H0

[ANS thanks Wayne Chandler, VE3WHC, for this information.]

/EX

SB SAT @ AMSAT $ANS-075.02
AMSAT-UK 12TH COLLOQUIUM

HR AMSAT NEWS SERVICE BULLETIN 075.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.02

The 12th AMSAT-UK Colloquium will be held at Surrey University, Guildford,
Surrey, U.K., from Friday 25th to Sunday 27th July 1997. This year's event
will comprise three days of technical and operational matters only; there
will be NO "political" subjects.

Amsat-UK invites authors to submit papers, about amateur radio space and associated activities, for this event and for the "Proceedings" document which will be published at the same time. It is normally preferred that authors present the papers themselves rather than having someone else read them in the authors' absence, but AMSAT-UK also welcomes "unpresented" papers for the document.

Abstracts of Papers should be submitted as soon as possible; the final date for acceptance has not yet been finalized but is likely to be 15 June 1997 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G3RWL, via the following routes:

Internet e-mail: g3rwl@amsat.org
Packet Radio: G3RWL @ GB7HSN.#32.GBR.EU
Satellite: AO16/19/22/23/25
Terrestrial mail: R W L Limebear G3RWL
60 Willow Road
Enfield EN1 3NQ
United Kingdom.
AMSAT-UK also invites anyone with requests for Program Topics (and possible authors) to submit them as soon as possible to G3RWL as above. Invitations for papers on specific subjects will be included in the final call, at the end of April.

Information about the Colloquium will shortly be available on the World Wide Web pages at the University of Surrey on:
http://www.ee.surrey.ac.uk/CSER/UOSAT/amateur/colloq97.html

A change to the booking requirements has been made this year] such that AMSAT-UK will accept unregistered day attendees subject to space, but they will not receive a free lunch. As usual, facilities will be available for attendees who wish to arrive at UoS on the evening before the event starts.

This year a healthy coverage of microwave-related material pertinent to the advent of the P3D satellite will be presented, and that there will be microwave test equipment available on the Friday evening for people to check
their home projects. Availability of application forms to attend the Colloquium will be publicized later in the year.

NOTE: All other inquiries about colloquium-97 should be sent] to the AMSAT-UK
office: AMSAT-UK London e12 5EQ

[ANS thanks Richard Limebear, G3RWL, Colloquium Program organizer for this news item.]

/EX

SB SAT @ AMSAT $ANS-075.03
MIR MISSION UPDATE

HR AMSAT NEWS SERVICE BULLETIN 075.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997

TO ALL RADIO AMATEURS BT
BID: $ANS-075.03

U.S. astronaut Jerry Linenger, KC5HBR, has reached the halfway point of his mission aboard the Russian space station Mir, today is his 62nd day in space. For his two Russian crew members, its their 33rd day.
The primary oxygen generation system has been off-line for a week now. The Electron system shut itself down last week due to excess build up of air. Both Electron systems are having problems, Electron 2, which was their primary system has a filter bypass problem, some spare parts will be coming up on the next Progress cargo ship. Electron 1, in the Kvant 1 module is having pump problems. Spare parts are a problem, but some are being manufactured right now.

Scheduled Activities

Apr 6- (TENTATIVE) Progress M-34 Launch.

Apr 8- (TENTATIVE) Progress M-34 docking.

[ANS thanks Keith Stein for this story.]

/EX

SB SAT @ AMSAT $ANS-075.04
RS-16 LATEST

HR AMSAT NEWS SERVICE BULLETIN 075.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.04

B.J. Arts, WT0N, reports that during the March, 14th, 1740 UTC pass over North America, RS-16's 10 meter, 29.408 , 29.451 MHz, beacons were not heard. The 70 cm, 435.504 MHz and 435.548 MHz, beacons were active at that time. The 435.504 MHz beacon was very strong, an S-9. The 435.548 beacon was very weak, an S-1. WT0N tried the passband on 2 meters, 145.915 - 145.948 MHz, and listened on 10 meters, 29.415 - 29.448 MHz . He did not hear his downlink signal and assumes that the transponder is not yet active.

Here is the example of 435 MHz CW telemetry, received by UA3CR on the 12.03.97 orbit number 134, over Moscow.
Below are some important parameters:

RS16 RS16
P160 PSU voltage (16.0 Volts)
O0 Solar panel voltage
N0 Solar panel current
M0
L16
K92
J5

I7
H49
G0
F156
E10 Temperature inside 1 in C deg.
D12 Temperature inside 2 in C deg.
C12 Temperature inside 3 in C deg.
B11 Temperature inside 4 in C deg.
A9 Temperature inside 5 in C deg.

[ANS thanks Richard W L Limebear, G3RWL, and B.J. Arts,
WT0N, for these reports..]

/EX

SB SAT @ AMSAT $ANS-075.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 075.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.06

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM
Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
RS-10 has strong downlink signals.
[ANS thanks Mark Herrick, KL0AD, for this report.]

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode.
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
RS-15 was a little weak on the downlink and the satellite spin puts a twist
in, but you can time the important exchanges around that "null".
[ANS thanks Mark Herrick, KL0AD, for this report.]

Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 70 cm, 435.504 Mhz beacon on RS-16 operational. The 10 meter beacon
is not active at this time. Transponder is not operational.
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Operating normally and lots of activity heard over
North America and Europe.
As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, and Miguel A.
Menendez, EA1BCU, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in Analog mode at the current time.
The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
03/14/97 01:05 utc JA
03/21/97 00:00 utc JD 1200 bps PSK
03/28/97 10:45 utc Digi-Talker
04/01/97 00:30 utc JD 9600 bps FSK

/EX

SB SAT @ AMSAT $ANS-075.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 075.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.07

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
AO-10
Participants in the Amsat-UK Central England VHF Net reported good results
on AO-10. Malcom G7NFO had worked some interesting "DX" including TR8CA,
PP8KWA,ZS2BWB and PY0FF.
[ANS thanks John Heath, G7HIA, Net Controller, for this report.]

Updated Keps for AO-10 are as follows:
1 14129U 83058B 97054.50000000 .00000010 00000-0 57107-5 0 5005
2 14129 25.8792 163.0281 6052907 93.3854 313.1701 2.05882272103000
[ANS thanks Ken Ernandes, N2WWD, for the updated keps.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)
.The last month (14 January - 17 February) has been uneventful for
OSCAR-11. Good, steady signals have been received from the 145.826
MHz. beacon. Mirek, OK2AOK reports hearing the mode-S beacon on
January 25th. The signals peaked at S6 on a pass when the maximum
elevation was 21 degrees.
[ANS thanks Clive Wallis, G3CWV, and Richard W L Limebear, G3RWL,
for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
PACSAT (AO-16)
It is working normally in its orbits on Europe.

1200 bps Manchester FSK modulation used on Uplinks.
1200 bps RC-BPSK-TX modulation used on Downlink. (+/- 10 KHz Doppler
correction). Graphic information about WOD/Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/ao16.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
No changes reported during last few weeks

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V 10V
14.036V
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.1528 MHz SSB,
1200 Baud PSK AX.25.)
LUSAT (LO-19) is working excellently in its orbits on Europe.
1200 bps Manchester FSK modulation used on Uplinks.
1200 bps RC-BPSK-TX modulation used on Downlink.
<Beacon>
22 de Enero de 1997.
!7 years !
Gracias a todos los amigos que lo hicieron posible.
Amsat - LU8DYF
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

**Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT
lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such

requests to the lists themselves.**

BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

954. Re: WXSAT help please

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: Rafael Garcia <rgarcia@sat.cide.upm.es>
Message-ID: <332D728A.15A4CF8C@sat.cide.upm.es>
Source record: 19508

Ken Durham wrote:

> I modified my scanner for 40Khz BW and am having
> a lot of pager and police radio type of interference.
> Not using a pre-amp yet. Wonder if a pre-amp with a
> couple of extra tuned LCs for 137Mhz would solve this?

Sure not! If you plan to install a preamp, most probably you will get a lot of noise, because your area it seems to be a lot of "radioelectric polution".

I would try a specific bandpass filter between your antenna and receiver. BTW, which scanner receiver do you use? I'm having quite well results with an Icom IC-R100 at 180kHz bandwith. (I'm looking a smaller IF filter, but not found yet).

--
Rafael,
ETSIA, Lab. Aerodinamica
Madrid (SPAIN)

955. Re: Information about RS-15 and RS-16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: Tovar <tvr@alive.com>
Message-ID: <332E1801.167E@alive.com>
Source record: 19509

Okay, where can I get it?

Keps, modes, etc?

You should be able to find the Keps for RS-16 in usual places,
but what you need to know is that it is object 24744 on the host
satellite ZEYA.

My homebrewed 'modes.dat' entry is:

```
Satellite: ZEYA
Object: 24744
Alias: RS-16
Frequency: USB USB 29.415 145.915 43 1
Frequency: CW NONE 29.408 0 0 0
Frequency: CW NONE 29.451 0 0 0
Frequency: CW NONE 435.504 0 0 0
Frequency: CW NONE 435.548 0 0 0
Mode: Ka
```

and the first frequency entry (and 'Mode') is somewhat speculative...

-- KD6PAG (networking old-timer, RF newbie)

956. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-17 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970317125432_515664.456256_FHA60-18@CompuServe.COM>
Source record: 19510

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #96

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
hil-img-2.compuserve.com (8.6.10/5.950515)
id HAA02825; Mon, 17 Mar 1997 07:54:18 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA03418 for <ham-space-list@mailbox.ucsd.edu>; Mon, 17 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA24482
sendmail 8.8.5/UCSD8.3
Mon, 17 Mar 1997 04:31:16 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA24468
sendmail 8.8.5/UCSD8.3
Mon, 17 Mar 1997 04:31:14 -0800 (PST)
Message-Id: <199703171231.EAA24468@noc.ucsd.edu>
Date: Mon, 17 Mar 97 04:31:13 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #96
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 17 Mar 97 Volume 97 : Issue 96

Today's Topics:
Amateur Analog (Voice) Satellite Frequencies FAQ
Internet in the Sky from a Big LEO (2 msgs)
Looking for keplerian elements on the Net.
NOAA & METEOR Sats
Sat tracker
Want - Fiberglass Pole for Rotor
What`s up with rs-15? (2 msgs)
WXSAT help please (3 msgs)
WXSAT reception (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 16 Mar 1997 19:34:12 -0800
From: ve7vdx@dowco.com (Scott Leaf)
Subject: Amateur Analog (Voice) Satellite Frequencies FAQ

Analog (Voice) Satellite Frequencies as of March 17, 1997
Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.908 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

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* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. The
ground controlers seem to be experimenting with the various beacons,
therefore it is difficult to predict which will be on, 29.408 seems to be
on most passes.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely
uplinked to it with a handheld on low power. On the other hand reception
of the 70cm downlink signal is more difficult without a directional antenna
most of the time. Therefore it is important to make sure
that you can hear the satellite downlink before you transmit therefor
avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time
of writing this satellite was reported to be in Analog mode.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time
of writing this satellite was reported by Jalsat to be in Analog mode
until March 21.

This FAQ is constantly being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

- errors or omissions to ve7vdx@dowco.com

Date: Sat, 15 Mar 1997 21:11:27 -0500
From: KD1YV <jimkd1yv@ix.netcom.com>
Subject: Internet in the Sky from a Big LEO

I read the following in a Reuter's story today. Note that Teledesic is
a Big LEO, not a Little LEO. These are not the guys trying to steal
amateur spectrum.

The FCC granted a license to offer Internet and telephone services over
the airwaves to Teledesic, a company backed by Bill Gates of Microsoft
and Craig McCaw (former chairman of McCaw Cellular Communications.)

The company will launch and operate a satellite constellation carrying
broadband communications of Internet, video-conferencing, interactive
multimedia, etc.

This is the first time that the FCC has granted this type of license.

McCaw claims that service will begin in 2002. (Saves them from that
pesky year 2000 problem, eh :-)

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html
--

Date: Mon, 17 Mar 1997 05:35:23 GMT
From: shb@vnet.net (Si Ballenger)
Subject: Internet in the Sky from a Big LEO

KD1YV <jimkd1yv@ix.netcom.com> wrote:

>The company will launch and operate a satellite constellation carrying
>broadband communications of Internet, video-conferencing, interactive
>multimedia, etc.

>This is the first time that the FCC has granted this type of license.

Their origional idea was to have several hundred satellites in low earth orbit
that would operate like moving cell sites (persons on the ground would appear
to be stationary) that would cover the entire earth. You could flip-phone
anybody anywhere on the earth at any time (if you had the $$$).

Date: 16 Mar 1997 12:32:51 GMT
From: "Geert PIRENS" <pass@glo.be>
Subject: Looking for keplerian elements on the Net.

Hello

I'm looking for keplerian elements ofr amateur sat's and weather sat's and
TV sat's

Can someone tell me where I can find it on the Net?

Thanks for ya help!

Pirens G. ONL2057

Date: 17 Mar 1997 03:19:58 GMT
From: mbv@flash.net (Ken Durham)
Subject: NOAA & METEOR Sats

In article <19970310161501.LAA25761@ladder01.news.aol.com>, jkktl@aol.com
says...
>
>Hi
>
>At present, NOAA 12 and 14 are up and running worldwide..
>over North America, only meteor 3/5 is running.
>
>I beliebe that SICH is operational over europe..Met 2/21 is on and off
>over Europe.
>
>check out
>http://members.aol.com/jkktl/ham.htm
>for wxsat info

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
NOAA 12 and 14 working OK, but the first time
I tried to hear Meteor 3-5 (9:00Pm CST AOS Dallas, TX)
there wasn't a peep. This would have been a 55 Deg pass.
Is there some known sked for this sat?

Ken K5MBV 5mbv@airmail.net and mbv@ti.com

Date: Sun, 16 Mar 1997 19:11:18 GMT
From: sco@mindspring.com (SCO)
Subject: Sat tracker

Does anyone have any experience using the Sat Tracker rotor
controller? I am considering buying one for the first time.

Reply by email only: sco@sco-inc.com

Date: Sat, 15 Mar 1997 18:07:09 -0500
From: Zack Lau <zlau@arrl.org>
Subject: Want - Fiberglass Pole for Rotor

Gary Watts wrote:

> only problem that I had was that the antennas would still slip out of
> alignment. I did not want to tighten down to much on the fiberglass..

Many "one size fits all" saddles offer very little surface
contact. I've gotten much better results by machining
my own out of square aluminum tubing to match the mast/boom
size I use--so I can tighten the antennas down by hand with
wing nuts. The EME types use milled blocks of aluminum to
do even better.--Zack Lau W1VT

Date: 16 Mar 1997 19:15:21 GMT
From: "Matthew T. Jachimstal" <mtjachim@mtu.edu>
Subject: What`s up with rs-15?

-----BEGIN PGP SIGNED MESSAGE-----

> I guess it really depends on how patient you are. The Michigan Tech
> ARC, w8yy, has had some success with rs-15. We have a 25W radio and a
> directional satellite antenna (about 10 or so elements). CW is really
> easy, that'd be your best bet. SSB is a a tad more difficult. Most of the
> trouble with SSB comes from the bird's spin, your signal will phase in
and
> out. With good antennas, a reasonable amount of power (100 watts should
> be plenty), and a good sense of timing to deal with rs-15's spin, you
> should have no trouble working this satellite.
>
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

> n9lmw will probably follow-up and correct any mistakes and perhaps give
us
> a recount of his last experience with rs-15.

Well, since you asked me to James, here I go.

Actually, you're almost perfectly correct. I think the satellite antennas
are something like 20 elements though. 10 pairs of crossed elements. :)

As for the fading, just repeating yourself till you get through works
pretty well.

Matthew
- --

| Matthew T. Jachimstal Holder of Past Knowledge N9LMW
| CS Major Michigan Technological University, Houghton, MI
| email: mtjachim@mtu.edu Voice: 906-487-0899 Pager: 906-222-9880
| WWW: http://jachsys.resnet.mtu.edu
| PGP ID: 683F741D FP: 8B 6A 03 A3 E2 5C 71 64 93 D0 22 17 0E 2B C6 AF
| Check the keyserver or finger jachim@netnet.net for PGP keys

-----BEGIN PGP SIGNATURE-----
Version: 2.6.2
Comment: Encrypted Email Vastly Preferred

iQEVAwUBMywqpQGqm95oP3QdAQESqQf+LxWSuhRmSm1dFXzOoIXNn1EDxYgBmDDO
Zgo5QgwJBLFVk+Iz5WQ8964rNXAm236yQpowDKH50FMKwrq5sDmzRKDeoeAulfPt
2fF8qGA15KOl4KBMzugZ31WVpjXeLvrJDEb77BkxS/fhm4ACrfRLQGPSdH9rGXzU
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RNowXTnkDlQsM5x2BQCeFWDV+mhA1HmUdQtZsnv4MXD8W8+77Ujs6cH+KXdbJnZQ
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=YwwQ
-----END PGP SIGNATURE-----

Date: 16 Mar 1997 18:56:16 GMT
From: jpbialas@spinach.csl.mtu.edu (James P. Bialas)
Subject: What`s up with rs-15?

In article <332b2062.36883343@news.sccoast.net>, n4zo@sccoast.net wrote:
> What does it take to get anything going on that bird? Unless the pass
>is almost directly overhead, no luck here. Occasionally there is a sig
>to be heard, but never anything as loud as the .4 w beacon. the max
>for the beacon is 1.2 w, and it is loud and clear. What does it take
>to hit it consistently? I know it takes more than 100w and ten
>elements.
>
>Gus, N4ZO

I guess it really depends on how patient you are. The Michigan Tech
ARC, w8yy, has had some success with rs-15. We have a 25W radio and a
directional satellite antenna (about 10 or so elements). CW is really

easy, that'd be your best bet. SSB is a a tad more difficult. Most of the trouble with SSB comes from the bird's spin, your signal will phase in and out. With good antennas, a reasonable amount of power (100 watts should be plenty), and a good sense of timing to deal with rs-15's spin, you should have no trouble working this satellite.

n9lmw will probably follow-up and correct any mistakes and perhaps give us a recount of his last experience with rs-15.

--

James Bialas, jpbialas@mtu.edu, kb8ynf, MTU ACM Vice President
---

Date: 16 Mar 1997 04:25:42 GMT
From: mbv@flash.net (Ken Durham)
Subject: WXSAT help please

I modified my scanner for 40Khz BW and am having
a lot of pager and police radio type of interference.
Not using a pre-amp yet. Wonder if a pre-amp with a
couple of extra tuned LCs for 137Mhz would solve this?
Ken K5MBV

Date: Sun, 16 Mar 1997 10:55:01 GMT
From: g1gsw@titanic.u-net.com (Colin Tinker)
Subject: WXSAT help please

On Thu, 13 Mar 1997 09:03:08 +0000, Mike <Mike@miti.demon.co.uk>
wrote:

>Hi,
>
>I have just downloaded WXSAT and am trying to set it up. I am
>getting good signals from NOAA-12 on 137.500 but I have been
>unable to decode any pictures yet.
>
>My RX is an Icom R7000. The FM bandwidth is either 15kHz or 6
>kHz. Is this OK?
>
>I have checked the levels going into the mic input on my PC and
>they look OK.
>
>I would appreciate any help/advise anyone can offer.
>
>Thanks in advance
>
>Mike
>**********

>
>mike@miti.demon.co.uk
>
>Buckinghamshire, U.K.

Try my homepages for the latest English version 2.3 of WxSat.

www.titanic.u-net.com
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

Date: 15 Mar 1997 22:40:02 GMT
From: jkktl@aol.com (Jkktl)
Subject: WXSAT help please

The bandwidth needs to be at least 35 45 Khz..otherwise you are clipping
off about half of the signal data.

There are ways to easily modify a scanner for this bandwidth.

Jim

Date: Sun, 16 Mar 1997 10:55:36 GMT
From: g1gsw@titanic.u-net.com (Colin Tinker)
Subject: WXSAT reception

On Fri, 14 Mar 1997 09:23:06 +0000, Mike <Mike@miti.demon.co.uk>
wrote:

>Hi,
>
>I am just getting into WXSAT reception and would appreciate any
>help.
>
>I am using the WXSAT programme, which utilises the PC's
>soundcard to decode the pictures. I am using 137 MHz and have
>had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
>any other sats that I should be looking for in this band?
>
>Also, re. the WXSAT prog; I can get it to produce a live picture
>OK, but if I try to auto record it doesn't want to know. Also, in the
>parameters window there are many different parameters to
>adjust...can anyone give me a rundown of the optimum settings
>please? Do any of the sats available on 137 MHz send colour pics,
>or are they all monochrome.
>
>Thanks in advance for any help
>
>Mike

>(G0UOH)
>**********
>
>mike@miti.demon.co.uk
>
>Buckinghamshire, U.K.

Try my Homepages for the latest English Version of WXSat.

www.titanic.u-net.com
g1gsw@titanic.u-net.com
tinkerc@ptc.pilkington.co.uk
g1gsw@gb7dhi

Date: 15 Mar 1997 22:38:10 GMT
From: jkktl@aol.com (Jkktl)
Subject: WXSAT reception

you can get some tips on using WXSAT at:

http://members.aol.com/jkktl/ham.htm

WXSAT is THE BEST system out there for weather satellite reception!!

Better than any commercial hardware system!

It takes a little patience to set it up..but more importantly..what is
your receiver, antenna, computer graphics capability?

E me and check into the above web site!

End of Ham-Space Digest V97 #96
****

957. NORAD Two-Line Orbital Element Sets (TLE962)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5gknjg$rik@blackbird.afit.af.mil>
Source record: 19511

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #962 -
Alouette 1
1 00424U 62049A 97074.22096127 .00000024 00000-0 17747-4 0 2749
2 00424 80.4649 16.3101 0024538 57.7949 302.5574 13.67888847719393
ATS 1
1 02608U 66110A 97067.06354389 -.00000131 00000-0 10000-3 0 55
2 02608 14.5487 350.0004 0006806 99.8500 260.2451 1.00287210 27516
ATS 3
1 03029U 67111A 97074.32495995 -.00000129 00000-0 10000-3 0 6324
2 03029 14.9362 356.9107 0012126 270.6463 277.1224 1.00271626107482
Starlette
1 07646U 75010A 97072.72550983 -.00000148 00000-0 -24609-5 0 408
2 07646 49.8292 165.0689 0205808 40.6461 320.9595 13.82192048116243
LAGEOS
1 08820U 76039A 97074.13342974 .00000008 00000-0 00000+0 0 2713
2 08820 109.8304 118.8528 0043755 69.8818 290.6608 6.38664366231131
ETS-2
1 09852U 77014A 97075.24812633 -.00000382 00000-0 10000-3 0 1024
2 09852 13.5625 29.8496 0004469 149.6479 210.3788 1.00013830 20365
GOES 2
1 10061U 77048A 97074.44928751 .00000040 00000-0 10000-3 0 8134
2 10061 12.7130 34.0264 0009672 148.4518 337.2257 1.00257118 17167
IUE
1 10637U 78012A 97075.65140333 -.00000051 00000-0 10000-3 0 3713
2 10637 35.9046 79.2083 1349824 64.9093 80.1912 1.00082926 22662
GOES 3
1 10953U 78062A 97075.41514837 -.00000113 00000-0 10000-3 0 7901
2 10953 11.7285 36.9932 0003304 247.4950 292.4417 1.00265287 21785

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SeaSat 1
1 10967U 78064A 97072.83263837 -.00000040 00000-0 31152-4 0 5596
2 10967 107.9971 12.6977 0002951 275.0747 85.0058 14.38156118980214
Nimbus 7
1 11080U 78098A 97073.64401202 -.00000070 00000-0 -26056-4 0 6558
2 11080 98.9087 288.2247 0008781 323.2575 36.7897 13.83685669928573
GOES 5
1 12472U 81049A 97 72.01921178 .00000000 00000-0 10000-3 0 9873
2 12472 8.6057 47.6274 0003556 84.7878 275.2591 1.00316180 15798
Cosmos 1383
1 13301U 82066A 97074.58807162 .00000064 00000-0 58046-4 0 5728
2 13301 82.9299 294.8038 0026303 210.0466 149.9179 13.68081675734487
LandSat 4
1 13367U 82072A 97074.74077598 .00000036 00000-0 17694-4 0 534
2 13367 98.0376 122.8342 0007951 21.5004 338.6524 14.57197328780082
DMSP B5D2-1
1 13736U 82118A 97076.13904819 -.00000018 00000-0 10959-4 0 1949
2 13736 98.6214 266.1138 0008225 318.0714 41.9833 14.25821857739965
IRAS
1 13777U 83004A 97075.58244934 .00000277 00000-0 22074-3 0 6077
2 13777 98.9679 261.3389 0013894 67.0500 293.2129 13.99267766391467
Cosmos 1447
1 13916U 83021A 97074.26428025 .00000051 00000-0 37551-4 0 6640
2 13916 82.9485 350.5417 0038895 114.6500 245.8717 13.74352662700979
TDRS 1
1 13969U 83026B 97071.05552597 -.00000314 00000-0 00000+0 0 7197
2 13969 9.3642 41.1076 0003996 289.4013 170.3732 1.00271158 24078
GOES 6
1 14050U 83041A 97071.31208863 -.00000014 00000-0 10000-3 0 6325
2 14050 7.4707 51.1272 0004269 32.9400 77.2104 1.00224929108889
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97074.19923094 .00000025 00000-0 15830-4 0 5971
2 14780 98.2982 137.4749 0002171 142.1780 217.9575 14.57070652693426
UO-11
1 14781U 84021B 97073.52539147 .00000048 00000-0 15901-4 0 9574
2 14781 97.8244 58.5941 0011228 311.1624 48.8570 14.69531389697352
Cosmos 1574
1 15055U 84062A 97075.45585064 -.00000003 00000-0 -18923-4 0 8644
2 15055 82.9534 45.1359 0026917 307.0581 52.8113 13.73645327638362
Cosmos 1602
1 15331U 84105A 97074.43390005 .00000251 00000-0 26518-4 0 5464
2 15331 82.5330 218.8766 0020980 127.2593 233.0536 14.84852779673229
ERBS
1 15354U 84108B 97074.88076987 -.00000242 00000-0 -39322-6 0 2627
2 15354 56.9971 12.4089 0005274 62.4407 297.7077 14.95022476677472
NOAA 9
1 15427U 84123A 97076.31035432 .00000069 00000-0 59948-4 0 745
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2 15427 98.9097 146.9061 0014135 260.3901 99.5673 14.13843774632221
Mir
1 16609U 86017A 97075.98413766 .00004248 00000-0 56240-4 0 1256
2 16609 51.6502 189.3021 0011343 185.3306 174.7565 15.60714481632637
SPOT 1
1 16613U 86019A 97073.22986388 -.00000044 00000-0 00000+0 0 431
2 16613 98.8005 146.3120 0001802 147.2383 212.8913 14.19991277258635
Cosmos 1766
1 16881U 86055A 97075.63723435 .00000146 00000-0 14607-4 0 4627
2 16881 82.5182 275.3789 0019242 153.4603 206.7600 14.83824267574241
EGP
1 16908U 86061A 97072.86521878 -.00000083 00000-0 10000-3 0 1601
2 16908 50.0098 247.9004 0011369 339.9213 20.1173 12.44416123149987
NOAA 10
1 16969U 86073A 97076.33651680 .00000000 00000-0 18403-4 0 43
2 16969 98.5393 71.7829 0012188 279.9052 80.0752 14.25022351545504
MOS-1
1 17527U 87018A 97075.22089378 -.00000043 00000-0 00000+0 0 5233
2 17527 98.8974 136.7492 0019647 297.3121 62.6042 14.00417643513068
GOES 7
1 17561U 87022A 97075.30292692 -.00000181 00000-0 10000-3 0 3236
2 17561 3.5958 67.6290 0007756 248.9027 231.9789 1.00265693 20035
Kvant-1
1 17845U 87030A 97075.02366511 .00003979 00000-0 53107-4 0 9263
2 17845 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091566595
DMSP B5D2-3
1 18123U 87053A 97076.30436388 -.00000013 00000-0 15432-4 0 8412
2 18123 98.7662 268.0593 0013773 192.4784 167.6048 14.15468489503138
RS-10/11
1 18129U 87054A 97072.73581700 .00000040 00000-0 26981-4 0 3326
2 18129 82.9259 309.2964 0012390 120.5343 239.7037 13.72375349487143
Meteor 2-16
1 18312U 87068A 97075.49421522 .00000050 00000-0 31452-4 0 5508
2 18312 82.5572 136.1077 0011914 169.2404 190.9013 13.84092956483840
Meteor 2-17
1 18820U 88005A 97076.23813507 .00000044 00000-0 26343-4 0 2058
2 18820 82.5417 189.8809 0015360 239.5491 120.4155 13.84770353461313
DMSP B5D2-4
1 18822U 88006A 97075.05102898 .00000004 00000-0 19966-4 0 4831
2 18822 98.3811 260.1244 0005544 296.9574 63.1038 14.23219706473248
Glonass 34
1 19163U 88043A 97073.35117993 .00000009 00000-0 10000-3 0 1622
2 19163 65.3689 76.7379 0010664 149.8729 210.2042 2.13102325 67996
Glonass 36
1 19165U 88043C 97068.24662632 .00000026 00000-0 10000-3 0 5691
2 19165 65.3471 76.8584 0004299 326.9091 33.0940 2.13101807 68503
METEOSAT 3
1 19215U 88051A 97074.83676492 -.00000142 00000-0 00000+0 0 3083
2 19215 3.8136 66.3853 0004199 162.9880 197.2878 0.96947900 19814
OKEAN 1
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1 19274U 88056A 97076.19971144 .00000313 00000-0 35877-4 0 1617
2 19274 82.5128 16.0261 0018929 311.0105 48.9471 14.82592669469821
Meteor 3-2
1 19336U 88064A 97074.22927764 .00000051 00000-0 10000-3 0 5574
2 19336 82.5438 334.6314 0015846 280.1005 79.8334 13.16980564415151
Glonass 39
1 19503U 88085C 97071.56240208 -.00000040 00000-0 10000-3 0 4554
2 19503 65.4760 315.6537 0004093 128.1019 231.9936 2.13101694 66064
NOAA 11
1 19531U 88089A 97076.32803478 .00000033 00000-0 42826-4 0 8919
2 19531 99.1640 107.2507 0011380 190.4573 169.6366 14.13124753437028
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97073.94584944 .00000013 00000-0 10000-3 0 6659
2 19749 65.3237 76.2219 0007556 256.9309 103.0051 2.13101516 63629
Glonass 41
1 19750U 89001B 97072.12353310 .00000003 00000-0 10000-3 0 5750
2 19750 65.3335 76.3553 0008721 231.3709 128.5746 2.13101736 63603
GPS BII-01
1 19802U 89013A 97074.37375976 -.00000014 00000-0 00000+0 0 3736
2 19802 55.4589 99.8358 0036349 188.8463 171.3074 2.00566124 59152
Akebono
1 19822U 89016A 97076.08652002 .00007116 00000-0 39895-3 0 8887
2 19822 75.1369 324.7973 3718280 259.4055 57.5872 7.96666022188363
Meteor 2-18
1 19851U 89018A 97072.93110313 .00000028 00000-0 11654-4 0 5487
2 19851 82.5167 65.9987 0013432 305.6887 54.3025 13.84427565406159
MOP-1
1 19876U 89020B 97071.21802549 -.00000165 00000-0 00000+0 0 2507
2 19876 2.5229 70.5903 0017744 281.8939 78.4081 0.97110575 9226
TDRS 4
1 19883U 89021B 97074.27623264 -.00000291 00000-0 10000-3 0 3146
2 19883 0.4282 86.6823 0003193 259.4112 245.2846 1.00270699201828
GPS BII-02
1 20061U 89044A 97072.71819277 -.00000010 00000-0 10000-3 0 3621
2 20061 54.0262 275.2542 0174941 223.2915 135.3400 2.00562608 56867
Nadezhda 1
1 20103U 89050A 97076.02536510 .00000018 00000-0 31617-5 0 1049
2 20103 82.9558 267.4501 0038720 15.1306 345.0996 13.73875261386147
GPS BII-03
1 20185U 89064A 97074.41273124 -.00000014 00000-0 00000+0 0 4039
2 20185 55.2523 100.2384 0017506 339.0413 20.9317 2.00555678 55471
GMS 4
1 20217U 89070A 97074.62969707 -.00000390 00000-0 10000-3 0 5363
2 20217 2.3352 73.6192 0001106 102.8386 343.6698 1.00274757 28140
INTERCOSMOS 24
1 20261U 89080A 97075.55953135 .00000083 00000-0 16778-4 0 5732
2 20261 82.5881 96.7551 1242673 142.2426 227.2827 12.47392635339865
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2 20302 53.1795 214.8950 0027019 192.2990 167.5934 2.00571978 54271
Meteor 3-3
1 20305U 89086A 97075.57358459 .00000044 00000-0 10000-3 0 7748
2 20305 82.5440 296.2629 0007487 10.3713 349.7522 13.04426717353718
COBE
1 20322U 89089A 97072.57573222 -.00000233 00000-0 -12091-3 0 2899
2 20322 98.9347 89.1408 0009489 11.3855 348.7515 14.03462301374713
Kvant-2
1 20335U 89093A 97075.02366511 .00003979 00000-0 53107-4 0 8418
2 20335 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091415608
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1 20361U 89097A 97072.10570302 -.00000053 00000-0 00000+0 0 1875
2 20361 56.1598 42.6514 0088162 141.0635 219.5638 2.00566522 43701
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2 20391 4.3565 61.7268 0002061 222.3030 137.8855 1.00270414 26724
SPOT 2
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2 20436 98.7335 152.1979 0000549 73.1919 286.9318 14.20025115370596
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AO-16
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WO-18
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2 20441 98.5379 163.3163 0012305 116.5899 243.6547 14.30111680373129
LO-19
1 20442U 90005G 97076.20845492 .00000026 00000-0 26780-4 0 535
2 20442 98.5470 163.9157 0012932 116.3018 243.9503 14.30225261373146
GPS BII-06
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2 20452 54.0549 155.7141 0067586 97.7216 263.1081 2.00557416 52255
MOS-1B
1 20478U 90013A 97072.72388809 .00000135 00000-0 13571-3 0 321
2 20478 99.1011 144.5144 0004646 234.2301 125.8423 13.93973624282107
DEBUT
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2 20479 99.0312 52.2907 0539795 233.7114 121.2976 12.83349714332437
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2 20480 99.0314 52.0274 0540361 234.3545 120.6091 12.83236907332410
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2 20496 43.1027 105.1374 0011797 0.7915 359.2958 15.36483280395242
Nadezhda 2
1 20508U 90017A 97076.30134945 .00000023 00000-0 87941-5 0 1036
2 20508 82.9510 41.7024 0044299 327.8951 31.9513 13.73518961353381
OKEAN 2
1 20510U 90018A 97075.82469047 .00000079 00000-0 75497-5 0 5690
2 20510 82.5266 332.4975 0019347 140.4247 219.8380 14.78673745379965
GPS BII-07
1 20533U 90025A 97061.89524668 .00000040 00000-0 00000+0 0 3010
2 20533 54.4568 276.8773 0310375 89.8836 267.4615 1.90032860 50700
PegSat
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2 20546 94.1214 146.9648 0056407 38.2312 322.2927 15.50691067386867
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2 20580 28.4682 279.6137 0014560 293.9934 65.9129 14.86425087179001
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2 20608 89.9325 171.0581 0103998 188.3335 171.6159 14.64983070365925
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1 20619U 90045A 97075.72040160 -.00000039 00000-0 10000-3 0 3782
2 20619 65.0578 314.6155 0026316 209.3718 150.5240 2.13102463 53113
Glonass 45
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2 20620 65.0658 314.8697 0008394 49.3270 310.7907 2.13102467 52986
Glonass 46
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2 20621 65.0876 314.6508 0011072 192.6800 167.3448 2.13102770 53159
Kristall
1 20635U 90048A 97075.02366511 .00003979 00000-0 53107-4 0 6332
2 20635 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091386439
ROSAT
1 20638U 90049A 97075.32792830 .00000318 00000-0 39397-4 0 6414
2 20638 52.9917 153.3671 0011657 226.7326 133.2677 15.07571879373369
Meteor 2-19
1 20670U 90057A 97076.22686422 .00000007 00000-0 -65802-5 0 2365
2 20670 82.5478 131.0276 0014763 204.2623 155.7843 13.84124848339518
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Feng Yun1-2
1 20788U 90081A 97076.19004056 .00000109 00000-0 10000-3 0 2781
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Meteor 2-20
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1 20959U 90103A 97074.18329092 -.00000015 00000-0 00000+0 0 1605
2 20959 55.2884 99.8988 0113138 244.0237 114.8502 2.00571132 46113
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1 20978U 90105A 97076.23771236 .00000113 00000-0 55342-4 0 9999
2 20978 98.5675 150.7169 0080197 84.1266 276.9053 14.32729276328816
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1 21006U 90110A 97073.11439997 .00000007 00000-0 10000-3 0 9338
2 21006 65.3040 75.5816 0055420 189.4613 170.4552 2.13102483 48762
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2 21008 65.3056 75.5983 0008968 266.6425 93.2939 2.13098711 48747
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2 21140 1.0575 78.8480 0003071 33.9107 326.1128 1.00275532 24393
Nadezhda 3
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2 21152 82.9251 303.6342 0041173 305.3472 54.3838 13.73544444301218
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Glonass 51
1 21217U 91025B 97073.67434477 -.00000046 00000-0 10000-3 0 9948
2 21217 64.7967 314.1403 0010177 224.2106 135.7328 2.13101992 46279
Glonass 52
1 21218U 91025C 97069.56053958 -.00000023 00000-0 10000-3 0 4628
2 21218 64.7976 314.2503 0008240 326.8706 33.1429 2.13102542 46191
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Meteor 3-4
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2 21232 82.5406 181.1544 0012803 200.9023 159.1581 13.16474912283204
NOAA 12
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2 21263 98.5435 93.3609 0012187 197.2781 162.7987 14.22694544303292
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2 21577 98.3056 135.7569 0005864 172.5069 187.6388 14.36542867296828
SARA
1 21578U 91050E 97072.70015015 .00000189 00000-0 74664-4 0 9542
2 21578 98.3524 145.0876 0004893 163.6562 196.4792 14.39337145297107
TDRS 5
1 21639U 91054B 97073.18110589 .00000058 00000-0 10000-3 0 1505
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Meteor 3-5
1 21655U 91056A 97072.24890543 .00000051 00000-0 10000-3 0 9620
2 21655 82.5556 130.4483 0012878 212.8932 147.1389 13.16851948268081
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DMSP B5D2-6
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2 21798 98.9295 99.5582 0012429 171.6885 188.4498 14.14026452273523
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2 21853 65.2587 75.1642 0007007 208.9740 151.0081 2.13102243 39919
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1 21854U 92005B 97074.74900783 .00000019 00000-0 00000+0 0 4243
2 21854 65.2615 75.1620 0016411 9.4138 350.6356 2.13104526 39897
Glonass 55
1 21855U 92005C 97075.28866920 .00000023 00000-0 00000+0 0 3938
2 21855 65.2581 75.1475 0008046 207.3376 152.6357 2.13102064 39892
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1 21890U 92009A 97074.41398231 .00000003 00000-0 00000+0 0 9529
2 21890 53.7383 215.4570 0057274 200.9784 158.7429 2.00554542 37081
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1 21930U 92019A 97073.58062774 -.00000093 00000-0 00000+0 0 8767
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1 22012U 92038A 97072.37521048 .00000359 00000-0 28731-4 0 7893
2 22012 81.6715 194.9576 0118079 12.5612 347.8513 14.91879551255363
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1 22014U 92039A 97076.15512943 -.00000050 00000-0 00000+0 0 8838
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Glonass 56
1 22056U 92047A 97071.90035661 -.00000042 00000-0 00000+0 0 3294
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2 22057 64.6654 314.1071 0008573 331.0991 28.9007 2.13102481 35955
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KO-23
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S80/T
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2 22078 66.0776 336.0983 0014258 230.9191 129.0558 12.86584942216019
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1 22275U 92089A 97074.41113846 -.00000042 00000-0 00000+0 0 8660
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TDRS 6
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2 22446 54.0399 276.0768 0111756 10.7675 349.4748 2.00566037 29978
Glonass 59
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ASTRO-D
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UFO F1
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2 22581 55.1222 337.1413 0067160 36.1913 324.2947 2.00569220 29011
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2 22698 89.5414 257.3826 0090871 166.4269 193.9393 14.21393663192739
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1 22700U 93042A 97075.26918949 -.00000002 00000-0 00000+0 0 6668
2 22700 54.1379 217.2067 0067946 6.8379 353.2141 2.00563507 27200
NOAA 13
1 22739U 93050A 97075.43332163 .00000028 00000-0 40954-4 0 2879
2 22739 99.0836 39.0328 0009749 176.2380 183.8867 14.10986491185447
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1 22779U 93054A 97072.86595179 -.00000010 00000-0 10000-3 0 7201
2 22779 54.1968 276.1857 0009265 56.6240 303.4995 2.00560004 25910
Meteor 2-21
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2 22782 82.5501 133.9185 0021380 307.9945 51.9283 13.83070953178323
UFO F2
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2 22787 3.8599 328.4695 0003428 7.5657 352.4443 1.00262471 11534
SPOT 3
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IO-26
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KO-25
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2 22828 98.5482 152.7529 0010457 131.3692 228.8391 14.28171058149085
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1 22829U 93061G 97073.22637629 .00000008 00000-0 20656-4 0 5352
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METEOSAT 6
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TUBSAT-B
1 22970U 94003B 97073.49445663 .00000051 00000-0 10000-3 0 3188
2 22970 82.5571 69.6543 0015073 283.8715 76.0733 13.16828834150638
GPS BIIA-24
1 23027U 94016A 97074.98584666 -.00000097 00000-0 00000+0 0 5018
2 23027 55.0142 338.8411 0061250 198.3101 161.5052 2.00573407 22156
Glonass 62
1 23043U 94021A 97072.89878754 -.00000047 00000-0 00000+0 0 4849
2 23043 64.5386 314.4683 0004471 188.3526 171.6933 2.13102880 22755
Glonass 63
1 23044U 94021B 97076.06599684 -.00000037 00000-0 00000+0 0 4518
2 23044 64.5479 314.3276 0025288 204.2334 155.6537 2.13102311 22829
Glonass 64
1 23045U 94021C 97075.30555650 -.00000042 00000-0 00000+0 0 4482
2 23045 64.5152 314.3834 0011436 30.4088 329.7071 2.13102300 22806
GOES 8
1 23051U 94022A 97072.13207615 -.00000279 00000-0 10000-3 0 6460
2 23051 0.1829 266.8960 0000856 30.3564 206.4165 1.00271757 18069
MSTI 2
1 23101U 94028A 97076.08243995 .00007348 00000-0 10302-3 0 4197
2 23101 97.0719 272.7998 0011489 32.8649 327.3320 15.56979003161712
STRV-1A
1 23125U 94034B 97071.39929278 .00001994 00000-0 52651-3 0 4110
2 23125 7.0113 121.0164 7244017 290.3970 9.5583 2.33123859 22377
STRV-1B
1 23126U 94034C 97075.65544766 .00003325 00000-0 68412-3 0 3682
2 23126 7.0495 118.9855 7245103 294.3845 8.8056 2.33322896 22510
Nadezhda 4
1 23179U 94041A 97075.20387627 .00000024 00000-0 86644-5 0 2647
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2 23179 82.9432 34.9839 0038082 83.1710 277.3783 13.75691224134194
Glonass 65
1 23203U 94050A 97075.91210201 -.00000021 00000-0 00000+0 0 4158
2 23203 64.7514 194.9619 0006965 146.2293 213.8039 2.13102182 20212
Glonass 66
1 23204U 94050B 97073.32993598 .00000010 00000-0 00000+0 0 4358
2 23204 64.7478 195.0730 0014618 351.9691 7.9971 2.13102139 20151
Glonass 67
1 23205U 94050C 97074.15064389 .00000001 00000-0 00000+0 0 4145
2 23205 64.7590 195.0379 0001190 327.3740 32.6081 2.13102614 20176
DMSP B5D2-7
1 23233U 94057A 97076.31750129 .00000086 00000-0 69450-4 0 1528
2 23233 98.7916 136.5828 0013299 123.1319 237.1130 14.12786087131390
OKEAN 1-7
1 23317U 94066A 97074.22278330 .00000211 00000-0 28587-4 0 2277
2 23317 82.5429 169.6787 0024506 281.7674 78.0787 14.74084234130462
ELEKTRO (GOMS)
1 23327U 94069A 97075.74836162 -.00000126 00000-0 00000+0 0 2598
2 23327 0.5847 95.3686 0002049 331.9757 92.7403 1.00270788 8736
RESURS 1-3
1 23342U 94074A 97074.89894706 -.00000025 00000-0 38041-5 0 7005
2 23342 97.9268 130.9210 0001329 91.5012 268.6340 14.69905770126721
Glonass 68
1 23396U 94076A 97072.58730385 .00000004 00000-0 00000+0 0 3901
2 23396 65.1992 75.1365 0028713 196.1106 163.8191 2.13102443 17983
Glonass 69
1 23397U 94076B 97076.04877762 .00000028 00000-0 00000+0 0 3904
2 23397 65.1835 75.0220 0014540 313.4991 46.4006 2.13102104 18052
Glonass 70
1 23398U 94076C 97075.46334557 .00000024 00000-0 00000+0 0 3962
2 23398 65.1826 75.0172 0005550 292.6366 67.3277 2.13101896 18053
LUCH (Altair-2)
1 23426U 94082A 97073.24447972 -.00000294 00000-0 00000+0 0 4962
2 23426 0.8900 261.0705 0002258 96.6763 356.9268 1.00261400 8204
RS-15
1 23439U 94085A 97072.72754785 -.00000039 00000-0 10000-3 0 2043
2 23439 64.8176 307.2073 0151846 150.2372 210.7296 11.27525602 91178
NOAA 14
1 23455U 94089A 97076.31347070 .00000149 00000-0 10658-3 0 9743
2 23455 98.9794 27.4422 0008807 187.3659 172.7383 14.11653708113989
Glonass 71
1 23511U 95009A 97075.42014078 -.00000042 00000-0 00000+0 0 3102
2 23511 64.5518 314.6602 0004722 224.4214 135.5931 2.13103716 15770
Glonass 72
1 23512U 95009B 97076.01099068 -.00000038 00000-0 00000+0 0 3140
2 23512 64.5449 314.6401 0006988 330.4057 29.6073 2.13101246 15787
Glonass 73
1 23513U 95009C 97074.89364654 -.00000045 00000-0 00000+0 0 3420
2 23513 64.5440 314.6954 0012685 200.5404 159.4679 2.13103118 15768
GMS 5
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1 23522U 95011B 97069.66639625 -.00000312 00000-0 10000-3 0 2101
2 23522 0.4401 8.4962 0000751 179.5029 0.0565 1.00266073 7121
DMSP B5D2-8
1 23533U 95015A 97076.17526213 .00000040 00000-0 45267-4 0 9040
2 23533 98.8472 81.1971 0007761 8.9034 351.2273 14.12779543102175
OSC 1
1 23545U 95017A 97073.60992225 .00000229 00000-0 81984-4 0 2071
2 23545 69.9723 262.5643 0013839 176.9008 183.2208 14.45487332102738
OSC 2
1 23546U 95017B 97074.54262120 .00000003 00000-0 18009-4 0 2416
2 23546 69.9776 260.6413 0012961 166.5788 193.5684 14.45508749102879
Microlab 1
1 23547U 95017C 97074.53927888 .00000078 00000-0 39109-4 0 1791
2 23547 69.9781 260.2930 0013334 168.3131 191.8307 14.45664727102886
OFEQ 3
1 23549U 95018A 97076.11286565 .00008448 00000-0 17942-3 0 4860
2 23549 143.3614 99.8552 0201591 287.8749 70.0143 15.22550974107865
GFZ-1
1 23558U 86017JE 97072.70264770 .00003788 00000-0 44884-4 0 2174
2 23558 51.6513 191.9560 0006301 152.8560 207.2766 15.64070500632160
ERS-2
1 23560U 95021A 97075.24658712 -.00000031 00000-0 46224-5 0 3448
2 23560 98.5497 151.3852 0001036 108.3611 251.7687 14.32248543 99511
Spektr
1 23579U 95024A 97075.02366511 .00003979 00000-0 53107-4 0 5947
2 23579 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091103919
GOES 9
1 23581U 95025A 97074.48820846 .00000062 00000-0 10000-3 0 3274
2 23581 0.1600 94.4785 0002438 260.0602 218.7978 1.00276294 6647
Helios 1A
1 23605U 95033A 97074.23943863 .00000099 00000-0 27938-4 0 4548
2 23605 98.1471 12.4047 0001624 68.5544 291.5834 14.63822131 90216
UPM SAT 1
1 23606U 95033B 97075.40756816 .00000211 00000-0 45972-4 0 2596
2 23606 98.1282 15.5178 0008745 46.0793 314.1129 14.67363675 90636
CERISE
1 23607U 95033C 97074.23762765 .00000072 00000-0 21597-4 0 1611
2 23607 98.1273 14.1171 0007329 51.9997 308.1872 14.67006692 90476
TDRS 7
1 23613U 95035B 97076.14531238 .00000076 00000-0 00000+0 0 3135
2 23613 1.2529 81.5316 0003221 258.2718 76.1997 1.00276145 6114
Glonass 74
1 23620U 95037A 97075.61578600 -.00000018 00000-0 00000+0 0 2608
2 23620 64.8197 194.8564 0018762 166.1112 193.9302 2.13102870 12812
Glonass 75
1 23621U 95037B 97075.79388412 -.00000020 00000-0 00000+0 0 2689
2 23621 64.8286 194.8535 0018162 177.3384 182.6593 2.13102073 12811
Glonass 76
1 23622U 95037C 97073.50549218 .00000008 00000-0 00000+0 0 2731
2 23622 64.8234 194.9301 0036817 164.8189 195.2819 2.13102373 12766
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Prognoz-M2
1 23632U 95039A 97072.95002340 -.00000242 00000-0 00000+0 0 1204
2 23632 70.8580 248.0170 7561561 327.9680 42.3720 0.26415200 1564
SICH-1
1 23657U 95046A 97073.19718798 .00000080 00000-0 89341-5 0 1533
2 23657 82.5357 312.0269 0026084 253.8504 105.9835 14.73537407 82591
RADARSAT
1 23710U 95059A 97075.87605080 .00000142 00000-0 72025-4 0 2487
2 23710 98.5794 84.6731 0001211 54.3191 305.8105 14.29986446 71210
Glonass 79
1 23734U 95068A 97073.62369831 .00000007 00000-0 00000+0 0 2574
2 23734 64.8149 194.8450 0017626 324.9354 34.9404 2.13101999 9734
Glonass 78
1 23735U 95068B 97075.68415010 -.00000019 00000-0 00000+0 0 2422
2 23735 64.8166 194.7627 0007038 210.0458 149.9103 2.13126106 9779
Glonass 77
1 23736U 95068C 97073.38884030 .00000009 00000-0 00000+0 0 2271
2 23736 64.8052 194.8570 0007381 194.2619 165.7071 2.13102089 9724
XTE
1 23757U 95074A 97074.19571216 .00000646 00000-0 24933-4 0 1283
2 23757 22.9835 6.8307 0013493 65.6142 294.5747 14.97789796 66145
Polar
1 23802U 96013A 97072.74045224 .00000093 00000-0 00000+0 0 1158
2 23802 86.5886 22.9799 6602321 273.3369 18.5602 1.36264980 5230
1996010E
1 23824U 96010E 97075.43614639 .00000387 00000-0 10000-3 0 1870
2 23824 47.4172 170.7404 6846141 103.7423 334.2863 2.83578752 9116
GPS BIIA-25
1 23833U 96019A 97075.62067808 -.00000096 00000-0 00000+0 0 1604
2 23833 54.6218 336.8977 0028158 148.7245 211.4756 2.00564926 7147
Priroda
1 23848U 96023A 97075.02366511 .00003979 00000-0 53107-4 0 2831
2 23848 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091 51000
MSX
1 23851U 96024A 97075.08751237 -.00000837 00000-0 -56253-3 0 2112
2 23851 99.4099 66.4179 0007362 124.8551 235.3313 13.97385855 45472
SAX
1 23857U 96027A 97074.56065351 .00001241 00000-0 47044-4 0 584
2 23857 3.9549 292.6646 0014712 328.7910 31.1404 14.91756036 47733
MSTI 3
1 23868U 96031A 97075.20152591 .00001858 00000-0 38845-4 0 1232
2 23868 97.1150 266.9368 0008210 264.4222 95.6093 15.46746190 46853
TOMS-EP
1 23940U 96037A 97074.78055880 .00002213 00000-0 99460-4 0 947
2 23940 97.4237 342.8898 0014011 108.5561 251.7200 15.22107988 38930
GPS BIIA-26
1 23953U 96041A 97074.04379928 -.00000016 00000-0 00000+0 0 1204
2 23953 55.1464 97.4234 0020007 340.6168 19.7426 2.00555036 4903
ADEOS
1 24277U 96046A 97075.81058337 -.00000044 00000-0 00000+0 0 1529
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2 24277 98.6082 154.7913 0001853 87.5253 272.6140 14.27645679 30189
FO-29
1 24278U 96046B 97074.57029956 .00000033 00000-0 66984-4 0 644
2 24278 98.5539 128.5240 0352177 68.8284 295.0106 13.52630104 28465
FAST
1 24285U 96049A 97074.91817159 .00001184 00000-0 11496-3 0 727
2 24285 82.9773 82.3920 2207170 157.6597 213.7940 10.81883758 22337
1996049B
1 24286U 96049B 97074.01855652 .00001105 00000-0 10482-3 0 827
2 24286 82.9946 82.9372 2207087 158.9125 211.9547 10.82291962 22238
Microsat
1 24291U 96050A 97073.11592085 .00040028 63829-5 28673-3 0 1555
2 24291 62.7915 92.4642 0569615 135.8800 228.9232 14.75270557 28870
MO-30
1 24305U 96052B 97072.47060387 .00000204 00000-0 20364-3 0 812
2 24305 82.9335 65.3170 0031505 109.6515 250.8038 13.73089897 25928
GPS BIIA-27
1 24320U 96056A 97075.89568577 .00000006 00000-0 00000+0 0 693
2 24320 54.6258 277.3788 0051733 99.8415 260.7705 2.00573264 3605
SAC-B/HETE
1 24645U 96061A 97075.13837982 .00000490 00000-0 31494-4 0 520
2 24645 37.9751 58.3348 0049260 269.9064 89.6045 15.14905278 19940
Soyuz TM-25
1 24717U 97003A 97075.02366511 .00003979 00000-0 53107-4 0 205
2 24717 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091632483
Gonets-D1 4
1 24728U 97006D 97075.46635339 .00000011 00000-0 00000+0 0 185
2 24728 82.6045 208.6786 0006560 345.7096 14.3809 12.63656952 3797
Gonets-D1 5
1 24729U 97006E 97075.56794167 .00000011 00000-0 00000+0 0 193
2 24729 82.5987 208.6216 0002640 28.6631 331.4605 12.62724373 3808
Gonets-D1 6
1 24730U 97006F 97075.81810229 .00000011 00000-0 00000+0 0 146
2 24730 82.6058 208.5139 0002439 94.9337 265.2032 12.62210306 3835
1997006G
1 24731U 97006G 97072.40254654 .00000011 00000-0 00000+0 0 154
2 24731 82.5982 210.8867 0041691 174.7806 185.3720 12.55181510 3399
JCSAT 4
1 24732U 97007A 97073.64965961 -.00000299 00000-0 00000+0 0 163
2 24732 0.0531 321.4452 0002388 72.1170 153.5811 1.00288795 171
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97075.66278516 .00000102 00000-0 00000+0 0 334
2 24742 0.0414 305.9809 0003114 44.8366 109.0350 1.00275329 214
1997009B
1 24743U 97009B 97075.47582137 .00095992 13743-7 55863-2 0 102
2 24743 6.8760 347.1151 7334781 189.8177 137.6340 2.24598080 344
ZEYA
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1 24744U 97010A 97074.97294184 .00003015 00000-0 10333-3 0 206
2 24744 97.2816 341.7767 0009268 67.3874 292.8355 15.30925189 1829
1997010B
1 24745U 97010B 97073.59842818 .00000546 00000-0 20590-4 0 75
2 24745 97.2821 340.4479 0008234 68.8474 291.3649 15.31173959 1614
1997010C
1 24746U 97010C 97073.60177163 .00011041 00000-0 27101-3 0 113
2 24746 97.2736 340.6633 0032189 215.6453 144.2721 15.40312503 1627
1997010D
1 24747U 97010D 97074.13739131 .00011372 00000-0 30279-3 0 85
2 24747 97.2772 341.1095 0022213 220.6175 139.3469 15.38105516 1614
TEMPO 2
1 24748U 97011A 97074.06042860 -.00000208 00000-0 00000+0 0 245
2 24748 0.5686 265.1377 0075930 18.6208 154.2145 1.02041451 170
1997011B
1 24749U 97011B 97075.27998754 .00140064 50869-6 10878-2 0 113
2 24749 25.7264 73.4556 6145337 189.1783 150.3356 3.93248078 311
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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958. Phase 3-D???

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: jrybak@mesa7.MesaState.EDU
Message-ID: <5gmni1$b4c@mesa7.mesa.colorado.edu>
Source record: 19512

Will 3-D be able to operate in more than one mode at a time? Is there likely to be a "dominant" mode which is in operation more than some of the others?

I want to get myself setup to work 3-D but I don't want to choose a mode which will be inactive most of the time.

Thanks.

Jim Rybak W0KSD

959. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970318111511_515664.456256_CHU77-30@CompuServe.COM>
Source record: 19513

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #97

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
arl-img-5.compuserve.com (8.6.10/5.950515)
id UAA21523; Mon, 17 Mar 1997 20:23:18 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id RAA01693 for <ham-space-list@mailbox.ucsd.edu>; Mon, 17 Mar
1997 17:22:26 -0800 (PST)
Received: by noc.ucsd.edu; id LAA27068
sendmail 8.8.5/UCSD8.3
Mon, 17 Mar 1997 11:21:12 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id LAA26986
sendmail 8.8.5/UCSD8.3
Mon, 17 Mar 1997 11:20:55 -0800 (PST)
Message-Id: <199703171920.LAA26986@noc.ucsd.edu>
Date: Mon, 17 Mar 97 11:20:53 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #97
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 17 Mar 97 Volume 97 : Issue 97

Today's Topics:
$$ REAL MONEY, it works $$ (2 msgs)
ANS-075 WEEKLY BULLETINS
IRCI filters WWW..site ANYONE ???? HELP
Looking for keplerian elements on the Net.
Need Packet Radio info in Houston
What are the frequencies used in radio astronomy? (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 17 Mar 97 14:34:01 GMT
From: sparkie@yellowhead16.NET (Kevin)
Subject: $$ REAL MONEY, it works $$

$$$ READ THIS $$$

NEW VERSION FOR 1997!! (Legal questions addressed!!)

In late October of 1996, I saw an article in an internet
newsgroup telling me that I could make $50,000.00 within a month
for an investment of only $5.00. I thought, "OH YEAH!!! I'VE
GOT A BRIDGE I'LL SELL YOU TOO!!!"
It sounded like all the rest of the "get rich quick" schemes and
scams I've seen over the past few years.

I spoke to my attorney, a few friends and my wife about
it, and they all agreed it was some kind of scam. I can't stand
scams, because usually someone gets burned, and I didn't want it
to be me. After rejecting the idea at first, it kind of played
on my mind and I thought, "What if it really worked?" I realized
all I had to lose was $5.00, I usually blow that much on the
lottery every week anyway, so I figured what the heck, and
decided to give it a shot.

Within two weeks I began receiving money in the mail!
Soon, hundreds, and then thousands of dollars began to roll in.
Within 4 weeks, I had received a total of $41,219.00! It came
from everywhere in the world. Lately, I've doubled my efforts
and the money is rolling in even faster. I would tell you how
much but then the IRS would know also, let's just say it's a VERY
comfortable living. Now, I am really going to work! Anybody can
afford to gamble $5.00 on a chance to make $35,000.00 or more in
a month, especially when the business has already proven itself.

If you follow the three steps below, there is no reason why
the same shouldn't happen to you! This is a legitimate investment
opportunity. You invest $5.00, and you receive a return on your
investment. So does the next investor. THIS IS NOT ILLEGAL!
THIS IS NOT A CHAIN LETTER! THIS IS PERFECTLY LEGITIMATE!
(See additional legal details below.)

THE PROCEDURE IS SIMPLE:

1) Invest your $5.00 by writing your name and address on five
seperate pieces of paper along with the words: "PLEASE ADD ME TO YOUR
MAILING LIST." (In this way, you're not just sending a dollar to

someone; you're paying for a legitimate service.) Fold on $1.00 U.S. Treasury bill, money order, or bank note inside each piece of paper, and mail them by standard U.S. Mail to the following five addresses:

1. J. Russell
872 W. Bigelow
Findlay, OH 45840

2. Silvestre Domingo Magos
1833 Vicente Dr.
San Luis Obispo, CA 93405

3. L. Lehr
329 Lafayette Rd.
Carneys Point, NJ 08069-2543

4. G. Seidler
379 Walnut St.
Stoughton, MA 02072

5. K. Wade
2349 Thornhill st.
Terrace, BC. CAN
V8G 4Z5

2) Now remove the top name from the list, and move the other four names up. In other words, #5 becomes #4 and so on. Put your name as the fifth one on the list. You can do this by simply retyping the article or reposting it to other newsgroups with the edited addresses.

3) Post the article to at least 200 newsgroups. There are 22,000, so it shouldn't be hard to find that many. Remember, there are no "Free Lunches" in this world and so the harder you work the more money you will make.

You are now in the mail order investment business, and should start seeing returns within a week or two. Of course, the more newsgroups you post to, the greater your return will be. If you wish to remain anonymous, you may use a pseudonym, but make sure address is correct.

LEGAL ???

People have asked me if this is really legal, and it is. You are using the Internet to advertise your business. What is that business? You are assembling a mailing list of people who are interested in home based computer and online businesses and methods of generating income at home. REMEMBER - people send you small fee to be added to your list. It is legal. What will you do with your list of thousands of names? That's up to you.

HERE IS WHY THE SYSTEM WORKS:

The internet is growing at a tremendous rate - it doubles in size every 4 months. Think about it. You see those "Make Money Fast" posts more and more. All that growth means profits for everyone who participates. There are no losers.

Of every 200 posts I made, I received roughly 5 responses. That probably doesn't seem like much. You make $5.00 for every 200 posts with your name at #5.

Each person who sent you $1.00 now also makes 200 additional postings with your name at #4. i.e. 1000 postings. On average, 50 people will send you $1.00 with your name at #4. That's $50.00

Your 50 new agents make 200 postings each with your name at #3 or 10,000 postings. Average return 500 people=$500.00. They make 200 postings each with your name at #2=100,000 postings=5000 returns at $1.00 each=$5,000.

Finally, 5,000 people make 200 postings with your name at #1 and you get a return of $50,000 before your name drops off the list. AND THAT'S IF EVERYONE DOWN THE LINE MAKES ONLY 200 POSTINGS! Total income in one cycle = $50,000.

From time to time, when you see your name no longer on the list, you take the latest posting that appears in the newsgroups, and send out another $5.00, and put your name at #5, and start posting again. Remember, 200 postings is only a guideline. The more you post, the greater the return.

Lets review why you should do this. THE ONLY COST IS $5.00, 5 STAMPS, AND 5 ENVELOPES. Anyone can afford $5.00 for such an effortless investment with such SPECTACULAR RETURNS.

Some people have said to me, "What happens if the scheme is played out and no one sends me any money?" BIG DEAL, so you lose $5.00. But what are the chances of that happening? SINCE THIS IS A BRAND NEW PROGRAM AS OF JANUARY 1997, YOU'RE IN ON THE GROUND FLOOR!

There are millions of internet users, and millions of new net surfers every month. REMEMBER - read the instructions carefully, and play fairly. THAT'S the only way this will work. Get a printout so you can refer back to this article easily.

Keep a list of everyone that sends you money, keep good books, pay your taxes, and always keep an eye on the postings to make sure everyone is playing fairly. You know where your name should be.

If you're really not sure or still think this can't be for real, then don't do it. But please print this article and pass it along to someone you know who really needs the bucks, and see what happens.

REMEMBER - HONESTY IS THE BEST POLICY. WHAT IS $5.00 TO YOU? YOU DON'T NEED TO CHEAT THIS IDEA TO MAKE MONEY!!! (We will monitor the program and if we find you have cheated by not sending your money to your five recipients, we will just dump you out of the system.)

This is the easiest way that you can make a buck. Think how excited you'll be to open up your mailbox day after day! Will it be $50.00 or $5,000.00?? Start making your plans, because it can happen to you.

DON'T PASS UP THIS ONCE IN A LIFETIME OPPORTUNITY!!!

****

EXTRA SECTION:

HOW TO POST TO NEWSGROUPS FAST WITH YOUR WEB BROWSER:

The fastest way to post to a Newsgroup:

Simply highlight and COPY (Control-C for copy) the text this e-mail message and PASTE it into a text editor such as Notepad and SAVE it (as a .txt file).

After you have made the necessary changes that are outlined above, simply COPY and PASTE the text into the message section of the message composition window and to be posted to the Newsgroup and post it.!

****

If you have Netscape 3.0 follow these simple steps:

1) Click on any Newsgroup like normal, THEN click on 'TO NEWS', which is on the far left when you're in the Newsgroup page. This will bring up a box to type a message in.

2) Leave the Newsgroup box like it is, CHANGE the subject box to something flashy like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH"!!!

3) Tab once and you should be ready to type. Now, retype (only once) THIS entire article WORD FOR WORD, except insert your name at #5, and remove #1 off the list, plus anyother small changes you think you need to make. Keep almost all of it the SAME!

4) When you're done typing the WHOLE article, click on FILE in THIS BOX, RIGHT ABOVE SEND, NOT WHERE IT SAYS NETSCAPE NEWS ON THE FIRST BOX.

Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIl YOU DO THIS. Once saved, move on to number 5 below.

NOTE: If you don't want to type in the whole article by hand, AND you know how to use a plain text editor (like NOTEPAD), you can edit the file ahead of time, then attach it as shown in step 6.

5) If you still have all of your text, send or post to this Newsgroup now just by clicking send, which is right below FILE, and right above Cc:.

6) Here's where you're going to post to all 200. OK, click on any Newsgroup then click on 'TO NEWS' , again in the top left

corner. Leave the NEWSGROUPS BOX alone again, put a flashy subject title in the SUBJECT BOX, hit TAB once you're in the body of the message. Click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find YOUR file that you saved; click on the file, and then click 'OPEN' now click on OK; if you did this right, you should see your file name in the attachments box, and it wil be shaded green.

Note: If you don't want to type in the whole article and you know how to use a plain text editor (Notepad), you can edit the file ahead of time, then attach it.

QUICK TIP!!!

You can post this message to many Newsgroups at a time by simply selecting a Newsgroup near the top of the screen, hold down the SHIFT key, and then select a Newsgroup near the bottom of the screen. All of the Newsgroups in between will also be selected.

IF YOU USE INTERNET EXPLORER IT'S JUST AS EASY...HOLDING DOWN THE LEFT MOUSE BUTTON, highlight this article. Then press the "control" and the "c" key at the same time to copy this article. Then print this article for your records, to have the names of those you will be sending $1.00 bills.

Go to the Newsgroup and press "post an article". A window will open. Type in your headline in the subject area then click in the large window below. Press "control" and the "v" keys and the article will be placed in the window.

If you want to edit the article, do so and then highlight and copy it again. Now every time you post the article in a new Newsgroup all you have to do is press "control" and "v" and press post.

That's all there is to it. Each time you do this, all you have to do is type in a different Newsgroup, until you have posted it to 200 or more DIFFERENT Newsgroups.

You see? Now you just have 199 more to go!!! (Don't worry each one takes about 30 seconds, once you get used to it.)

REMEMBER 200 IS THE MINIMUM. The more you post the more money you will receive. AND THAT'S ALL THERE IS TO IT!!!

DON'T LET THIS ONCE IN A LIFETIME OPPORTUNITY PASS YOU BY!!! START ENJOYING THE GOOD LIFE, YOU DESERVE IT!!!

Date: Mon, 17 Mar 97 15:45:40 CST
From: "Johan Dijkhuis" <s8804028@driene.student.utwente.nl>
Subject: $$ REAL MONEY, it works $$

My advise:
take a newspaper, take the international section and look for " Albania".
have fun! (and a newspaper is less than $5 too)
73 Johan pa3fpj@amsat.org
packet radio pa3fpj@pi8daz.#twe.nld.eu

Date: 17 Mar 1997 17:54:54 GMT
From: "BJ Arts" <bjarts@uslink.net>
Subject: ANS-075 WEEKLY BULLETINS

SB SAT @ AMSAT $ANS-075.01
SECOND CALL FOR PAPERS

HR AMSAT NEWS SERVICE BULLETIN 075.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.01

The 1997 Amsat-NA annual meeting and space symposium will be held
October 17-19 1997 at the Airport Delta Hotel in Toronto, Ontario
Canada.

This is the Second Call for Papers - Those who wish to present papers at
this event, should forward their request together with a title by April
1 1997. Topics may include all relevant Amateur Satellite disciplines.

Abstracts are required by June 1 1997 with final versions by August 1
1997 (so that they may be printed in the proceedings).

We also encourage those not able to attend to send papers for inclusion
in the proceedings of the symposium

Submissions and esquires should be made to:-

Wayne Chandler, VE3WHC

by internet: ve3whc@amsat.org (apologies to those who tried and
could not get in earlier)
By Mail Wayne Chandler
Box 6, Carlisle, Ontario
Canada. L0R 1H0

[ANS thanks Wayne Chandler, VE3WHC, for this information.]

/EX

SB SAT @ AMSAT $ANS-075.02
AMSAT-UK 12TH COLLOQUIUM

HR AMSAT NEWS SERVICE BULLETIN 075.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.02

The 12th AMSAT-UK Colloquium will be held at Surrey University, Guildford, Surrey, U.K., from Friday 25th to Sunday 27th July 1997. This year's event will comprise three days of technical and operational matters only; there will be NO "political" subjects.

Amsat-UK invites authors to submit papers, about amateur radio space and associated activities, for this event and for the "Proceedings" document which will be published at the same time. It is normally preferred that authors present the papers themselves rather than having someone else read them in the authors' absence, but AMSAT-UK also welcomes "unpresented" papers for the document.

Abstracts of Papers should be submitted as soon as possible; the final date for acceptance has not yet been finalized but is likely to be 15 June 1997 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G3RWL, via the following routes:

Internet e-mail: g3rwl@amsat.org
Packet Radio: G3RWL @ GB7HSN.#32.GBR.EU
Satellite: AO16/19/22/23/25
Terrestrial mail: R W L Limebear G3RWL
60 Willow Road
Enfield EN1 3NQ
United Kingdom.
AMSAT-UK also invites anyone with requests for Program Topics (and possible authors) to submit them as soon as possible to G3RWL as above. Invitations for papers on specific subjects will be included in the final call, at the end of April.

Information about the Colloquium will shortly be available on the World Wide Web pages at the University of Surrey on:
http://www.ee.surrey.ac.uk/CSER/UOSAT/amateur/colloq97.html

A change to the booking requirements has been made this year] such that AMSAT-UK will accept unregistered day attendees subject to space, but they will not receive a free lunch. As usual, facilities will be available for attendees who wish to arrive at UoS on the evening before the event starts.

This year a healthy coverage of microwave-related material pertinent to the advent of the P3D satellite will be presented, and that there will be microwave test equipment available on the Friday evening for people to check
their home projects. Availability of application forms to attend the Colloquium will be publicized later in the year.

NOTE: All other inquiries about colloquium-97 should be sent] to the AMSAT-UK
office: AMSAT-UK London e12 5EQ

[ANS thanks Richard Limebear, G3RWL, Colloquium Program organizer for this news item.]

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SB SAT @ AMSAT $ANS-075.03
MIR MISSION UPDATE

HR AMSAT NEWS SERVICE BULLETIN 075.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.03

U.S. astronaut Jerry Linenger, KC5HBR, has reached the halfway point of his mission aboard the Russian space station Mir, today is his 62nd day in space. For his two Russian crew members, its their 33rd day.
The primary oxygen generation system has been off-line for a week now. The Electron system shut itself down last week due to excess build up of air. Both Electron systems are having problems, Electron 2, which was their primary system has a filter bypass problem, some spare parts will be coming up on the next Progress cargo ship. Electron 1, in the Kvant 1 module is having pump problems. Spare parts are a problem, but some are being manufactured right now.

Scheduled Activities

Apr 6- (TENTATIVE) Progress M-34 Launch.

Apr 8- (TENTATIVE) Progress M-34 docking.

[ANS thanks Keith Stein for this story.]

/EX

SB SAT @ AMSAT $ANS-075.04
RS-16 LATEST

HR AMSAT NEWS SERVICE BULLETIN 075.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.04

B.J. Arts, WT0N, reports that during the March, 14th, 1740 UTC pass over North America, RS-16's 10 meter, 29.408 , 29.451 MHz, beacons were not heard. The 70 cm, 435.504 MHz and 435.548 MHz, beacons were active at that time. The 435.504 MHz beacon was very strong, an S-9. The 435.548 beacon was very weak, an S-1. WT0N tried the passband on 2 meters, 145.915 - 145.948 MHz, and listened on 10 meters, 29.415 - 29.448 MHz . He did not hear his downlink signal and assumes that the transponder is not yet active.

Here is the example of 435 MHz CW telemetry, received by UA3CR on the 12.03.97 orbit number 134, over Moscow.
Below are some important parameters:

RS16 RS16
P160 PSU voltage (16.0 Volts)
O0 Solar panel voltage
N0 Solar panel current
M0

L16
K92
J5
I7
H49
G0
F156
E10 Temperature inside 1 in C deg.
D12 Temperature inside 2 in C deg.
C12 Temperature inside 3 in C deg.
B11 Temperature inside 4 in C deg.
A9 Temperature inside 5 in C deg.

[ANS thanks Richard W L Limebear, G3RWL, and B.J. Arts,
WT0N, for these reports..]

/EX

SB SAT @ AMSAT $ANS-075.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 075.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.06

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM
Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
RS-10 has strong downlink signals.
[ANS thanks Mark Herrick, KL0AD, for this report.]

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode.
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
RS-15 was a little weak on the downlink and the satellite spin puts a twist
in, but you can time the important exchanges around that "null".

[ANS thanks Mark Herrick, KL0AD, for this report.]

Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 70 cm, 435.504 Mhz beacon on RS-16 operational. The 10 meter beacon
is not active at this time. Transponder is not operational.
RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Operating normally and lots of activity heard over
North America and Europe.
As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, and Miguel A.

Menendez, EA1BCU, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in Analog mode at the current time.
The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
03/14/97 01:05 utc JA
03/21/97 00:00 utc JD 1200 bps PSK
03/28/97 10:45 utc Digi-Talker
04/01/97 00:30 utc JD 9600 bps FSK

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SB SAT @ AMSAT $ANS-075.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 075.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 16, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-075.07

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
AO-10
Participants in the Amsat-UK Central England VHF Net reported good results
on AO-10. Malcom G7NFO had worked some interesting "DX" including TR8CA,
PP8KWA,ZS2BWB and PY0FF.
[ANS thanks John Heath, G7HIA, Net Controller, for this report.]

Updated Keps for AO-10 are as follows:
1 14129U 83058B 97054.50000000 .00000010 00000-0 57107-5 0 5005
2 14129 25.8792 163.0281 6052907 93.3854 313.1701 2.05882272103000
[ANS thanks Ken Ernandes, N2WWD, for the updated keps.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK)
.The last month (14 January - 17 February) has been uneventful for
OSCAR-11. Good, steady signals have been received from the 145.826
MHz. beacon. Mirek, OK2AOK reports hearing the mode-S beacon on
January 25th. The signals peaked at S6 on a pass when the maximum
elevation was 21 degrees.
[ANS thanks Clive Wallis, G3CWV, and Richard W L Limebear, G3RWL,
for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)

PACSAT (AO-16)
It is working normally in its orbits on Europe.
1200 bps Manchester FSK modulation used on Uplinks.
1200 bps RC-BPSK-TX modulation used on Downlink. (+/- 10 KHz Doppler
correction). Graphic information about WOD/Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/ao16.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
No changes reported during last few weeks

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V 10V
14.036V
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.1528 MHz SSB,
1200 Baud PSK AX.25.)
LUSAT (LO-19) is working excellently in its orbits on Europe.
1200 bps Manchester FSK modulation used on Uplinks.
1200 bps RC-BPSK-TX modulation used on Downlink.
<Beacon>
22 de Enero de 1997.
!7 years !
Gracias a todos los amigos que lo hicieron posible.
Amsat - LU8DYF
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

**Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT

lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.**

BJ Arts
WT0N in EN-37, ARMY MARS AAR5EL
Hibbing, Minnesota. U.S.A.
e-mail bjarts@uslink.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

Date: 17 Mar 97 14:42:07 GMT
From: mdim@intranet.GR (Mixalis Dimitrakakis)
Subject: IRCI filters WWW..site ANYONE ???? HELP

Dear friends

I am looking for the IRCI filters web site so I can order some filters
for my transceiver.(Any other manufacturer will be wellcome too).

If there is no www... site a fax number will be good enough too.
Any other suggestions will be accepted.

Thank you in advance

73 Michael SV1CVY
Electrical Engineer
email mdim@intranet.gr

Date: Mon, 17 Mar 1997 01:34:03 -0800
From: Harbin Osteen <hosteen@ptw.com>
Subject: Looking for keplerian elements on the Net.

Geert PIRENS wrote:
>
> Hello
>
> I'm looking for keplerian elements ofr amateur sat's and weather sat's and
> TV sat's
>
> Can someone tell me where I can find it on the Net?
>
> Thanks for ya help!
>
> Pirens G. ONL2057

Howdy Pirens:
You can get TLE's from these sites, and while you are at the RPV site,
download STS PLUS. You can track 32 sat's with this program, and it will
correct for dopler shift.

http://www.mindspring.com/~dransom/stsplus.html
http://www.grove.net/~tkelso/

SeeYaa: Harbin

Date: Sat, 15 Mar 1997 22:02:02 GMT
From: lar01@sprynet.com (larry)
Subject: Need Packet Radio info in Houston

On 14 Feb 1997 16:07:37 GMT, cmainz@aol.com (CMAINZ) wrote:

>I am a Ham operator working as a maritime mobile. I'm looking for
>information on Packet Radio (ie benefits, costs etc). I am currently
>staying in NW Houston and would like to make a local contact. I will be
>leaving on an extended sea trip later this year. Thanks,
greetings
I am from canada, but i suspect the information, you are looking for,
could come from anyone.
packet radio is something like the internet, however there are two
disctinct comparisons/differences. the internet is fast and more
efficient but packet radio is wireless.
With packet radio you need a tnc. you can probably get lots of
information if you type tnc or packet radio on your
internet search engine.
For packet you will need your computer, thats obvious, a tnc and a two
meter radio.
tncs generally cost around $150 to $450, again i am canadian and our
prices tend to be higher.
The general frequencies used tend to be around the 145 mhz, plus or
minus .1 mhz, area.
In terms of international boating, you might consider investingating
the use of the amateur digital, packet, satellites which are up.
Again, use you search engine and look for amsat and see what
they have to say about packet and amateur satellites.
With just about any mode/band of amateur radio, you can find lots of
information and activity just by doing research, looking around. I,
as i am sure you have found, the internet offers scads of information
on just about any topic, someone has already inputted into the system.

Larry ve3fxq

Date: Sat, 15 Mar 1997 22:07:01 GMT
From: lar01@sprynet.com (larry)
Subject: What are the frequencies used in radio astronomy?

greetings
I realise that this is not an amateur radio related question. I did
ask this question in a more appropriate usenet group title but i got
no information back.
Does anyone know what frequencies are currently being used to look at

the cosmos and what frequencies the ufo research groups are using to
look for signs of intelligent life. p.s. i have not jumped off the
deep end.
Larry ve3fxq

Date: Mon, 17 Mar 97 15:33:19 CST
From: "Johan Dijkhuis" <s8804028@driene.student.utwente.nl>
Subject: What are the frequencies used in radio astronomy?

On Sat, 15 Mar 1997 22:07:01 GMT,
larry <lar01@sprynet.com> wrote:

>greetings
>I realise that this is not an amateur radio related question. I did
>ask this question in a more appropriate usenet group title but i got
>no information back.
>Does anyone know what frequencies are currently being used to look at
>the cosmos and what frequencies the ufo research groups are using to
>look for signs of intelligent life. p.s. i have not jumped off the
>deep end.
>Larry ve3fxq
>
>
You'd probably best look at www.nfra.nl, they/ve got a quite extensive site.
73 Johan pa3fpj@amsat.org

End of Ham-Space Digest V97 #97
****

960. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970318125549_515664.456256_IHM54-28@CompuServe.COM>
Source record: 19514

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #99

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54]) by
hil-img-4.compuserve.com (8.6.10/5.950515)
id HAA17179; Tue, 18 Mar 1997 07:55:31 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA16472 for <ham-space-list@mailbox.ucsd.edu>; Tue, 18 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA00589
sendmail 8.8.5/UCSD8.3
Tue, 18 Mar 1997 04:31:13 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA00574
sendmail 8.8.5/UCSD8.3
Tue, 18 Mar 1997 04:31:11 -0800 (PST)
Message-Id: <199703181231.EAA00574@noc.ucsd.edu>
Date: Tue, 18 Mar 97 04:31:10 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #99
To: Ham-Space@ucsd.edu

Ham-Space Digest Tue, 18 Mar 97 Volume 97 : Issue 99

Today's Topics:
WXSAT help please

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 17 Mar 1997 17:34:18 +0100
From: Rafael Garcia <rgarcia@hp433.cide.upm.es>
Subject: WXSAT help please

Ken Durham wrote:

> I modified my scanner for 40Khz BW and am having
> a lot of pager and police radio type of interference.
> Not using a pre-amp yet. Wonder if a pre-amp with a
> couple of extra tuned LCs for 137Mhz would solve this?

Sure not! If you plan to install a preamp, most probably you will get a lot of noise, because your area it seems to be a lot of "radioelectric polution".

I would try a specific bandpass filter between your antenna and receiver. BTW, which scanner receiver do you use? I'm having quite well results with an Icom IC-R100 at 180kHz bandwith. (I'm looking a smaller IF filter, but not found yet).

--
Rafael,
ETSIA, Lab. Aerodinamica
Madrid (SPAIN)

End of Ham-Space Digest V97 #99
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961. Undeliverable message

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: POSTMASTER@CompuServe.COM
Message-ID: <970318105410_515664.456256_CHU77-12@CompuServe.COM>
Source record: 19515

Re: ? EMDRNF - Mail Delivery Failure. Receiver not found. 100560,3667
Ham-Space Digest V97 #98

Your message could not be delivered as addressed.

--- Returned message ---

Sender: owner-ham-space@ucsd.edu
Received: from mailbox1.ucsd.edu (mailbox1.ucsd.edu [132.239.1.53]) by
dub-img-4.compuserve.com (8.6.10/5.950515)
id FAA23811; Tue, 18 Mar 1997 05:54:00 -0500
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id CAA29049 for <ham-space-list@mailbox.ucsd.edu>; Tue, 18 Mar
1997 02:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id CAA18489
sendmail 8.8.5/UCSD8.3
Tue, 18 Mar 1997 02:31:46 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA18471
sendmail 8.8.5/UCSD8.3
Tue, 18 Mar 1997 02:31:40 -0800 (PST)
Message-Id: <199703181031.CAA18471@noc.ucsd.edu>
Date: Tue, 18 Mar 97 02:31:38 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #98
To: Ham-Space@ucsd.edu

Ham-Space Digest Tue, 18 Mar 97 Volume 97 : Issue 98

Today's Topics:
NORAD Two-Line Orbital Element Sets (TLE962)
What`s up with rs-15?
WXSAT reception (2 msgs)

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 18 Mar 1997 00:28:32 GMT
From: tkelso@afit.af.mil (TS Kelso)
Subject: NORAD Two-Line Orbital Element Sets (TLE962)

The most current orbital elements from the NORAD two-line element sets are
carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are
also available on this system.

Element sets (also updated daily) and some documentation and software are
available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the
directory pub/space.

As a service to the satellite user community, the most current of these
elements are uploaded weekly to sci.space.news and rec.radio.amateur.space.
This week's elements are provided below.

****

- Current Two-Line Element Sets #962 -
Alouette 1
1 00424U 62049A 97074.22096127 .00000024 00000-0 17747-4 0 2749
2 00424 80.4649 16.3101 0024538 57.7949 302.5574 13.67888847719393
ATS 1
1 02608U 66110A 97067.06354389 -.00000131 00000-0 10000-3 0 55
2 02608 14.5487 350.0004 0006806 99.8500 260.2451 1.00287210 27516
ATS 3
1 03029U 67111A 97074.32495995 -.00000129 00000-0 10000-3 0 6324
2 03029 14.9362 356.9107 0012126 270.6463 277.1224 1.00271626107482
Starlette
1 07646U 75010A 97072.72550983 -.00000148 00000-0 -24609-5 0 408
2 07646 49.8292 165.0689 0205808 40.6461 320.9595 13.82192048116243
LAGEOS
1 08820U 76039A 97074.13342974 .00000008 00000-0 00000+0 0 2713
2 08820 109.8304 118.8528 0043755 69.8818 290.6608 6.38664366231131
ETS-2
1 09852U 77014A 97075.24812633 -.00000382 00000-0 10000-3 0 1024
2 09852 13.5625 29.8496 0004469 149.6479 210.3788 1.00013830 20365
GOES 2
1 10061U 77048A 97074.44928751 .00000040 00000-0 10000-3 0 8134
2 10061 12.7130 34.0264 0009672 148.4518 337.2257 1.00257118 17167
IUE
1 10637U 78012A 97075.65140333 -.00000051 00000-0 10000-3 0 3713
2 10637 35.9046 79.2083 1349824 64.9093 80.1912 1.00082926 22662
GOES 3
1 10953U 78062A 97075.41514837 -.00000113 00000-0 10000-3 0 7901

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2 10953 11.7285 36.9932 0003304 247.4950 292.4417 1.00265287 21785
SeaSat 1
1 10967U 78064A 97072.83263837 -.00000040 00000-0 31152-4 0 5596
2 10967 107.9971 12.6977 0002951 275.0747 85.0058 14.38156118980214
Nimbus 7
1 11080U 78098A 97073.64401202 -.00000070 00000-0 -26056-4 0 6558
2 11080 98.9087 288.2247 0008781 323.2575 36.7897 13.83685669928573
GOES 5
1 12472U 81049A 97 72.01921178 .00000000 00000-0 10000-3 0 9873
2 12472 8.6057 47.6274 0003556 84.7878 275.2591 1.00316180 15798
Cosmos 1383
1 13301U 82066A 97074.58807162 .00000064 00000-0 58046-4 0 5728
2 13301 82.9299 294.8038 0026303 210.0466 149.9179 13.68081675734487
LandSat 4
1 13367U 82072A 97074.74077598 .00000036 00000-0 17694-4 0 534
2 13367 98.0376 122.8342 0007951 21.5004 338.6524 14.57197328780082
DMSP B5D2-1
1 13736U 82118A 97076.13904819 -.00000018 00000-0 10959-4 0 1949
2 13736 98.6214 266.1138 0008225 318.0714 41.9833 14.25821857739965
IRAS
1 13777U 83004A 97075.58244934 .00000277 00000-0 22074-3 0 6077
2 13777 98.9679 261.3389 0013894 67.0500 293.2129 13.99267766391467
Cosmos 1447
1 13916U 83021A 97074.26428025 .00000051 00000-0 37551-4 0 6640
2 13916 82.9485 350.5417 0038895 114.6500 245.8717 13.74352662700979
TDRS 1
1 13969U 83026B 97071.05552597 -.00000314 00000-0 00000+0 0 7197
2 13969 9.3642 41.1076 0003996 289.4013 170.3732 1.00271158 24078
GOES 6
1 14050U 83041A 97071.31208863 -.00000014 00000-0 10000-3 0 6325
2 14050 7.4707 51.1272 0004269 32.9400 77.2104 1.00224929108889
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97074.19923094 .00000025 00000-0 15830-4 0 5971
2 14780 98.2982 137.4749 0002171 142.1780 217.9575 14.57070652693426
UO-11
1 14781U 84021B 97073.52539147 .00000048 00000-0 15901-4 0 9574
2 14781 97.8244 58.5941 0011228 311.1624 48.8570 14.69531389697352
Cosmos 1574
1 15055U 84062A 97075.45585064 -.00000003 00000-0 -18923-4 0 8644
2 15055 82.9534 45.1359 0026917 307.0581 52.8113 13.73645327638362
Cosmos 1602
1 15331U 84105A 97074.43390005 .00000251 00000-0 26518-4 0 5464
2 15331 82.5330 218.8766 0020980 127.2593 233.0536 14.84852779673229
ERBS
1 15354U 84108B 97074.88076987 -.00000242 00000-0 -39322-6 0 2627
2 15354 56.9971 12.4089 0005274 62.4407 297.7077 14.95022476677472
NOAA 9
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1 15427U 84123A 97076.31035432 .00000069 00000-0 59948-4 0 745
2 15427 98.9097 146.9061 0014135 260.3901 99.5673 14.13843774632221
Mir
1 16609U 86017A 97075.98413766 .00004248 00000-0 56240-4 0 1256
2 16609 51.6502 189.3021 0011343 185.3306 174.7565 15.60714481632637
SPOT 1
1 16613U 86019A 97073.22986388 -.00000044 00000-0 00000+0 0 431
2 16613 98.8005 146.3120 0001802 147.2383 212.8913 14.19991277258635
Cosmos 1766
1 16881U 86055A 97075.63723435 .00000146 00000-0 14607-4 0 4627
2 16881 82.5182 275.3789 0019242 153.4603 206.7600 14.83824267574241
EGP
1 16908U 86061A 97072.86521878 -.00000083 00000-0 10000-3 0 1601
2 16908 50.0098 247.9004 0011369 339.9213 20.1173 12.44416123149987
NOAA 10
1 16969U 86073A 97076.33651680 .00000000 00000-0 18403-4 0 43
2 16969 98.5393 71.7829 0012188 279.9052 80.0752 14.25022351545504
MOS-1
1 17527U 87018A 97075.22089378 -.00000043 00000-0 00000+0 0 5233
2 17527 98.8974 136.7492 0019647 297.3121 62.6042 14.00417643513068
GOES 7
1 17561U 87022A 97075.30292692 -.00000181 00000-0 10000-3 0 3236
2 17561 3.5958 67.6290 0007756 248.9027 231.9789 1.00265693 20035
Kvant-1
1 17845U 87030A 97075.02366511 .00003979 00000-0 53107-4 0 9263
2 17845 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091566595
DMSP B5D2-3
1 18123U 87053A 97076.30436388 -.00000013 00000-0 15432-4 0 8412
2 18123 98.7662 268.0593 0013773 192.4784 167.6048 14.15468489503138
RS-10/11
1 18129U 87054A 97072.73581700 .00000040 00000-0 26981-4 0 3326
2 18129 82.9259 309.2964 0012390 120.5343 239.7037 13.72375349487143
Meteor 2-16
1 18312U 87068A 97075.49421522 .00000050 00000-0 31452-4 0 5508
2 18312 82.5572 136.1077 0011914 169.2404 190.9013 13.84092956483840
Meteor 2-17
1 18820U 88005A 97076.23813507 .00000044 00000-0 26343-4 0 2058
2 18820 82.5417 189.8809 0015360 239.5491 120.4155 13.84770353461313
DMSP B5D2-4
1 18822U 88006A 97075.05102898 .00000004 00000-0 19966-4 0 4831
2 18822 98.3811 260.1244 0005544 296.9574 63.1038 14.23219706473248
Glonass 34
1 19163U 88043A 97073.35117993 .00000009 00000-0 10000-3 0 1622
2 19163 65.3689 76.7379 0010664 149.8729 210.2042 2.13102325 67996
Glonass 36
1 19165U 88043C 97068.24662632 .00000026 00000-0 10000-3 0 5691
2 19165 65.3471 76.8584 0004299 326.9091 33.0940 2.13101807 68503
METEOSAT 3
1 19215U 88051A 97074.83676492 -.00000142 00000-0 00000+0 0 3083
2 19215 3.8136 66.3853 0004199 162.9880 197.2878 0.96947900 19814
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OKEAN 1
1 19274U 88056A 97076.19971144 .00000313 00000-0 35877-4 0 1617
2 19274 82.5128 16.0261 0018929 311.0105 48.9471 14.82592669469821
Meteor 3-2
1 19336U 88064A 97074.22927764 .00000051 00000-0 10000-3 0 5574
2 19336 82.5438 334.6314 0015846 280.1005 79.8334 13.16980564415151
Glonass 39
1 19503U 88085C 97071.56240208 -.00000040 00000-0 10000-3 0 4554
2 19503 65.4760 315.6537 0004093 128.1019 231.9936 2.13101694 66064
NOAA 11
1 19531U 88089A 97076.32803478 .00000033 00000-0 42826-4 0 8919
2 19531 99.1640 107.2507 0011380 190.4573 169.6366 14.13124753437028
TDRS 3
1 19548U 88091B 97062.71478730 -.00000195 00000-0 10000-3 0 2739
2 19548 3.0099 70.5962 0003643 311.3554 121.5465 1.00264216 18136
Glonass 40
1 19749U 89001A 97073.94584944 .00000013 00000-0 10000-3 0 6659
2 19749 65.3237 76.2219 0007556 256.9309 103.0051 2.13101516 63629
Glonass 41
1 19750U 89001B 97072.12353310 .00000003 00000-0 10000-3 0 5750
2 19750 65.3335 76.3553 0008721 231.3709 128.5746 2.13101736 63603
GPS BII-01
1 19802U 89013A 97074.37375976 -.00000014 00000-0 00000+0 0 3736
2 19802 55.4589 99.8358 0036349 188.8463 171.3074 2.00566124 59152
Akebono
1 19822U 89016A 97076.08652002 .00007116 00000-0 39895-3 0 8887
2 19822 75.1369 324.7973 3718280 259.4055 57.5872 7.96666022188363
Meteor 2-18
1 19851U 89018A 97072.93110313 .00000028 00000-0 11654-4 0 5487
2 19851 82.5167 65.9987 0013432 305.6887 54.3025 13.84427565406159
MOP-1
1 19876U 89020B 97071.21802549 -.00000165 00000-0 00000+0 0 2507
2 19876 2.5229 70.5903 0017744 281.8939 78.4081 0.97110575 9226
TDRS 4
1 19883U 89021B 97074.27623264 -.00000291 00000-0 10000-3 0 3146
2 19883 0.4282 86.6823 0003193 259.4112 245.2846 1.00270699201828
GPS BII-02
1 20061U 89044A 97072.71819277 -.00000010 00000-0 10000-3 0 3621
2 20061 54.0262 275.2542 0174941 223.2915 135.3400 2.00562608 56867
Nadezhda 1
1 20103U 89050A 97076.02536510 .00000018 00000-0 31617-5 0 1049
2 20103 82.9558 267.4501 0038720 15.1306 345.0996 13.73875261386147
GPS BII-03
1 20185U 89064A 97074.41273124 -.00000014 00000-0 00000+0 0 4039
2 20185 55.2523 100.2384 0017506 339.0413 20.9317 2.00555678 55471
GMS 4
1 20217U 89070A 97074.62969707 -.00000390 00000-0 10000-3 0 5363
2 20217 2.3352 73.6192 0001106 102.8386 343.6698 1.00274757 28140
INTERCOSMOS 24
1 20261U 89080A 97075.55953135 .00000083 00000-0 16778-4 0 5732
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2 20261 82.5881 96.7551 1242673 142.2426 227.2827 12.47392635339865
GPS BII-04
1 20302U 89085A 97074.57638967 -.00000000 00000-0 10000-3 0 3848
2 20302 53.1795 214.8950 0027019 192.2990 167.5934 2.00571978 54271
Meteor 3-3
1 20305U 89086A 97075.57358459 .00000044 00000-0 10000-3 0 7748
2 20305 82.5440 296.2629 0007487 10.3713 349.7522 13.04426717353718
COBE
1 20322U 89089A 97072.57573222 -.00000233 00000-0 -12091-3 0 2899
2 20322 98.9347 89.1408 0009489 11.3855 348.7515 14.03462301374713
Kvant-2
1 20335U 89093A 97075.02366511 .00003979 00000-0 53107-4 0 8418
2 20335 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091415608
GPS BII-05
1 20361U 89097A 97072.10570302 -.00000053 00000-0 00000+0 0 1875
2 20361 56.1598 42.6514 0088162 141.0635 219.5638 2.00566522 43701
COSMOS 2054 (Altair-1)
1 20391U 89101A 97074.73459002 -.00000155 00000-0 00000+0 0 5235
2 20391 4.3565 61.7268 0002061 222.3030 137.8855 1.00270414 26724
SPOT 2
1 20436U 90005A 97076.24609772 -.00000044 00000-0 00000+0 0 1995
2 20436 98.7335 152.1979 0000549 73.1919 286.9318 14.20025115370596
UO-14
1 20437U 90005B 97072.23664479 .00000024 00000-0 26066-4 0 2539
2 20437 98.5245 155.9651 0011289 126.3098 233.9122 14.29952058372507
AO-16
1 20439U 90005D 97075.47324822 .00000000 00000-0 16813-4 0 525
2 20439 98.5374 161.8631 0011588 118.4754 241.7594 14.30000905372988
DO-17
1 20440U 90005E 97075.18857247 .00000034 00000-0 29889-4 0 532
2 20440 98.5438 162.3838 0011918 118.6761 241.5622 14.30143785372976
WO-18
1 20441U 90005F 97076.23381578 .00000004 00000-0 18314-4 0 560
2 20441 98.5379 163.3163 0012305 116.5899 243.6547 14.30111680373129
LO-19
1 20442U 90005G 97076.20845492 .00000026 00000-0 26780-4 0 535
2 20442 98.5470 163.9157 0012932 116.3018 243.9503 14.30225261373146
GPS BII-06
1 20452U 90008A 97074.49885023 -.00000044 00000-0 10000-3 0 2879
2 20452 54.0549 155.7141 0067586 97.7216 263.1081 2.00557416 52255
MOS-1B
1 20478U 90013A 97072.72388809 .00000135 00000-0 13571-3 0 321
2 20478 99.1011 144.5144 0004646 234.2301 125.8423 13.93973624282107
DEBUT
1 20479U 90013B 97072.38532224 -.00000022 00000-0 27848-4 0 505
2 20479 99.0312 52.2907 0539795 233.7114 121.2976 12.83349714332437
FO-20
1 20480U 90013C 97072.36672865 -.00000024 00000-0 25399-4 0 9512
2 20480 99.0314 52.0274 0540361 234.3545 120.6091 12.83236907332410
MOS-1B R/B
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1 20491U 90013D 97075.18997116 .00000392 00000-0 80030-3 0 3272
2 20491 99.0485 127.9874 0470330 17.5047 344.1657 13.03018381337283
LACE
1 20496U 90015A 97072.50080840 .00001174 00000-0 40353-4 0 7367
2 20496 43.1027 105.1374 0011797 0.7915 359.2958 15.36483280395242
Nadezhda 2
1 20508U 90017A 97076.30134945 .00000023 00000-0 87941-5 0 1036
2 20508 82.9510 41.7024 0044299 327.8951 31.9513 13.73518961353381
OKEAN 2
1 20510U 90018A 97075.82469047 .00000079 00000-0 75497-5 0 5690
2 20510 82.5266 332.4975 0019347 140.4247 219.8380 14.78673745379965
GPS BII-07
1 20533U 90025A 97061.89524668 .00000040 00000-0 00000+0 0 3010
2 20533 54.4568 276.8773 0310375 89.8836 267.4615 1.90032860 50700
PegSat
1 20546U 90028A 97073.63650055 .00007243 00000-0 11866-3 0 422
2 20546 94.1214 146.9648 0056407 38.2312 322.2927 15.50691067386867
HST
1 20580U 90037B 97073.87990185 .00000359 00000-0 23211-4 0 9391
2 20580 28.4682 279.6137 0014560 293.9934 65.9129 14.86425087179001
MACSAT 2
1 20608U 90043B 97073.91562340 .00000166 00000-0 25849-4 0 2547
2 20608 89.9325 171.0581 0103998 188.3335 171.6159 14.64983070365925
Glonass 44
1 20619U 90045A 97075.72040160 -.00000039 00000-0 10000-3 0 3782
2 20619 65.0578 314.6155 0026316 209.3718 150.5240 2.13102463 53113
Glonass 45
1 20620U 90045B 97067.86172488 -.00000010 00000-0 10000-3 0 3520
2 20620 65.0658 314.8697 0008394 49.3270 310.7907 2.13102467 52986
Glonass 46
1 20621U 90045C 97075.90661936 -.00000038 00000-0 10000-3 0 9690
2 20621 65.0876 314.6508 0011072 192.6800 167.3448 2.13102770 53159
Kristall
1 20635U 90048A 97075.02366511 .00003979 00000-0 53107-4 0 6332
2 20635 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091386439
ROSAT
1 20638U 90049A 97075.32792830 .00000318 00000-0 39397-4 0 6414
2 20638 52.9917 153.3671 0011657 226.7326 133.2677 15.07571879373369
Meteor 2-19
1 20670U 90057A 97076.22686422 .00000007 00000-0 -65802-5 0 2365
2 20670 82.5478 131.0276 0014763 204.2623 155.7843 13.84124848339518
CRRES
1 20712U 90065A 97074.17347483 .00000196 00000-0 50403-3 0 4048
2 20712 17.7425 139.7021 7180905 222.5113 51.3223 2.35857479 49514
GPS BII-08
1 20724U 90068A 97076.21783449 .00000002 00000-0 00000+0 0 1897
2 20724 55.1003 97.6828 0140207 189.4831 170.2872 2.00564905 46928
Feng Yun1-2
1 20788U 90081A 97076.19004056 .00000109 00000-0 10000-3 0 2781
2 20788 98.8195 78.3159 0014974 93.3277 266.9837 14.01411747334333
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Meteor 2-20
1 20826U 90086A 97072.13704819 .00000014 00000-0 -73548-6 0 595
2 20826 82.5230 70.3209 0014402 120.1014 240.1571 13.83647410326032
GPS BII-09
1 20830U 90088A 97075.77175365 -.00000052 00000-0 00000+0 0 1569
2 20830 56.0907 40.4234 0064160 95.7254 265.0421 2.00570954 47551
GPS BIIA-10
1 20959U 90103A 97074.18329092 -.00000015 00000-0 00000+0 0 1605
2 20959 55.2884 99.8988 0113138 244.0237 114.8502 2.00571132 46113
DMSP B5D2-5
1 20978U 90105A 97076.23771236 .00000113 00000-0 55342-4 0 9999
2 20978 98.5675 150.7169 0080197 84.1266 276.9053 14.32729276328816
Glonass 47
1 21006U 90110A 97073.11439997 .00000007 00000-0 10000-3 0 9338
2 21006 65.3040 75.5816 0055420 189.4613 170.4552 2.13102483 48762
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2 21007 65.3296 75.7009 0032497 175.5760 184.4873 2.13101052 48739
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1 21008U 90110C 97073.20516153 .00000007 00000-0 00000+0 0 3340
2 21008 65.3056 75.5983 0008968 266.6425 93.2939 2.13098711 48747
AO-21
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2 21087 82.9409 119.6751 0035185 162.5285 197.7090 13.74579167307512
RS-12/13
1 21089U 91007A 97073.84791958 .00000018 00000-0 27160-5 0 9635
2 21089 82.9218 348.6137 0027877 198.3470 161.6600 13.74077885306208
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2 21140 1.0575 78.8480 0003071 33.9107 326.1128 1.00275532 24393
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2 21152 82.9251 303.6342 0041173 305.3472 54.3838 13.73544444301218
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2 21216 64.8212 314.2011 0009139 205.7837 154.2325 2.13103339 46246
Glonass 51
1 21217U 91025B 97073.67434477 -.00000046 00000-0 10000-3 0 9948
2 21217 64.7967 314.1403 0010177 224.2106 135.7328 2.13101992 46279
Glonass 52
1 21218U 91025C 97069.56053958 -.00000023 00000-0 10000-3 0 4628
2 21218 64.7976 314.2503 0008240 326.8706 33.1429 2.13102542 46191
GRO
1 21225U 91027B 97074.23863614 .00002554 00000-0 46848-4 0 4390
2 21225 28.4600 92.7494 0002965 66.7984 293.2935 15.45042170211883
Meteor 3-4
1 21232U 91030A 97074.24085321 .00000050 00000-0 10000-3 0 9646
2 21232 82.5406 181.1544 0012803 200.9023 159.1581 13.16474912283204
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1 21263U 91032A 97076.30243144 .00000027 00000-0 31243-4 0 3124
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2 21263 98.5435 93.3609 0012187 197.2781 162.7987 14.22694544303292
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2 21552 56.3748 38.2990 0077180 270.2194 88.8827 2.00570589 41742
ERS-1
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2 21574 98.5476 152.0409 0001247 83.8600 276.2726 14.32245453296484
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2 21577 98.3056 135.7569 0005864 172.5069 187.6388 14.36542867296828
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1 21578U 91050E 97072.70015015 .00000189 00000-0 74664-4 0 9542
2 21578 98.3524 145.0876 0004893 163.6562 196.4792 14.39337145297107
TDRS 5
1 21639U 91054B 97073.18110589 .00000058 00000-0 10000-3 0 1505
2 21639 0.0682 72.2250 0000315 221.8308 128.6846 1.00276394 20560
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2 21655 82.5556 130.4483 0012878 212.8932 147.1389 13.16851948268081
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2 21701 56.9849 103.7664 0005082 97.8367 262.3240 14.96576241300935
DMSP B5D2-6
1 21798U 91082A 97076.31089713 .00000082 00000-0 66600-4 0 6672
2 21798 98.9295 99.5582 0012429 171.6885 188.4498 14.14026452273523
Glonass 53
1 21853U 92005A 97074.93445848 .00000020 00000-0 10000-4 0 1648
2 21853 65.2587 75.1642 0007007 208.9740 151.0081 2.13102243 39919
Glonass 54
1 21854U 92005B 97074.74900783 .00000019 00000-0 00000+0 0 4243
2 21854 65.2615 75.1620 0016411 9.4138 350.6356 2.13104526 39897
Glonass 55
1 21855U 92005C 97075.28866920 .00000023 00000-0 00000+0 0 3938
2 21855 65.2581 75.1475 0008046 207.3376 152.6357 2.13102064 39892
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GPS BIIA-13
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Glonass 57
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Glonass 58
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2 22077 66.0864 355.1866 0013497 237.9277 122.0401 12.86301192214858
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GPS BIIA-17
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2 22275 54.6601 156.3351 0054554 250.1303 109.3222 2.00589537 31016
TDRS 6
1 22314U 93003B 97071.20839874 -.00000155 00000-0 10000-3 0 6951
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GPS BIIA-18
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2 22513 65.2734 75.0142 0005695 217.5502 142.4354 2.13105391 31695
Glonass 61
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2 22514 65.2789 74.9958 0009774 199.5733 160.4122 2.13104161 31705
ASTRO-D
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UFO F1
1 22563U 93015A 97041.56985684 .00000043 00000-0 00000+0 0 5529
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2 22657 55.1336 336.9595 0081620 227.8219 131.5110 2.00558556 24380
RADCAL
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2 22698 89.5414 257.3826 0090871 166.4269 193.9393 14.21393663192739
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NOAA 13
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GPS BIIA-22
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Meteor 2-21
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2 22782 82.5501 133.9185 0021380 307.9945 51.9283 13.83070953178323
UFO F2
1 22787U 93056A 97 72.23671468 .00000000 00000-0 10000-3 0 7106
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SPOT 3
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2 22823 98.7248 150.1639 0016647 340.6548 19.3991 14.16989158179748
STELLA
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2 22824 98.5508 149.1898 0006186 153.4627 206.6881 14.27107361180523
AO-27
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KO-25
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POSAT
1 22829U 93061G 97073.22637629 .00000008 00000-0 20656-4 0 5352
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METEOSAT 6
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Meteor 3-6
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2 22969 82.5572 68.1159 0014130 278.9842 80.9687 13.16743520150936
TUBSAT-B
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2 22970 82.5571 69.6543 0015073 283.8715 76.0733 13.16828834150638
GPS BIIA-24
1 23027U 94016A 97074.98584666 -.00000097 00000-0 00000+0 0 5018
2 23027 55.0142 338.8411 0061250 198.3101 161.5052 2.00573407 22156
Glonass 62
1 23043U 94021A 97072.89878754 -.00000047 00000-0 00000+0 0 4849
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Glonass 63
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2 23044 64.5479 314.3276 0025288 204.2334 155.6537 2.13102311 22829
Glonass 64
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GOES 8
1 23051U 94022A 97072.13207615 -.00000279 00000-0 10000-3 0 6460
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MSTI 2
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2 23101 97.0719 272.7998 0011489 32.8649 327.3320 15.56979003161712
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STRV-1B
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Nadezhda 4
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Glonass 66
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2 23204 64.7478 195.0730 0014618 351.9691 7.9971 2.13102139 20151
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1 23233U 94057A 97076.31750129 .00000086 00000-0 69450-4 0 1528
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OKEAN 1-7
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2 23317 82.5429 169.6787 0024506 281.7674 78.0787 14.74084234130462
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RESURS 1-3
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Glonass 70
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2 23398 65.1826 75.0172 0005550 292.6366 67.3277 2.13101896 18053
LUCH (Altair-2)
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2 23426 0.8900 261.0705 0002258 96.6763 356.9268 1.00261400 8204
RS-15
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NOAA 14
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Glonass 73
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2 23579 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091103919
GOES 9
1 23581U 95025A 97074.48820846 .00000062 00000-0 10000-3 0 3274
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Helios 1A
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TDRS 7
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2 23613 1.2529 81.5316 0003221 258.2718 76.1997 1.00276145 6114
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Glonass 76
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Glonass 79
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2 23734 64.8149 194.8450 0017626 324.9354 34.9404 2.13101999 9734
Glonass 78
1 23735U 95068B 97075.68415010 -.00000019 00000-0 00000+0 0 2422
2 23735 64.8166 194.7627 0007038 210.0458 149.9103 2.13126106 9779
Glonass 77
1 23736U 95068C 97073.38884030 .00000009 00000-0 00000+0 0 2271
2 23736 64.8052 194.8570 0007381 194.2619 165.7071 2.13102089 9724
XTE
1 23757U 95074A 97074.19571216 .00000646 00000-0 24933-4 0 1283
2 23757 22.9835 6.8307 0013493 65.6142 294.5747 14.97789796 66145
Polar
1 23802U 96013A 97072.74045224 .00000093 00000-0 00000+0 0 1158
2 23802 86.5886 22.9799 6602321 273.3369 18.5602 1.36264980 5230
1996010E
1 23824U 96010E 97075.43614639 .00000387 00000-0 10000-3 0 1870
2 23824 47.4172 170.7404 6846141 103.7423 334.2863 2.83578752 9116
GPS BIIA-25
1 23833U 96019A 97075.62067808 -.00000096 00000-0 00000+0 0 1604
2 23833 54.6218 336.8977 0028158 148.7245 211.4756 2.00564926 7147
Priroda
1 23848U 96023A 97075.02366511 .00003979 00000-0 53107-4 0 2831
2 23848 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091 51000
MSX
1 23851U 96024A 97075.08751237 -.00000837 00000-0 -56253-3 0 2112
2 23851 99.4099 66.4179 0007362 124.8551 235.3313 13.97385855 45472
SAX
1 23857U 96027A 97074.56065351 .00001241 00000-0 47044-4 0 584
2 23857 3.9549 292.6646 0014712 328.7910 31.1404 14.91756036 47733
MSTI 3
1 23868U 96031A 97075.20152591 .00001858 00000-0 38845-4 0 1232
2 23868 97.1150 266.9368 0008210 264.4222 95.6093 15.46746190 46853
TOMS-EP
1 23940U 96037A 97074.78055880 .00002213 00000-0 99460-4 0 947
2 23940 97.4237 342.8898 0014011 108.5561 251.7200 15.22107988 38930
GPS BIIA-26
1 23953U 96041A 97074.04379928 -.00000016 00000-0 00000+0 0 1204
2 23953 55.1464 97.4234 0020007 340.6168 19.7426 2.00555036 4903
ADEOS
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1 24277U 96046A 97075.81058337 -.00000044 00000-0 00000+0 0 1529
2 24277 98.6082 154.7913 0001853 87.5253 272.6140 14.27645679 30189
FO-29
1 24278U 96046B 97074.57029956 .00000033 00000-0 66984-4 0 644
2 24278 98.5539 128.5240 0352177 68.8284 295.0106 13.52630104 28465
FAST
1 24285U 96049A 97074.91817159 .00001184 00000-0 11496-3 0 727
2 24285 82.9773 82.3920 2207170 157.6597 213.7940 10.81883758 22337
1996049B
1 24286U 96049B 97074.01855652 .00001105 00000-0 10482-3 0 827
2 24286 82.9946 82.9372 2207087 158.9125 211.9547 10.82291962 22238
Microsat
1 24291U 96050A 97073.11592085 .00040028 63829-5 28673-3 0 1555
2 24291 62.7915 92.4642 0569615 135.8800 228.9232 14.75270557 28870
MO-30
1 24305U 96052B 97072.47060387 .00000204 00000-0 20364-3 0 812
2 24305 82.9335 65.3170 0031505 109.6515 250.8038 13.73089897 25928
GPS BIIA-27
1 24320U 96056A 97075.89568577 .00000006 00000-0 00000+0 0 693
2 24320 54.6258 277.3788 0051733 99.8415 260.7705 2.00573264 3605
SAC-B/HETE
1 24645U 96061A 97075.13837982 .00000490 00000-0 31494-4 0 520
2 24645 37.9751 58.3348 0049260 269.9064 89.6045 15.14905278 19940
Soyuz TM-25
1 24717U 97003A 97075.02366511 .00003979 00000-0 53107-4 0 205
2 24717 51.6518 194.1406 0010709 179.8060 180.2097 15.60702091632483
Gonets-D1 4
1 24728U 97006D 97075.46635339 .00000011 00000-0 00000+0 0 185
2 24728 82.6045 208.6786 0006560 345.7096 14.3809 12.63656952 3797
Gonets-D1 5
1 24729U 97006E 97075.56794167 .00000011 00000-0 00000+0 0 193
2 24729 82.5987 208.6216 0002640 28.6631 331.4605 12.62724373 3808
Gonets-D1 6
1 24730U 97006F 97075.81810229 .00000011 00000-0 00000+0 0 146
2 24730 82.6058 208.5139 0002439 94.9337 265.2032 12.62210306 3835
1997006G
1 24731U 97006G 97072.40254654 .00000011 00000-0 00000+0 0 154
2 24731 82.5982 210.8867 0041691 174.7806 185.3720 12.55181510 3399
JCSAT 4
1 24732U 97007A 97073.64965961 -.00000299 00000-0 00000+0 0 163
2 24732 0.0531 321.4452 0002388 72.1170 153.5811 1.00288795 171
1997007B
1 24733U 97007B 97054.40823753 .00021632 58591-5 11657-1 0 145
2 24733 23.3677 354.3067 8764697 182.5927 161.6635 0.70833414 40
INTELSAT 801
1 24742U 97009A 97075.66278516 .00000102 00000-0 00000+0 0 334
2 24742 0.0414 305.9809 0003114 44.8366 109.0350 1.00275329 214
1997009B
1 24743U 97009B 97075.47582137 .00095992 13743-7 55863-2 0 102
2 24743 6.8760 347.1151 7334781 189.8177 137.6340 2.24598080 344
```

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ZEYA
1 24744U 97010A 97074.97294184 .00003015 00000-0 10333-3 0 206
2 24744 97.2816 341.7767 0009268 67.3874 292.8355 15.30925189 1829
1997010B
1 24745U 97010B 97073.59842818 .00000546 00000-0 20590-4 0 75
2 24745 97.2821 340.4479 0008234 68.8474 291.3649 15.31173959 1614
1997010C
1 24746U 97010C 97073.60177163 .00011041 00000-0 27101-3 0 113
2 24746 97.2736 340.6633 0032189 215.6453 144.2721 15.40312503 1627
1997010D
1 24747U 97010D 97074.13739131 .00011372 00000-0 30279-3 0 85
2 24747 97.2772 341.1095 0022213 220.6175 139.3469 15.38105516 1614
TEMPO 2
1 24748U 97011A 97074.06042860 -.00000208 00000-0 00000+0 0 245
2 24748 0.5686 265.1377 0075930 18.6208 154.2145 1.02041451 170
1997011B
1 24749U 97011B 97075.27998754 .00140064 50869-6 10878-2 0 113
2 24749 25.7264 73.4556 6145337 189.1783 150.3356 3.93248078 311
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

Date: Sat, 15 Mar 1997 22:22:09 GMT
From: n4zo@sccoast.net
Subject: What`s up with rs-15?

What does it take to get anything going on that bird? Unless the pass is almost directly overhead, no luck here. Occasionally there is a sig to be heard, but never anything as loud as the .4 w beacon. the max for the beacon is 1.2 w, and it is loud and clear. What does it take to hit it consistently? I know it takes more than 100w and ten elements.

Gus, N4ZO

Date: 16 Mar 1997 21:08:06 GMT
From: jkktl@aol.com (Jkktl)
Subject: WXSAT reception

There are some good wxsat links and FAQ at:

http://members.aol.com/jkktl/ham/htm

Date: Sun, 16 Mar 1997 10:04:19 -0600
From: Brian Burke <burkefam@icss.net>
Subject: WXSAT reception

Rolf Mathson wrote:
>
> Mike wrote:
> >
> > Hi,
> >
> > I am just getting into WXSAT reception and would appreciate any
> > help.
> >
> > I am using the WXSAT programme, which utilises the PC's
> > soundcard to decode the pictures. I am using 137 MHz and have
> > had some success with NOAA's 12 & 14 and Meteor 3-5. Are there
> > any other sats that I should be looking for in this band?
> >
>
> <snip>
>
> Mike,
> Sats in the band are:
> NOAA 12_____137.5Mhz.
> NOAA 14_____137.62Mhz.
> OKEAN 4____137.4Mhz.
> Sich -1_______137.4Mhz.
> Meteor 3-5___137.85Mhz.
> Meteor 3-6___137.30Mhz?? (inactive)
> Meteor 2-21__137.85Mhz. (inactive)
>
> Since you're in the UK you might be able to pick up SICH and
> OKEAN. (Unfortunatly for us folks in the US they only transmit over
> Russia.) None of the sats transmit in color, but WXSAT program will
> generate pseudo-color images from the NOAA IR/VIS transmissions.
> What type of problem are you having with the auto record? Is it not
> responding at all or won't it auto sync....?
>
> A good source for WX sat info in the UK is the Remote Imaging Group
> (http:\\www.rig.org.uk)
>
> Regards,
>
> Rolf
The Chinese Fen Yung used to transmit in color. Don't know if its still
around. Brian

End of Ham-Space Digest V97 #98
****

962. Re: NOAA & METEOR Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970318192601.OAA03330@ladder01.news.aol.com>
Source record: 19516

You will not hear Meteor sats after dark because they only transmit in the visible light channel..there is no nfra red capability..no sunlight, no signal..

Jim
K2TL
http://members.aol.com/jkktl/ham.htm

963. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: sparkie@yellowhead16.NET
Message-ID: <199703182033.MAA02971@okjunc.junction.net>
Source record: 19517

Sorry for the (spam) Mail

Do you think if I knew it was wrong I would have given
you my Email address and snail-mail address. I'm so stupid
I didn't even know I'm stupid. This is my first time on the net and
when the mail came in I just did what it said. So much for
the blind leading the blind, case in point
All I can say is send me the posting address and I will pull
It and then Target others (spammers).Like you do. I'm SORRY.

KEVIN

964. ! New HighTech CD-ROM released for 97 !

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: amsoft@epix.net
Message-ID: <5gmujg$q6j@news1.epix.net>
Source record: 19518
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ORIGINATOR: AmSoft
AUTHOR: Pete deVolpi, KC3TL
E-MAIL: amsoft@epix.net
TELEPHONE: 717-938-8249
FACSIMILE: 717-938-6767
WWW SITE: http://hamster.ivey.uwo.ca/~amsoft/

- -

AmSoft announces the 1997 release of "The World of Ham Radio
CD-ROM.
The World of Ham Radio contains the World's largest collection
of amateur radio software, and the most recent FCC amateur radio
license database available anywhere. Track all US and Foreign
Licensees authorized to operate by the FCC. More than 1,000,00
callsigns are found in seconds with this CD-ROM. The current
database includes calls issued up to 14 January 1997. Find hams
by full or partial call sign, prior call sign, last name, first
name, State, City or zip codes. Create your mailing lists or just
print single labels from this FCC Callsign database program.
DOS, Windows 3.x, and *Windows 95 compatible lookups on this
CD-ROM.
Every issue comes with the AmCall auto-logging station logbook
which uses this callsign database. Compatible with most other
amateur radio software packages available today. Also includes
all the "Vanity Flood Gate assignments, plus the missing 3,500
"Vanity Assignment still Available" calls.

There are over 2150 amateur radio modification files included on
this CD-ROM logically arranged by manufacturer, and model number.
That's over 800 new mods since our last issue.

This CD-ROM is non invasive to your drives, this means no hard
drive usage unless you decide to use it.

A Complete user interface "CDVIEW" for the Ham Radio Software
library eliminates the need for you to use DOS commands and
hard drive space. CDVIEW includes Instant online help and
program documentation by pressing the (I) key on your keyboard.
CDVIEW will make it very easy for you to move through and
operate
the massive 20,000+ file compilation. These files could easily fill
822+ Megabytes of space if they were not on this convenient

CD-ROM.
Users can preview new ham software directly on the CD-ROM
without
requiring a hard drive, many of the software programs run directly
from the CD-ROM. You can use the CD-ROM to place files onto
removable diskettes, or to install files onto your computer.

For more information visit: http://hamster.ivey.uwo.ca/~amsoft/
or contact AmSoft direct from the information at the top of this
notice.

- -

This announcement is only posted in amateur radio and electronics
related newsgroups. It is only posted 1 time per year as a means
of public announcement of a new product related to these specific
newsgroups.

- -

For a FREE AmSoft newsletter published bi-monthly please send
"SUBSCRIBE" to amsoft@epix.net

965. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970318192800.OAA03432@ladder01.news.aol.com>
Source record: 19519

WXSAT can be had at:
http://members.aol.com/jkktl/ham/htm

also download the tips on using this excellent program!

Jim

966. ARLK022 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-18 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk022.1997@arrl.org>
Source record: 19520
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK022
ARLK022 Keplerian data

ZCZC SK22
QST de W1AW
Keplerian Bulletin 22 ARLK022
From ARRL Headquarters
Newington, CT March 18, 1997
To all radio amateurs

SB KEP ARL ARLK022
ARLK022 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

RS-16
1 24744U 97010A 97066.14889668 .00002139 00000-0 74153-4 0 367
2 24744 97.2814 333.1163 0009586 91.5327 268.6998 15.30875098 474
AO-10
1 14129U 83058B 97054.50000000 .00000010 00000-0 57107-5 0 5005
2 14129 25.8792 163.0281 6052907 93.3854 313.1701 2.05882272103000
RS-10/11
1 18129U 87054A 97077.11025760 .00000057 00000-0 45638-4 0 3331
2 18129 82.9249 306.0616 0012585 108.6302 251.6217 13.72375986487745
UO-11
1 14781U 84021B 97076.99798022 .00000092 00000-0 23357-4 0 09839
2 14781 97.8250 61.9243 0011066 299.8624 60.1481 14.69532597697860
RS-12/13
1 21089U 91007A 97077.19751673 .00000007 00000-0 -91234-5 0 00135
2 21089 82.9212 346.1311 0027932 188.3494 171.7202 13.74077715306668
UO-14
1 20437U 90005B 97076.99477240 .00000038 00000-0 31276-4 0 02594
2 20437 98.5201 160.6201 0011526 113.2091 247.0305 14.29952809373183
RS-15
1 23439U 94085A 97077.07354701 -.00000039 00000-0 10000-3 0 2051
2 23439 64.8170 300.1796 0151638 149.4241 211.5613 11.27525646 91664
AO-16
1 20439U 90005D 97076.45282995 -.00000043 00000-0 84662-7 0 00593
2 20439 98.5370 162.8242 0011731 115.9407 244.2980 14.30000535373123
```

```
DO-17
1 20440U 90005E 97077.14753948 -.00000009 00000-0 13340-4 0 00654
2 20440 98.5433 164.3060 0012176 113.9917 246.2544 14.30143537373250
WO-18
1 20441U 90005F 97077.14335581 .00000014 00000-0 21935-4 0 00614
2 20441 98.5381 164.2088 0012333 113.9938 246.2537 14.30111880373258
LO-19
1 20442U 90005G 97077.18788171 .00000049 00000-0 35599-4 0 00604
2 20442 98.5472 164.8786 0013105 113.5322 246.7239 14.30225569373289
FO-20
1 20480U 90013C 97076.96689172 -.00000036 00000-0 -27832-5 0 09554
2 20480 99.0326 55.7575 0540418 223.9313 131.7610 12.83236570333009
AO-21
1 21087U 91006A 97077.13943541 .00000094 00000-0 82657-4 0 08088
2 21087 82.9407 118.9752 0035216 159.8736 200.3818 13.74579147307649
UO-22
1 21575U 91050B 97077.17438821 .00000038 00000-0 27062-4 0 07719
2 21575 98.3151 140.8866 0007347 157.4918 202.6592 14.37060844297414
KO-23
1 22077U 92052B 97077.16578231 -.00000037 00000-0 10000-3 0 06542
2 22077 66.0812 335.8147 0013285 234.9118 125.0655 12.86300838216047
KO-25
1 22828U 93061F 97077.19970934 .00000014 00000-0 22964-4 0 05249
2 22828 98.5482 153.7131 0010546 128.6201 231.5931 14.28171099149221
IO-26
1 22826U 93061D 97077.14360086 .00000010 00000-0 21283-4 0 05624
2 22826 98.5504 153.5828 0009451 144.3498 215.8318 14.27829495181095
AO-27
1 22825U 93061C 97077.16818205 .00000002 00000-0 18145-4 0 05709
2 22825 98.5524 153.3840 0008687 142.3126 217.8667 14.27720157181087
FO-29
1 24278U 96046B 97077.15918750 -.00000012 00000-0 21254-4 0 00807
2 24278 98.5532 130.7614 0352181 62.1081 301.5256 13.52629894028817
MO-30
1 24305U 96052B 97076.98851815 .00000204 00000-0 20364-3 0 00849
2 24305 82.9304 61.9728 0031446 96.9237 263.5464 13.73090713026540
Mir
1 16609U 86017A 97077.52086315 .00003806 00000-0 51028-4 0 1296
2 16609 51.6514 181.5663 0010837 191.4408 168.6345 15.60727216632878

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
March 22, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

967. Linux and KANSAS CITY Rotor Interface with Sattrack

Newsgroup: rec.radio.amateur.space
Date: 1997-03-19 00:00:00 UTC
From: pf@misg.csd.harris.com
Message-ID: <5go0mk$3p6@hawk-hcsc.hcsc.com>
Source record: 19422

Dear OM's ,

I'm running Sattrack V3.1 under Linux on my PC to track ham's satellites .
I just purchased a KANSAS CITY interface , and I'm looking for the C code
to be included into satctrl.c & sattrack.h to make this KCT interface
running .

Can somebody help me ?
I'm convinced that somebody else should be interested in this support .
I've contacted Manfred the author of SATTRACK and he has no idea who has
written this code , but I'm sure he would be pleased to include it in his
next update .

If you have an idea on the subject I would appreciate you send me an
email . As I'm not an expert in programming it would be difficult for
me to write this code by myself ....

Many thanks in advance .

Best regards .

Pierre-Francois


```
_____________________________________________________________________________
| |
| ##### Pierre-Francois MONET |
| # __ __ __ __ __ CONCURRENT COMPUTER CORPORATION |
| # ##### | | | | | |\ | | | 78180 Montigny le Btx (FRANCE) |
| ##### |- |-- |--| | \ | | |- Tel (work):(33) 01 30 85 37 00 |
| # ##### | | \ | | | \| |__ |__ Internet : pf@mail.ccur.com |
| ##### AX25 : f5bqp @ f6ptt-1 |
| # ampr.org : f5bqp@f5bqp-9.ampr.org|
| ##### or 44.151.96.6 |
|_____________________________________________________________________________|
```


--


```
_____________________________________________________________________________
| |
| ##### Pierre-Francois MONET |
| # __ __ __ __ __ CONCURRENT COMPUTER CORPORATION |
```

968. Link budget

Newsgroup: rec.radio.amateur.space
Date: 1997-03-19 00:00:00 UTC
From: Jordi Soriano Goma <jsoriano@voltor.upc.es>
Message-ID: <33302B7D.1E51@voltor.upc.es>
Source record: 19423

Hello

I have problems with a link budget.

I don't understand if the power of the transponders refers to all the band (p.e. 250 Khz) and It's divided between all the users or if the output power refers only to each channel (p.e. 15 Khz).

Thank you.

73. Jordi.

969. a

Newsgroup: rec.radio.amateur.space
Date: 1997-03-19 00:00:00 UTC
From: Jordi Soriano Goma <jsoriano@voltor.upc.es>
Message-ID: <33302DB3.15B8@voltor.upc.es>
Source record: 19424

a

970. (no subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-19 00:00:00 UTC
From: Jordi Soriano Goma <jsoriano@voltor.upc.es>
Message-ID: <33302D7A.1C90@voltor.upc.es>
Source record: 19425

a

971. Microwave links (Help needed)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-19 00:00:00 UTC
From: winston@cyber-wizard.com
Message-ID: <5gnf3c$l11@informer1.cis.McMaster.CA>
Source record: 19521

Hi there,
I am a final year student in EE. I am working on microwave links at 38.7GHz for my thesis. The antennas system that we use are built by Harris. It is called the "Microstar".
I would like to know more about the advantages and disadvantages when connecting at such a high frequency in telecommunication.
I am also studying the attenuation and effect of such frequency when it propagates through various type of glass,vegetation and weather.
I am trying to use some formulas in order for me to verify my experimental result with the theoretical result. However, I am not sure about which formulas in optics or microwave that I can use.
If anyone of you have more to say about this, please send an email to winston@cyber-wizard.com . Any other information would be greatly appreciated.

BTW, I hope I am posting up in the right newsgroup. If not, I would like to apologize and please suggest the right group for me. Thanks.

** I have limited excess to newsgroup, so please replying by sending an email to me.

Thanks you for your attention.

Winston

972. Icom-970 problem!!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: Javier <ea4cmv@cot.es>
Message-ID: <33307F68.3D09@cot.es>
Source record: 19426

Hi all, I have an Icom-970 and sometimes it becomes completly deaf in 70 cms. band and with the general coverage module occurs the same. At the same time the display show three dashes in the place of every digit.
The question is if anybody who has this rig and had had this problem know how to solve it.
Thank you 73's Javier EA4CMV.

973. DOVE Telemetry Data for 03/20/97

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: Mike Cat <JoeQPublic@someaddress.net>
Message-ID: <33314A45.6B17@someaddress.net>
Source record: 19427

I'm just posting the telemetry data from Dove that I received last night
FYI.
Enjoy!

Dove 17 Telemetry Data from 02:45 UTC pass on 20 MAR 1997

DOVE-1>BCRXMT/V:vmax=760930 battop=766771 temp=278413

DOVE-1>TIME-1/V:PHT: uptime is 041/07:55:04. Time is Thu Mar 20
02:43:57 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:70 07:52 08:70 09:70
0A:9F
0B:EA 0C:E7 0D:D6 0E:01 0F:26 10:C1 11:9C 12:00 13:02 14:B0 15:9C
16:B2 17:B0 18:B0 19:AC 1A:B0 1B:FF 1C:53 1D:B0 1E:1C 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:19 23:18 24:14 25:3C 26:01 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:01 2F:A0 30:D0 31:A0 32:00 33:00 34:C7 35:A9 36:B0
37:B0 38:BA

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:55:34. Time is Thu Mar 20
02:44:27 1997

DOVE-1>TLM/V:00:57 01:56 02:86 03:34 04:56 05:57 06:70 07:51 08:6C 09:70
0A:9F
0B:EA 0C:E7 0D:D6 0E:00 0F:25 10:C0 11:9C 12:00 13:02 14:B0 15:9C
16:B0 17:AB 18:B0 19:B0 1A:B0 1B:FF 1C:54 1D:AC 1E:1B 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:19 23:19 24:12 25:3C 26:00 27:00 28:00 29:00 2A:01
2B:00
2C:00 2D:35 2E:00 2F:A0 30:D0 31:A2 32:00 33:00 34:C8 35:A9 36:B0
37:B0 38:BB

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

```
DOVE-1>BCRXMT/V:vmax=760930 battop=766771 temp=278413

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:56:04. Time is Thu Mar 20
02:44:57 1997

DOVE-1>TLM/V:00:56 01:57 02:86 03:33 04:56 05:56 06:70 07:51 08:6C 09:70
0A:9F
0B:E9 0C:E8 0D:D4 0E:00 0F:26 10:C0 11:9D 12:00 13:02 14:B1 15:9C
16:B2 17:B0 18:B0 19:AC 1A:B0 1B:FF 1C:54 1D:AE 1E:1B 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:1A 23:18 24:14 25:3C 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:9F 30:D0 31:A1 32:00 33:01 34:C9 35:AA 36:B0
37:B0 38:BC

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:56:34. Time is Thu Mar 20
02:45:27 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:6C 07:50 08:70 09:6C
0A:9F
0B:E9 0C:E8 0D:D6 0E:00 0F:24 10:C0 11:9C 12:01 13:02 14:B1 15:9D
16:B0 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:AC 1E:1A 1F:5C 20:8C

DOVE-1>TLM/V:21:5C 22:1A 23:1A 24:14 25:3C 26:00 27:00 28:00 29:00 2A:01
2B:00
2C:00 2D:35 2E:00 2F:9F 30:D0 31:A0 32:00 33:01 34:CA 35:AA 36:B0
37:B0 38:BD

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=760045 battop=766771 temp=318063

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:57:04. Time is Thu Mar 20
02:45:57 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:70 07:50 08:6C 09:6C
0A:9F
0B:EA 0C:E8 0D:D6 0E:01 0F:25 10:BF 11:9C 12:00 13:02 14:B2 15:9E
16:AD 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:B0 1E:1B 1F:5A 20:8C
```

DOVE-1>TLM/V:21:5A 22:1A 23:1A 24:14 25:3C 26:01 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A0 30:D0 31:A1 32:00 33:00 34:CA 35:AA 36:B0
37:B0 38:BC

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:57:34. Time is Thu Mar 20
02:46:27 1997

DOVE-1>TLM/V:00:57 01:56 02:86 03:33 04:56 05:56 06:70 07:50 08:70 09:6C
0A:9F
0B:EA 0C:E8 0D:D6 0E:00 0F:25 10:BF 11:9C 12:00 13:01 14:B2 15:9E
16:B2 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:56 1D:B0 1E:1B 1F:5C 20:8C

DOVE-1>TLM/V:21:5A 22:1A 23:18 24:14 25:3C 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:01 2D:34 2E:01 2F:9F 30:D0 31:A2 32:00 33:00 34:CA 35:AC 36:B0
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=760045 battop=766771 temp=318063

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:58:04. Time is Thu Mar 20
02:46:57 1997

DOVE-1>TLM/V:00:56 01:57 02:86 03:33 04:56 05:56 06:70 07:50 08:70 09:6C
0A:9F
0B:EA 0C:E8 0D:D5 0E:00 0F:24 10:BF 11:9C 12:00 13:02 14:B3 15:9E
16:B2 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:AD 1E:1C 1F:5B 20:8D

DOVE-1>TLM/V:21:59 22:1A 23:19 24:14 25:3D 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A2 30:D0 31:A2 32:00 33:00 34:CA 35:AC 36:B0
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:58:34. Time is Thu Mar 20
02:47:27 1997

```
DOVE-1>TLM/V:21:59 22:1A 23:18 24:12 25:3E 26:00 27:00 28:01 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A0 30:D0 31:A2 32:00 33:00 34:CB 35:AA 36:B1
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TLM/V:00:56 01:57 02:87 03:34 04:56 05:56 06:70 07:50 08:70 09:6B
0A:9F
0B:EC 0C:E8 0D:D6 0E:00 0F:25 10:BF 11:9D 12:00 13:02 14:B4 15:9F
16:B2 17:B0 18:B2 19:B0 1A:B0 1B:FF 1C:59 1D:B0 1E:1A 1F:5A 20:8B

DOVE-1>TIME-1/V:PHT: uptime is 041/08:00:34. Time is Thu Mar 20
02:49:27 1997

DOVE-1>TLM/V:00:56 01:57 02:87 03:34 04:56 05:56 06:70 07:50 08:70 09:6B
0A:9F
0B:EC 0C:E8 0D:D6 0E:01 0F:26 10:BF 11:9C 12:00 13:10 14:B6 15:A2
16:B1 17:B0 18:B1 19:B0 1A:B0 1B:FF 1C:5B 1D:AD 1E:1B 1F:5A 20:90

DOVE-1>TLM/V:21:5A 22:1A 23:16 24:11 25:3E 26:00 27:11 28:07 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A1 30:D0 31:A2 32:00 33:00 34:D0 35:B0 36:B3
37:B0 38:C1

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=761638 battop=766771 temp=238763

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0
------------------------------------------------------------
```

Mike Cat
catman@codem.com
http://www.codem.com/

974. My First MIR Packet Contact! <<<<< : >>>>>

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: Mike Cat <JoeQPublic@someaddress.net>
Message-ID: <33314D2F.7C50@someaddress.net>
Source record: 19428

Hello all,

Well, I've have my ticket only since December '96 and I finally got
around to getting some equipment that is suitable for working MIR (and
the Shuttle) on 2 meter packet. So, last night (or today UTC), I made
my first contact (YES! FINALLY!):

First MIR Contact on Packet Radio
Time 07:50 UTC Thursday 20 MAR 1997 (it was a 72 degree pass)

Home station setup:

ICOM HT T7A
TNC: Kantronics KAM Plus
Computer: Gateway 2000 P5-100
Software: Used STSPlus version 9650 and Hyperterminal under Win95
Xmit: 145.200 (no compensation for Doppler
Rcv: 145.800 lots of QRM from APRS on 145.790)
Power out: 60 Watts (using rfconcepts amp)
Antenna: M-Squared Eggbeater in the attic (3rd floor of house) with
optional reflector kit.

The session follows:

R0MIR>KB2WVO-7/V:HELLO FROM MIR CREW

c R0MIR-1
cmd:*** R0MIR-1 busy
*** DISCONNECTED
R0MIR>KB2WVO-7/V:HELLO FROM MIR CREW

c R0MIR-1
cmd:*** R0MIR-1 busy
*** DISCONNECTED
R0MIR-1>WF1F/V:CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>

R0MIR-1>WF1F/V: - Logged off

cmd:c R0MIR-1
cmd:*** CONNECTED to R0MIR-1
Logged on to R0MIR's Personal Message System
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
l
b

Msg # Stat Date Time To From @ BBS Subject
75 P 03/18/97 05:32 R0MIR WF1F for jerry
74 P 03/18/97 01:01 ROMIR IW3RCR

*** retry count exceeded
*** DISCONNECTED
cmd:

As you can see, it was a VERY SHORT session. Timing is everything as we all are aware, and the PMS/BBS on MIR only allows one connection at a time. By the time WF1F logged off, there was only about a minute left before LOS, plus there was ALOT (as usual) interference from 145.790 APRS stations close by, so many AX.25 packets were wiped out on receive from MIR. I can't wait until they change those MIR packet freq's again (hopefully to a MUCH better location)!

Does anyone know what version/sort of PMS MIR is running? I would like to get a list of help for it BEFORE I make contact the next time so I'll know what I'm doing.

More postings to come in the future.
Thanks and have a great day!

Mike Cat
catman@codem.com
http://www.codem.com/

975. Feed Horn for 5ft dish

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: seven@datasync.com
Message-ID: <5gsaic$ird@osh2.datasync.com>
Source record: 19429

I just came across two 5ft dishes that I want to use for my 70cm work.
Can someone describe the feedhorn for me.
I read up some in the ARRL antenna book and the waveguide they suggest
would be REALLY BIG.
Is there another way?

976. WEBPAGE UPDATES

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <33391931.9504045@news.primenet.com>
Source record: 19430

Check out the new indexes at

"http://www.dxer.com"

"Amateur Television Index"

"New Product Index"

"Used Equipment Index:

"Additions to Ham Club, CW, Satellite
and VHF/UHF indexes"

Begining May 1st, 1997 Comet Antennas will be
having a monthly drawing for Comet Shirts, and
other selected items.. Details will be posted
at "http://www.dxer.com"

977. VIRUS EN INTERNET

Newsgroup: rec.radio.amateur.space
Date: 1997-03-20 00:00:00 UTC
From: Ricardo_Simonetti@evnet.satlink.net
Message-ID: <1764007807.199004689@evnet.satlink.net>
Source record: 19431

GUARDA!!!!!!!
>----------
>De: Luis M. Barreiro
>Para: Diego F. Sifon
>Asunto: RV: Virus Warning
>Fecha: Jueves 20 de Marzo de 1997 10:17
>
>Microsoft Mail v3.0 (MAPI 1.0 Transport) IPM.Microsoft Mail.Note
>De:Luis M. Barreiro
>Para:Diego F. Sifon
>Asunto:RV: Virus Warning
>Fecha:1997-03-20 10:17
>Prioridad:3
>Identificador del mensaje:E481AEB507A1D011BBD100AA002FCC93
>Identificador de la conversacion:RV: Virus Warning
>
>----------

>
>
>
>----------
>De: Subject: Paul Jernigan[SMTP:"Virus Warning"@importmusic.com.ar]
>Enviado: Miercoles 19 de Marzo de 1997 18:40
>Para: yapali@turknet.com.tr; mogar@mbox.vol.it; nostin@msn.com;
>barreiro@importmusic.com.ar; royal@netpoint.com.br; yssales@yorkville.com
>Asunto: Virus Warning
>
>Dear Friends,
>
>I just got this message by e-mail. This is very important information
>that
>you need to read.
>
>>Return-path: <ndunn@gibson.com>
>>X-Sender: ndunn@mail.nash.gibson.com
>>Date: Wed, 19 Mar 1997 13:23:51 -0600
>>To: jburrows@gibson.com,mcarter@gibson.com,scarver@gibson.com,
>> ldunbar@gibson.com,pjerniga@gibson.com,rolsen@gibson.com,
>> eorstrom@gibson.com,sam@gibson.com,bsulcer@gibson.com,
>> mwagner@gibson.com,jyarboro@gibson.com,dyokie@gibson.com,
>> dwilson@gibson.com,mwatts@gibson.com,mgarcia@gibson.com,
>> wbeavers@gibson.com

>>From: Nick Dunn <ndunn@gibson.com>
>>Subject: Virus Warning
>>
>>Please distribute as widely as possible:
>>
>> There is a computer virus that is being sent across the
>Internet. If you receive an email message with the subject line "Deeyenda",
>>DO NOT read the message, DELETE it immediately. Please read the
>messages below.
>> Some miscreant is sending email under the title "Deeyenda"
>>nationwide, if you get anything like this DON'T DOWNLOAD THE FILE! It has a
virus that rewrites your hard drive, obliterating anything on it.
>>Please be careful and forward this mail to anyone you care about.
>>
>> FCC WARNING !!!!! ----- DEEYENDA PLAGUES INTERNET ----
>>
>> The internet community has again been plagued by another
>computer virus. This message is being spread throughout the internet,
including USENET posting, EMAIL, and other interent activities..
>>The reason for all the attention is because of the nature of this virus and
the
potential security risks it makes.
Instead of a destructive trojan virus (most viruses!), this virus,
referred to as Deeyenda Maddick, performs a comprehensive search on your
computer, looking for valuable information, such as email and login
passwords, credit cards, personal info, etc. The Deeyenda virus also has
the capability to stay memory resident while running a host of applications
and operation systems, such as Windows 3.11 and Windows 95.
>>
What this means to internet users is that when a login and PASSWORD are sent
to the server, this virus can COPY this information and SEND IT OUT TO AN
UNKNOWN ADDRESS (varies).
>>
The reason for this warning is because the Deeyenda virus is virtually
undetectable. Once attacked, your computer will be unsecure. Although
it can attack any O/S, this virus is most likely to attack those users
viewing Java enhanced Web Pages (Netscape 2.0+ and Microsoft Internet
Explorer 3.0+ which are running on Windows 95) . Researchers at Princeton
University have found this virus on a number of World Wide Web pages
and fear it s spread.
>>
Please pass this on, for we must alert the general public of the security
risks.
>>
>Enrique Corbacho
>Gibson Musical Instruments
>Tel. (615) 391-2127
>Fax (615) 885-6742 or 615 871 4060
>e-mail: ecorbach@gibson.com

>

****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
****

978. Re: Phase 3-D???

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: Chris McKendry <kh2pm@kuentos.guam.net>
Message-ID: <33314E3B.2ED1@kuentos.guam.net>
Source record: 19432

Jim,

For starters, I am new to the newsgroups, so if anyone sees me doing
something wrong, bear with me.

Do you get QST (Official Journal of the ARRL)?
I am looking at a very informative article in the
January 1997 issue, pages 28-31. Seems as if all the answers to your
questions are probably here, if not easily obtained with a simple
search of the internet. I am anxious to start using the Phase 3D sat
myself!!
In a nutshell, the QST article states that the controlling groups will
be those with the largest financial contribution to the construction of
the satellite. This board will design the "schedule" of the sat and
is probably going to change from time to time. As of press time of the
article, there was no absolute designation as to which mode would be
"dominant" over the others. One item is for certain: you will need to
buy a SSB receiver since there will be no FM transmissions from the sat
since SSB and CW transmissions use much less power. There are mentions
of "sumultaneous SSB or CW conversations" so maybe that is a hint of
the capabilities of the sat. Also the article states that Phase 3D will
operate in 2 uplink/downlink modes simultaneously; but only once the
sat is in orbit and all tests are complete no one will know for sure
whether that will be possible. There will be updates in future issuesof
QST so check the newsstands or join ARRL and get in the mag in the mail.

Hope that was of any help.

Chris KH2PM

979. Re: Feed Horn for 5ft dish

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5gsu42$t9v@library.airnews.net>
Source record: 19433

>Can someone describe the feedhorn for me.
>.... the waveguide they suggest
>would be REALLY BIG.
>Is there another way?
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
The waveguide *would* be really big for
70cm use. A 5ft dish is not going to
yield a lot of gain at that frequency
either.
You didn't state the f/d ratio so
a description of the feed can't be
complete. A possibility would be a three
turn helix (also *very* big) if the f/d
is large (.6 or so.) The reflector would
be nearly as large as the dish and would
mask it causing considerable loss.
....Probably will end up being a 2 el beam.
A small beam would be much lighter and
could give the same gain with less problems
than the dish.
Ken K5MBV
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

980. Re: Internet in the Sky from a Big LEO

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: jrc@skypoint.com
Message-ID: <5gtglu$bnd@mirage.skypoint.com>
Source record: 19434
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

In article <5gil6t$p1v$2@ralph.vnet.net>, Si Ballenger <shb@vnet.net> wrote:
>KD1YV <jimkd1yv@ix.netcom.com> wrote:
>
>>The company will launch and operate a satellite constellation carrying
>>broadband communications of Internet, video-conferencing, interactive
>>multimedia, etc.
>

If you want to know more about Satellite Constellations, especially Teledisc
and Iridium, you have to see

http://www.ee.surrey.ac.uk/Personal/L.Wood/constellations/

This is an excellent page.
--
Jeffrey Comstock
EMAIL: jrc@brainiac.mn.org
CW: -. .-. ----- -..

981. Re: Link budget

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <52875.s8804028@mail.student.utwente.nl>
Source record: 19435

On Wed, 19 Mar 1997 19:07:57 +0100,
Jordi Soriano Goma <jsoriano@voltor.upc.es> wrote:

>Hello
>
>I have problems with a link budget.
>
>I don't understand if the power of the transponders refers to all the
>band (p.e. 250 Khz) and It's divided between all the users or if the
>output power refers only to each channel (p.e. 15 Khz).
>
>Thank you.
>
>73. Jordi.
>
As far as I know it always revers to the total downlink power, so you have
to divide by the number of users. Ussually the beacons are stronger than
the users ever get, so you can use the beacon power for the calcultation
and take a bit extra.
73 Johan pa3fpj@pi8daz.#twe.nld.eu/ pa3fpj@amsat.org

982. Re: My First MIR Packet Contact! <<<<< : >>>>>

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5gue4m$q5s$1@independence.ecn.ou.edu>
Source record: 19436

Mike Cat <JoeQPublic@someaddress.net> writes:

>Hello all,
<SNIP>

>Does anyone know what version/sort of PMS MIR is running? I would like
>to get a list of help for it BEFORE I make contact the next time so I'll
>know what I'm doing.
<SNIP>

>Mike Cat
>catman@codem.com
>http://www.codem.com/

Take a look at this month's CQ VHF. It has an entire article about MIR
PBS, including do's/don't's, and the help screen. BTW, you're asked to
NOT get the help screen, as I assume it takes too long to send it.

CQ VHF is only $2.95 in the states.

John
Trying desperately to hit SAFEX!
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

983. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211349.FAA07424@mailbox1.ucsd.edu>
Source record: 19437

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 77490.wrk; Fri, 21 Mar 1997 14:58:18 -1
Received: from [195.120.135.127] by infocomm.it id 77410.wrk; Fri, 21 Mar 1997 14:58:02 -1
Received: from [195.120.135.127] by infocomm.it id 773a0.wrk; Fri, 21 Mar 1997 14:57:52 -1
Received: from [195.120.135.127] by infocomm.it id 77350.wrk; Fri, 21 Mar 1997 14:57:42 -1
Received: from [195.120.135.127] by infocomm.it id 77300.wrk; Fri, 21 Mar 1997 14:57:32 -1
Received: from [195.120.135.127] by infocomm.it id 772b0.wrk; Fri, 21 Mar 1997 14:57:22 -1
Received: from [195.120.135.127] by infocomm.it id 77260.wrk; Fri, 21 Mar 1997 14:57:12 -1
Received: from [195.120.135.127] by infocomm.it id 77210.wrk; Fri, 21 Mar 1997 14:57:02 -1
Received: from [195.120.135.127] by infocomm.it id 77170.wrk; Fri, 21 Mar 1997 14:56:46 -1
Received: from [195.120.135.127] by infocomm.it id 77070.wrk; Fri, 21 Mar 1997 14:56:16 -1
Received: from [195.120.135.127] by infocomm.it id 76ee0.wrk; Fri, 21 Mar 1997 14:55:30 -1
Received: from [195.120.135.127] by infocomm.it id 76c90.wrk; Fri, 21 Mar 1997 14:54:20 -1
Received: from [195.120.135.127] by infocomm.it id 76990.wrk; Fri, 21 Mar 1997 14:52:52 -1
Received: from [195.120.135.127] by infocomm.it id 76680.wrk; Fri, 21 Mar 1997 14:51:18 -1
Received: from [195.120.135.127] by infocomm.it id 76340.wrk; Fri, 21 Mar 1997 14:49:42 -1
Received: from [195.120.135.127] by infocomm.it id 760a0.wrk; Fri, 21 Mar 1997 14:48:20 -1
Received: from [132.239.1.54] by infocomm.it id 75d70.wrk; Fri, 21 Mar 1997 14:46:48 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA05066 for <ham-space-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 04:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id EAA02684
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 04:30:56 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA02668
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 04:30:53 -0800 (PST)
Message-Id: <199703211230.EAA02668@noc.ucsd.edu>
Date: Fri, 21 Mar 97 04:30:52 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #105
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 21 Mar 97 Volume 97 : Issue 105

Today's Topics:
DOVE Telemetry Data for 03/20/97
Feed Horn for 5ft dish
My First MIR Packet Contact! <<<<< : >>>>>
Phase 3-D???
RS-10/11

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 09:31:33 -0500
From: Mike Cat <JoeQPublic@someaddress.net>
Subject: DOVE Telemetry Data for 03/20/97

I'm just posting the telemetry data from Dove that I received last night
FYI.
Enjoy!

Dove 17 Telemetry Data from 02:45 UTC pass on 20 MAR 1997

DOVE-1>BCRXMT/V:vmax=760930 battop=766771 temp=278413

DOVE-1>TIME-1/V:PHT: uptime is 041/07:55:04. Time is Thu Mar 20
02:43:57 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:70 07:52 08:70 09:70
0A:9F
0B:EA 0C:E7 0D:D6 0E:01 0F:26 10:C1 11:9C 12:00 13:02 14:B0 15:9C
16:B2 17:B0 18:B0 19:AC 1A:B0 1B:FF 1C:53 1D:B0 1E:1C 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:19 23:18 24:14 25:3C 26:01 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:01 2F:A0 30:D0 31:A0 32:00 33:00 34:C7 35:A9 36:B0
37:B0 38:BA

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

```
DOVE-1>TIME-1/V:PHT: uptime is 041/07:55:34. Time is Thu Mar 20
02:44:27 1997

DOVE-1>TLM/V:00:57 01:56 02:86 03:34 04:56 05:57 06:70 07:51 08:6C 09:70
0A:9F
0B:EA 0C:E7 0D:D6 0E:00 0F:25 10:C0 11:9C 12:00 13:02 14:B0 15:9C
16:B0 17:AB 18:B0 19:B0 1A:B0 1B:FF 1C:54 1D:AC 1E:1B 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:19 23:19 24:12 25:3C 26:00 27:00 28:00 29:00 2A:01
2B:00
2C:00 2D:35 2E:00 2F:A0 30:D0 31:A2 32:00 33:00 34:C8 35:A9 36:B0
37:B0 38:BB

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=760930 battop=766771 temp=278413

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:56:04. Time is Thu Mar 20
02:44:57 1997

DOVE-1>TLM/V:00:56 01:57 02:86 03:33 04:56 05:56 06:70 07:51 08:6C 09:70
0A:9F
0B:E9 0C:E8 0D:D4 0E:00 0F:26 10:C0 11:9D 12:00 13:02 14:B1 15:9C
16:B2 17:B0 18:B0 19:AC 1A:B0 1B:FF 1C:54 1D:AE 1E:1B 1F:5A 20:90

DOVE-1>TLM/V:21:5C 22:1A 23:18 24:14 25:3C 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:9F 30:D0 31:A1 32:00 33:01 34:C9 35:AA 36:B0
37:B0 38:BC

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:56:34. Time is Thu Mar 20
02:45:27 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:6C 07:50 08:70 09:6C
0A:9F
0B:E9 0C:E8 0D:D6 0E:00 0F:24 10:C0 11:9C 12:01 13:02 14:B1 15:9D
16:B0 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:AC 1E:1A 1F:5C 20:8C

DOVE-1>TLM/V:21:5C 22:1A 23:1A 24:14 25:3C 26:00 27:00 28:00 29:00 2A:01
2B:00
2C:00 2D:35 2E:00 2F:9F 30:D0 31:A0 32:00 33:01 34:CA 35:AA 36:B0
37:B0 38:BD
```

```
DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=760045 battop=766771 temp=318063

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:57:04. Time is Thu Mar 20
02:45:57 1997

DOVE-1>TLM/V:00:57 01:57 02:86 03:34 04:56 05:56 06:70 07:50 08:6C 09:6C
0A:9F
0B:EA 0C:E8 0D:D6 0E:01 0F:25 10:BF 11:9C 12:00 13:02 14:B2 15:9E
16:AD 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:B0 1E:1B 1F:5A 20:8C

DOVE-1>TLM/V:21:5A 22:1A 23:1A 24:14 25:3C 26:01 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A0 30:D0 31:A1 32:00 33:00 34:CA 35:AA 36:B0
37:B0 38:BC

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:57:34. Time is Thu Mar 20
02:46:27 1997

DOVE-1>TLM/V:00:57 01:56 02:86 03:33 04:56 05:56 06:70 07:50 08:70 09:6C
0A:9F
0B:EA 0C:E8 0D:D6 0E:00 0F:25 10:BF 11:9C 12:00 13:01 14:B2 15:9E
16:B2 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:56 1D:B0 1E:1B 1F:5C 20:8C

DOVE-1>TLM/V:21:5A 22:1A 23:18 24:14 25:3C 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:01 2D:34 2E:01 2F:9F 30:D0 31:A2 32:00 33:00 34:CA 35:AC 36:B0
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=760045 battop=766771 temp=318063

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0
```

```
DOVE-1>TIME-1/V:PHT: uptime is 041/07:58:04. Time is Thu Mar 20
02:46:57 1997

DOVE-1>TLM/V:00:56 01:57 02:86 03:33 04:56 05:56 06:70 07:50 08:70 09:6C
0A:9F
0B:EA 0C:E8 0D:D5 0E:00 0F:24 10:BF 11:9C 12:00 13:02 14:B3 15:9E
16:B2 17:B0 18:B0 19:B0 1A:B0 1B:FF 1C:59 1D:AD 1E:1C 1F:5B 20:8D

DOVE-1>TLM/V:21:59 22:1A 23:19 24:14 25:3D 26:00 27:00 28:00 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A2 30:D0 31:A2 32:00 33:00 34:CA 35:AC 36:B0
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TIME-1/V:PHT: uptime is 041/07:58:34. Time is Thu Mar 20
02:47:27 1997

DOVE-1>TLM/V:21:59 22:1A 23:18 24:12 25:3E 26:00 27:00 28:01 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A0 30:D0 31:A2 32:00 33:00 34:CB 35:AA 36:B1
37:B0 38:BE

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

DOVE-1>TLM/V:00:56 01:57 02:87 03:34 04:56 05:56 06:70 07:50 08:70 09:6B
0A:9F
0B:EC 0C:E8 0D:D6 0E:00 0F:25 10:BF 11:9D 12:00 13:02 14:B4 15:9F
16:B2 17:B0 18:B2 19:B0 1A:B0 1B:FF 1C:59 1D:B0 1E:1A 1F:5A 20:8B

DOVE-1>TIME-1/V:PHT: uptime is 041/08:00:34. Time is Thu Mar 20
02:49:27 1997

DOVE-1>TLM/V:00:56 01:57 02:87 03:34 04:56 05:56 06:70 07:50 08:70 09:6B
0A:9F
0B:EC 0C:E8 0D:D6 0E:01 0F:26 10:BF 11:9C 12:00 13:10 14:B6 15:A2
16:B1 17:B0 18:B1 19:B0 1A:B0 1B:FF 1C:5B 1D:AD 1E:1B 1F:5A 20:90
```

DOVE-1>TLM/V:21:5A 22:1A 23:16 24:11 25:3E 26:00 27:11 28:07 29:00 2A:00
2B:00
2C:00 2D:34 2E:00 2F:A1 30:D0 31:A2 32:00 33:00 34:D0 35:B0 36:B3
37:B0 38:C1

DOVE-1>STATUS/V: 80 00 00 1E 82 18 AA 02 00 50 00 00 0A 0C 3C 05 1C 00
0F 04 01

DOVE-1>BRAMST/V:
S-band is on
Power 1 W day/night
DOVE Command Team
(WD0E)

DOVE-1>BCRXMT/V:vmax=761638 battop=766771 temp=238763

DOVE-1>LSTAT/V:I P:0x3000 o:0 l:14140 f:14140, d:0 st:0

Mike Cat
catman@codem.com
http://www.codem.com/

Date: Thu, 20 Mar 1997 20:34:58 GMT
From: seven@datasync.com (KC5WCP)
Subject: Feed Horn for 5ft dish

I just came across two 5ft dishes that I want to use for my 70cm work.
Can someone describe the feedhorn for me.
I read up some in the ARRL antenna book and the waveguide they suggest
would be REALLY BIG.
Is there another way?

Date: Thu, 20 Mar 1997 09:43:59 -0500
From: Mike Cat <JoeQPublic@someaddress.net>
Subject: My First MIR Packet Contact! <<<<< : >>>>>

Hello all,

Well, I've have my ticket only since December '96 and I finally got
around to getting some equipment that is suitable for working MIR (and
the Shuttle) on 2 meter packet. So, last night (or today UTC), I made
my first contact (YES! FINALLY!):

First MIR Contact on Packet Radio
Time 07:50 UTC Thursday 20 MAR 1997 (it was a 72 degree pass)

Home station setup:

ICOM HT T7A
TNC: Kantronics KAM Plus
Computer: Gateway 2000 P5-100

Software: Used STSPlus version 9650 and Hyperterminal under Win95
Xmit: 145.200 (no compensation for Doppler
Rcv: 145.800 lots of QRM from APRS on 145.790)
Power out: 60 Watts (using rfconcepts amp)
Antenna: M-Squared Eggbeater in the attic (3rd floor of house) with
optional reflector kit.

The session follows:

R0MIR>KB2WVO-7/V:HELLO FROM MIR CREW

c R0MIR-1
cmd:*** R0MIR-1 busy
*** DISCONNECTED
R0MIR>KB2WVO-7/V:HELLO FROM MIR CREW

c R0MIR-1
cmd:*** R0MIR-1 busy
*** DISCONNECTED
R0MIR-1>WF1F/V:CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>

R0MIR-1>WF1F/V: - Logged off

cmd:c R0MIR-1
cmd:*** CONNECTED to R0MIR-1
Logged on to R0MIR's Personal Message System
CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
l
b

Msg # Stat Date Time To From @ BBS Subject
75 P 03/18/97 05:32 R0MIR WF1F for jerry
74 P 03/18/97 01:01 ROMIR IW3RCR
*** retry count exceeded
*** DISCONNECTED
cmd:

As you can see, it was a VERY SHORT session. Timing is everything as we
all are aware, and the PMS/BBS on MIR only allows one connection at a
time. By the time WF1F logged off, there was only about a minute left
before LOS, plus there was ALOT (as usual) interference from 145.790
APRS stations close by, so many AX.25 packets were wiped out on receive
from MIR. I can't wait until they change those MIR packet freq's again
(hopefully to a MUCH better location)!

Does anyone know what version/sort of PMS MIR is running? I would like
to get a list of help for it BEFORE I make contact the next time so I'll
know what I'm doing.

More postings to come in the future.
Thanks and have a great day!

Mike Cat
catman@codem.com

http://www.codem.com/

Date: Fri, 21 Mar 1997 00:48:27 +1000
From: Chris McKendry <kh2pm@kuentos.guam.net>
Subject: Phase 3-D???

Jim,

For starters, I am new to the newsgroups, so if anyone sees me doing
something wrong, bear with me.

Do you get QST (Official Journal of the ARRL)?
I am looking at a very informative article in the
January 1997 issue, pages 28-31. Seems as if all the answers to your
questions are probably here, if not easily obtained with a simple
search of the internet. I am anxious to start using the Phase 3D sat
myself!!
In a nutshell, the QST article states that the controlling groups will
be those with the largest financial contribution to the construction of
the satellite. This board will design the "schedule" of the sat and
is probably going to change from time to time. As of press time of the
article, there was no absolute designation as to which mode would be
"dominant" over the others. One item is for certain: you will need to
buy a SSB receiver since there will be no FM transmissions from the sat
since SSB and CW transmissions use much less power. There are mentions
of "sumultaneous SSB or CW conversations" so maybe that is a hint of
the capabilities of the sat. Also the article states that Phase 3D will
operate in 2 uplink/downlink modes simultaneously; but only once the
sat is in orbit and all tests are complete no one will know for sure
whether that will be possible. There will be updates in future issuesof
QST so check the newsstands or join ARRL and get in the mag in the mail.

Hope that was of any help.

Chris KH2PM

Date: Wed, 12 Mar 1997 02:00:54 GMT
From: abarrese@vivanet.com (Anthony)
Subject: RS-10/11

I'm new at using amateur satellites. What I need to know is how do I
go about using RS-10. What I already know is that I could use my hand
held for the up-link and my shortwave for down-link. Are amatuer's
only allowed to use cw, but not voice.

Thanks,

Anthony
KB2YZV

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End of Ham-Space Digest V97 #105
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984. Re: Feed Horn for 5ft dish

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3332B792.5018@arrl.org>
Source record: 19438

Ken Durham wrote:
>
> >Can someone describe the feedhorn for me.
> >.... the waveguide they suggest
> >would be REALLY BIG.
> >Is there another way?
> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
> The waveguide *would* be really big for
> 70cm use. A 5ft dish is not going to
> yield a lot of gain at that frequency
> either.
> You didn't state the f/d ratio so
> a description of the feed can't be
> complete. A possibility would be a three
> turn helix (also *very* big) if the f/d
> is large (.6 or so.) The reflector would
> be nearly as large as the dish and would
> mask it causing considerable loss.

The typical reflector size is 0.75 wavelengths
in diameter. Since a 5 ft dish is 2.2 wavelengths
at 435 MHz, the blockage is 11.5%. By comparision,
a really popular 90 mm optical telescope has a
blockage of 9%.

However, in the April 1995 IEEE Antennas and Propagation
Magazine, p.45 Dr. Kraus described a helical-beam with a
pair of loops instead of the ground plane.

Has anyone done much research on the topic of short
backfire arrays using small parabolic reflectors?
This technique may yield the highest practical gain,
but I can't help much.--Zack Lau W1VT

> ....Probably will end up being a 2 el beam.
> A small beam would be much lighter and
> could give the same gain with less problems
> than the dish.
> Ken K5MBV

985. SURLPUS SAT DISH

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: pboshea <pboshea@iol.ie>
Message-ID: <01bc3633$5954e860$d12d7dc2@default>
Source record: 19439

I AM IN A POSITION TO ACQUIRE A SURPLUS SATELLITE DISH WHICH I BELIEVE WAS
USED IN THE 10 Ghz RANGE....
QUESTION
CAN THIS DISH BE USED TO RECEIVE OTHER FREQUENCIESOR IS IT FREQUENCY
SPECIFIC
ITS RATHER LARGE APPROX 10ft IN DIAMETER
THANKS IN ADVANCE

PAT O'SHEA

986. Landwehr Preamplifier

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: "John R. Moore" <w4ue@pobox.com>
Message-ID: <3333533B.7EB6@pobox.com>
Source record: 19440

I am trying to locate the device number of the Gaasfet used
in the landwehr 435 MHZ preamplifier. Any help would certianly
be appreciated.
John W4UE
mailto:w4ue@pobox.com

987. New ham web site

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: Vancouver Electronics <ab7on@paclink.com>
Message-ID: <33332D06.5BC4@paclink.com>
Source record: 19441

http://home.paclink.com/users/ab7on/

988. ARLS007 Mir fire remains "hot" topic during MIREX school contacts

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls007.1997@arrl.org>
Source record: 19442
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS007
ARLS007 Mir fire remains "hot" topic during MIREX school contacts

ZCZC AS07
QST de W1AW
Space Bulletin 007 ARLS007
From ARRL Headquarters
Newington, CT March 21, 1997
To all radio amateurs

SB SPACE ARL ARLS007
ARLS007 Mir fire remains ''hot'' topic during MIREX school contacts

Ham-astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space station, assured students at Booker T. Washington High School in Houston, Texas, this week that all aboard the space station are in good shape after a fire aboard Mir late last month. About three dozen students got to chat with Linenger March 17 and posed more than a dozen questions during the ten-minute contact. Linenger also discussed the effects of the fire on experiments and described the escape arrangements available to those aboard Mir.

On March 11, students at United South High School, Laredo, Texas, successfully spoke with Linenger via ham radio. Other Mir school QSOs are tentatively scheduled to happen between now and April 20, 1997.

Linenger will remain aboard Mir with Cosmonauts Vasily Tsibliev and Alexander Lazutkin until mid-May.
NNNN
/EX

989. Re: SURLPUS SAT DISH

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc3652$9dd79220$5ec1e1ce@carl.ais.net>
Source record: 19443

-----BEGIN PGP SIGNED MESSAGE-----

The dish itself is not frequency specific ... it's the feed system that
determines the frequency of operation ...

To the extent that the dish is rather large, it must have pretty good
surface accuracy in order to maintain gain ... more error from ideal
surface = greater loss of achievable gain (up to the limit due to size)

I hope I have answered some of your questions ...

73,
Carl - wa6vse
carl@ais.net

pboshea <pboshea@iol.ie> wrote in article
<01bc3633$5954e860$d12d7dc2@default>...
> I AM IN A POSITION TO ACQUIRE A SURPLUS SATELLITE DISH WHICH I BELIEVE
WAS
> USED IN THE 10 Ghz RANGE....
> QUESTION
> CAN THIS DISH BE USED TO RECEIVE OTHER FREQUENCIESOR IS IT FREQUENCY
> SPECIFIC
> ITS RATHER LARGE APPROX 10ft IN DIAMETER
> THANKS IN ADVANCE
>
> PAT O'SHEA
>

-----BEGIN PGP SIGNATURE-----
Version: 4.5

iQCVAwUBMzMereIP1XFmaCFVAQGBjgQApxrpC8V7jOqooyxbrUiNOoF+Eaj/Mer1
qMPmQ9pk0uhGr9XEOLqpMkaXyEBEmdqsKKyEQgapd7yrL4G476HB8koIa1oVkQ64
Fyu159nXjvX+Y0jcXkEFIgANPXu8l7OrDeU/CevmIrAavfcbCsHRrvDtxeKvVcqO
lPlv8lGXKTo=
=pWKw
-----END PGP SIGNATURE-----

990. Satellite sked

Newsgroup: rec.radio.amateur.space
Date: 1997-03-21 00:00:00 UTC
From: Stephanie Steele <kc7dba@primenet.com>
Message-ID: <3333594D.2BF9@primenet.com>
Source record: 19444

I am looking for skeds on any analog satellite to complete my WAS. I specifically need North Dakota, Oklahoma, Arkansas, South Carolina, Delaware, and Montana. I will gladly sked with anyone needing my state of Idaho. Please reply via e-mail only as I do not check this newsgroup regularly. Thanks in advance.
--
Stephanie Steele

e-mail address kc7dba@primenet.com
packet address kc7dba@kb7cfd.id.pnw.usa.noam

Thinking is the hardest work there is, which is probably why so few engage in it.

-Henry Ford

991. Re: My First MIR Packet Contact! <<<<< : >>>>>

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5gvchf$2ja$1@ddi2.digital.net>
Source record: 19445

In article <33314D2F.7C50@someaddress.net> Mike Cat,
JoeQPublic@someaddress.net writes:
>Does anyone know what version/sort of PMS MIR is running? I would like
>to get a list of help for it BEFORE I make contact the next time so I'll
>know what I'm doing.

Mike -

Congrats on getting through to Mir. And yeah, the interference is pretty
horendous.

Check out the following web page for the NASA Johnson Space Center
Amateur Radio Club.

http://www.phoenix.net/~mbordel/jscarc/

Go to Mir Links and you will find some *fascinating* information on Mir's
amateur radio activities, including background information, images, a
tutorial on the Mir PMS system (including the information you requested
on the packet BBS), and a whole lot more.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not
accept any unsolicited E-mail or commercial advertisements.

992. Amsat *needs* your help!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5gvi0g$18o_002@blpm02-203.mcn.net>
Source record: 19446
Cross-posted to: alt.radio.scanner,aus.radio.amsat,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.space,
rec.radio.scanner,rec.radio.swap,sci.astro.amateur,sci.space.policy

Amsat-NA is in need of donations to help complete and launch the Phase 3D satellite. Last report says we need to raise over $150,000. Launch date is only a few months away so we haven't much time. You're fooling yourselves if you believe that the money will magically appear come launch day or that someone else will donate the needed funds. I don't want to see Amsat bankrupt itself in the name of Phase 3D.

If 150 of us will call Martha at (301) 589-6062 and each donate $1,000 then we can be assured Phase 3D will be riding on the ESA rocket and not a cement weight.(cement looks good on the ground, not in space)

If 300 of us will call Martha at (301) 589-6062 and each donate $500 then we'll be able to enjoy the sounds from Phase 3D's transponders as it passes high over head.(I can almost hear it now)

If 600 of us would just call Martha at (301) 589-6062 and each donate $250 then we would have an excellent tool to use for recuiting new members into the greatest organization amateur radio has ever known: AMSAT.

If you have made a pledge to donate to the Phase 3D project and have not keep it, Martha is impatiently waiting to hear from you at (301) 589-6062.

If you have never donated to Phase 3D, you can put an end to that retched feeling of guilt in your guts by sending a donation to Martha at 850 Sligo Ave., Suite 600, Silver Spring, MD. 20910-4703

If you have never heard of Phase 3D, check out: http://www.amsat.org then call Martha at (301) 589-6062 and donate.

Did I mention that Martha likes to sign up new members too? If you're reading this and are not an Amsat member... Shame Shame Shame. Call Martha and sign up today, you'll sleep better for it.

If you live some place other than North America, send your Phase 3D donation to your local Amsat Organization(They all need project funds).

73 de KB7ADL
Vince

993. Re: VIRUS EN INTERNET

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Fernando_J._Garcia@evnet.satlink.net
Message-ID: <1764007807.206004475@evnet.satlink.net>
Source record: 19447

Lo siguiente es un mensaje de una lista que fue distribuida en la BBS
Interlink, espero sea ☐til para aclarar las cosas:

```
From: jorge.gomez@caracas.bbs.ve (JORGE GOMEZ)
To: "Lenguaje Binario" <binario@uaa.dped.uaa.mx>
Subject: (BINARIO) Hoax!
Date: Sat, 08 Mar 97 09:51:00 -0500
Reply-To: binario@uaa.dped.uaa.mx
Sender: Maiser@uaa.dped.uaa.mx
Organization: Caracas BBS, Venezuela, 582-482-8487

Muchos de ustedes quizas reconozcan este logotipo ASCII:

/~~~~~~~~~|~~~~~~~~~~~~/~~~~~~~~|~~~~~~~~~~|~~~~~~~~~~~~~/~~~|~\
| "Why | Surf When / You Can | Ride The | Bus?" / | \
|__________|__________/__________|__________|___________/ | \
/ /______|----\
| Visit the TOURBUS website to see the Archives, |///////| |
| FAQ, and Subscription Information! |///////| |
| http://www.TOURBUS.com |///////| |
| |///////| |
~~~/~~~\~~/~~~\~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~/~~~\~~~~
\___/ \___/ T h e I n t e r n e t T o u r B u s \___/

Se trata del incansable autobus de Patrick Crispen y Bob Rankin. En la
edicion del 6 de marzo, aparece un articulo sobre el tema de los hoax
(avisos de virus en e-mail que realmente no existen) que intentaremos
traducir medianamente para disfrute de los lectores de Lenguaje Binario.
Hemos dejado deliberadamente en ingles las citas textuales que se hacen de
los avisos de nuevos virus, pues en ese idioma es como han sido divulgados
en mayor medida. Tambien hemos dejado en ingles la palabra "hoax"
("enga~o") por cuanto consideramos que ya la misma ha pasado a formar parte
de la terminologia del correo electronico. Les instamos a que envien este
mensaje a sus relacionados para contribuir a minimizar el efecto de los
anuncios de virus falsos.

================================================================================
VIRUS EN E-MAILS

Los mayores hoaxes que transitan por la red son los mensajes que dicen que
puedes contraer un virus informatico al leer mensajes que contengan ciertos
subjects. Aqui estan algunos de los mensajes sobre virus falsos mas
populares:

Here is some important information. Beware of a file called
Goodtimes. ... If you get anything called "Good Times", DON'T
```

read it or download it. It is a virus that will erase your hard drive. Forward this to all your friends. It may help them a lot.

o

There is a computer virus that is being sent across the Internet. If you receive an e-mail message with the subject line "Irina", DO NOT read the message. DELETE it immediately.

o

There is a computer virus that is being sent across the Internet. If you receive an email message with the subject line "Deeyenda", DO NOT read the message, DELETE it immediately!

o

This is a warning for all internet users - there is a dangerous virus propagating across the internet through an e-mail message entitled "PENPAL GREETINGS!". DO NOT DOWNLOAD ANY MESSAGE ENTITLED "PENPAL GREETINGS!" This message appears to be a friendly letter asking you if you are interested in a penpal, but by the time you read this letter, it is too late. The "trojan horse" virus will have already infected the boot sector of your hard drive, destroying all of the data present. It is a self-replicating virus, and once the message is read, it will AUTOMATICALLY forward itself to anyone who's e-mail address is present in YOUR mailbox!

[Las citas textuales provienen de http://ciac.llnl.gov/ciac/CIACHoaxes.html]

Algunos de estos mensajes de alerta sobre virus incluyen un aviso de emergencia proveniente de la Comision Federal de Comunicaciones de Estados Unidos --la FCC (la recuerdan?).

Amigos, es absolutamente IMPOSIBLE que puedan contraer un virus al leer el texto de un e-mail. No se puede. Punto final. No me importa lo que cualquiera pudiera decir. Es IMPOSIBLE! Los mensajes que te previenen acerca de "Good Times", "Irina", "Deeyenda", "Penpal Greetings" y cualquier otro virus por e-mail son HOAXES!

Ah! Y respecto a los mensajes de advertencia de la FCC, la politica de este organismo es:

La FCC no disemina informacion advirtiendo de la existencia, impacto o formas en que afectan los virus informaticos.

[Cita textual de http://www.fcc.gov/Bureaus/Miscellaneous/Public_Notices/pnmc5036.txt]

Dicho esto, dejenme informarles que *ES* posible que contraigan un virus informatico de un archivo que haya sido *anexo* a un e-mail, pero para ello tendrian que ejecutar antes ese archivo. Por ejemplo, supongan que alguien les envia un mensaje de correo electronico con un archivo de Microsoft Word

infectado con un virus, anexo al mensaje. Vuestras computadoras NO podrian ser infectadas con el virus si abren y leen el mensaje (recuerden, es IMPOSIBLE que contraigan virus desde mensajes de correo electronico). Vuestras computadoras *si podrian*, sin embargo, ser infectadas al ustedes abrir el documento de Word infectado.

Deberian ustedes preocuparse por la posibilidad de recibir archivos infectados, anexos a un mensaje de correo electronico que les envien? Si y no. De acuerdo a un articulo publicado hace poco en la lista de correo Macintosh Evangelist, hay actualmente:

- De 10.000 a 11.000 virus de DOS
- 12 virus de Windows
- 35 virus de Mac
- 200 o mas virus de macros; de entre los cuales el 70 o el 90% son multiplataforma
- 6 virus de Unix

Esos 10.000 u 11.000 virus de DOS afectan a toda maquina que corra DOS, Windows y Windows '95 (pero no a las Mac), y muchos de los 200 o mas virus de macros afectan a todas las maquinas (PC y Mac). A proposito, las macros son series de comandos (normalmente comandos de Microsoft Word) que permiten agrupar varias tareas en un solo comando.

En el TourBus hemos hablado de esto un par de veces antes, pero, como pueden ustedes cuidarse de contraer un virus informatico al bajar archivos de Internet? La respuesta es: NUNCA abran un archivo sin antes haberlo revisado con un antivirus. Inclusive si el archivo les ha sido enviado por su jefe, su pareja o algun miembro de su iglesia, REVISEN EL ARCHIVO ANTES DE ABRIRLO.

Para terminar: como pueden protegerse de los virus "Good Times", "Irina", "Deeyenda" y "Penpal Greetings"? NO TIENEN QUE HACERLO! ELLOS SON HOAXES, NO EXISTEN!

Algunas direcciones para saber mas de este tema:

http://ciac.llnl.gov/ciac/CIACHoaxes.html
http://www.fcc.gov/Bureaus/Miscellaneous/Public_Notices/pnmc5036.txt
==========
Para suscribirse al TourBus, envie un mensaje sin subject a Listserv@aol.com, con el siguiente comando:

SUBSCRIBE TOURBUS Nombres apellidos

Tambien pueden visitar el TourBus en http://www.tourbus.com.

LENGUAJE BINARIO **********
Revista electronica sobre computacion, Internet y temas afines
Suscribase enviando un SUB BINARIO a Maiser@uaa.dped.uaa.mx
Editor: Jorge Gomez Jimenez (Jorge.gomez@caracas.bbs.ve)
****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)

****

994. Re: VIRUS EN INTERNET

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Wtania@evnet.satlink.net
Message-ID: <1764007807.205367402@evnet.satlink.net>
Source record: 19448

Debo recordarles a todo que los virus son filas ejecutables realizadas a
partir de un lenguaje (C, VB, etc). Es imposible que un mensaje electronico
sea algo ejecutable ya que en general es texto o html.
Si posee un fila (es decir es un mensaje MIME) la fila ejecutable es el
virus.
Por otro lado los virus no pueden superar las barreras de las arquitecturas.
Word 97 no corre en Macintosh... Por que un virus puede hacerlo?
Tratando de que no se pongan paranoicos
Tania y Facundo

****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
****

995. Re: VIRUS EN INTERNET

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Fernando_J._Garcia@evnet.satlink.net
Message-ID: <1764007807.205367618@evnet.satlink.net>
Source record: 19449

Igual, lo mejor es no abrir mails no solicitados...

@G-Fer@
****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
****

996. RS16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Fred N Benardella <WA2HFI@ix.netcom.com>
Message-ID: <5h0nnh$31o@dfw-ixnews4.ix.netcom.com>
Source record: 19450

I've listened for RS16 on 29.408 and still have yet to hear it (the beacon). Or should I be listening on 29.451? Also have not tried the 435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10 working? Any info appreciated.
Thank you, Fred WA2HFI EN34is (MN)

997. Re: DSP-2232

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: "Bob Houghton (KC6LVG)" <houghton@cyberg8t.com>
Message-ID: <333402FC.332F@cyberg8t.com>
Source record: 19451

Dear Melvin,

I am using a DSP-1232 that's about 3 years old (it's at work so I can't tell you the ROM version number) and it was one of the first units that had the STEP, STEPSIZE, STEPLEN and other doppler control functions working. This function toggles the mic up/dowm lines and *only* works with the psk modem (modem 13). If your unit was manufactured in December 1993 or after, I believe that I will have this feature. If you want to know my rom version, I can check next Thursday when I return to work.

BTW, I too, just bought an Icom 821H and I like it very much so far. I am trying to get set up on the 9600 baud birds using a Kantronics 9612 TNC and eggbeater antennas. I'm reluctant to put crossed yagis on top of my house but so far I'm quite dissapointed with the amount of data I'm receiving on each pass. (I'm usind a Landwher preamp on the receive side.)

Good luck,

Bob Houghton KC6LVG

998. HELP WITH TRAKBOX

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: nieman@ix.netcom.com
Message-ID: <5h126i$89h@dfw-ixnews4.ix.netcom.com>
Source record: 19452

I just purchased a trakbox fron another ham and I am having trouble loading the elements. I am using telix software and it doesn't seem to work. When I start to upload elements file it reads the first couple of lines then locks up. Is there a better software or please give me some setup help for this software. Thanks in advance. Fred KC6VLL.

999. ARLK023 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk023.1997@arrl.org>
Source record: 19453
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK023
ARLK023 Keplerian data

ZCZC SK23
QST de W1AW
Keplerian Bulletin 23 ARLK023
From ARRL Headquarters
Newington, CT March 22, 1997
To all radio amateurs

SB KEP ARL ARLK023
ARLK023 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
RS-10/11
1 18129U 87054A 97080.09945804 .00000051 00000-0 39565-4 0 03518
2 18129 82.9244 303.8512 0012728 100.8158 259.4432 13.72376146488152
UO-11
1 14781U 84021B 97079.99393699 .00000081 00000-0 21465-4 0 09761
2 14781 97.8258 64.7981 0010880 288.9671 71.0356 14.69533381698306
RS-12/13
1 21089U 91007A 97080.11020732 .00000047 00000-0 34169-4 0 09883
2 21089 82.9197 343.9718 0027713 179.8481 180.2689 13.74078402307067
UO-14
1 20437U 90005B 97080.77328644 .00000041 00000-0 32607-4 0 2568
2 20437 98.5205 164.3186 0012558 106.2724 253.9842 14.29952621373725
RS-15
1 23439U 94085A 97080.08913907 -.00000039 00000-0 10000-3 0 02246
2 23439 64.8172 295.3025 0151443 148.7792 212.2235 11.27525739092003
AO-16
1 20439U 90005D 97076.45282995 -.00000043 00000-0 84662-7 0 00593
2 20439 98.5370 162.8242 0011731 115.9407 244.2980 14.30000535373123
DO-17
1 20440U 90005E 97080.15595064 .00000008 00000-0 19697-4 0 00572
2 20440 98.5434 167.2593 0012210 105.1350 255.1186 14.30144020373683
```

```
WO-18
1 20441U 90005F 97080.29176462 -.00000026 00000-0 64616-5 0 578
2 20441 98.5380 167.2978 0012620 105.7850 254.4724 14.30111768373703
LO-19
1 20442U 90005G 97080.26608133 .00000007 00000-0 19196-4 0 548
2 20442 98.5471 167.9014 0013221 104.9193 255.3457 14.30225546373727
FO-20
1 20480U 90013C 97080.47551300 -.00000010 00000-0 52984-4 0 9530
2 20480 99.0331 58.6017 0540482 215.9765 140.3797 12.83236835333456
AO-21
1 21087U 91006A 97080.12385931 .00000094 00000-0 82657-4 0 08028
2 21087 82.9404 116.7654 0035503 151.5394 208.7711 13.74579418308052
UO-22
1 21575U 91050B 97080.23796780 -.00000026 00000-0 52769-5 0 7598
2 21575 98.3152 143.8465 0007618 149.5341 210.6229 14.37060857297854
KO-23
1 22077U 92052B 97080.82003760 -.00000037 00000-0 10000-3 0 6493
2 22077 66.0817 328.1626 0013025 235.0705 124.9067 12.86301121216518
KO-25
1 22828U 93061F 97080.77275034 -.00000003 00000-0 16070-4 0 5213
2 22828 98.5477 157.2100 0010577 118.4487 241.7761 14.28171383149733
IO-26
1 22826U 93061D 97080.15688628 -.00000009 00000-0 13648-4 0 05539
2 22826 98.5510 156.5338 0009605 135.5543 224.6413 14.27829477181527
AO-27
1 22825U 93061C 97080.18169766 -.00000003 00000-0 16314-4 0 05658
2 22825 98.5518 156.3331 0009312 135.0145 225.1798 14.27720142181513
FO-29
1 24278U 96046B 97080.19187264 -.00000043 00000-0 -10174-4 0 00739
2 24278 98.5527 133.3834 0352218 54.2410 309.0944 13.52629651029227
Mir
1 16609U 86017A 97080.14608745 .00000682 00000-0 14298-4 0 01427
2 16609 51.6515 168.3545 0010901 201.7849 158.2725 15.60732823633280

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

1000. Any news on HALO Space Launch 1??

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Art Jeyes <chrishil@erols.com>
Message-ID: <3333E7B1.54BA@erols.com>
Source record: 19454

This morning the project HALO Space Launch 1 was due to take place ...

has anyone heard any results.... anyone able to copy the ATV or APRS TM?

thanks & 73
Art --AA3GU

1001. Re: RS16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: orion**@capital.net
Message-ID: <33363523.6689089@news.capital.net>
Source record: 19455

On Sat, 22 Mar 1997 15:47:13 GMT, Fred N Benardella
<WA2HFI@ix.netcom.com> wrote:

>I've listened for RS16 on 29.408 and still have yet to hear it (the beacon). Or should I be listening on 29.451? Also have not tried the 435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10 working? Any info appreciated.
>Thank you, Fred WA2HFI EN34is (MN)

I've heard the beacon loud and clear on 29.408 on numerous occasions.
Are you listening at the right times for the satellite's pass?

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

1002. Mir QSO's in Europe ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: Adriaan <adpe1khp@pi.net>
Message-ID: <3334C38E.3656@pi.net>
Source record: 19456
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

Hi,

Have the crew made some QSO's to Europe stations on VHF last days ??

Cuagn, Adriaan
////
(o o)
----------oOO--(_)--OOoo--
VHF DX AmateurRadio Station PE1KHP JO22XE
Home site http://home.pi.net/~adpe1khp/home.htm
Packet Radio pe1khp@pi8apd.#gld.nld.eu

Use 70cm, don't give it to the LPD-boys

Member of the dutch radioclub VERON (IARU), member of VHF
commitee and chair-man of the local-club VERON Apeldoorn

Radioamateurs in Apeldoorn

Welkom op de site van radioamateurs in Apeldoorn. Nieuw is het geluid wat te horen is aan het einde
van deze pagina. Laat eens horen wat jullie er van vinden. En vooral in welke mode er een test gemaakt wordt.
Ook het VHF nieuws is weer aangepast, met het laatste VHF nieuws en tevens
informatie over meteorenscatter en contesten en bakens. Kijk vooral naar de bakenlijst
die aangepast is aan het nieuwe band plan op tweemeter. Daar zijn de nieuwe frequenties te vinden van,
niet alleen de Nederlandse bakens, maar ook van die in het buitenland staan opgesteld. Ook de
site van de Veron afdeling Apeldoorn is update gemaakt. Met daarin activiteiten als vossenjachten,
lezingen, bestuursmededelingen, repeaters en het nieuws uit de uitzendingen van PI4APD. En tevens
zijn daar een aantal fotoboeken te vinden oa de velddag en de verkoping.

De lijst van Radio activiteiten in Apeldoorn

Veron afdeling 05 Apeldoorn

VHF nieuws

Dit is Jos PA3GXM

Dit is Adriaan PE1KHP

Dit is jamboree on the air in Apeldoorn

Digitale stad Apeldoorn

Meer Radioamateur links in de wereld

Elke reactie is welkom, dit alleen nog per email. Ook foto's zijn erg welkom in jpg formaat.
Dit voor andere achtergronden of als versiering van deze pagina's.
Vooral van bijzondere stations zoek ik nog foto's, zoals omzetters-, baken-, contest staions.

Cuagn Adriaan.

U bent de ste bezoeker vandaag

© 23 -maart- 1997 Adriaan pe1khp

1003. Re: VIRUS EN INTERNET

Newsgroup: rec.radio.amateur.space
Date: 1997-03-22 00:00:00 UTC
From: ka0yos@arn.net
Message-ID: <5gvndlnhj1@services.arn.net>
Source record: 19457

In article <1764007807.199004689@evnet.satlink.net>,
Ricardo_Simonetti@evnet.satlink.net says...
>
>[illegible]GUARDA!!!!!!!
>>----------
>>De: Luis M. Barreiro
>>Para: Diego F. Sifon
>>Asunto: RV: Virus Warning
>>Fecha: Jueves 20 de Marzo de 1997 10:17
>>
>>Microsoft Mail v3.0 (MAPI 1.0 Transport) IPM.Microsoft Mail.Note
>>De:Luis M. Barreiro
>>Para:Diego F. Sifon
>>Asunto:RV: Virus Warning
>>Fecha:1997-03-20 10:17
>>Prioridad:3
>>Identificador del mensaje:E481AEB507A1D011BBD100AA002FCC93
>>Identificador de la conversacion:RV: Virus Warning
>>
>>----------

>---
>>
>>
>>
>>----------
>>De: Subject: Paul Jernigan[SMTP:"Virus
Warning"@importmusic.com.ar]
>>Enviado: Miercoles 19 de Marzo de 1997 18:40
>>Para: yapali@turknet.com.tr; mogar@mbox.vol.it;
nostin@msn.com;
>>barreiro@importmusic.com.ar; royal@netpoint.com.br;
yssales@yorkville.com
>>Asunto: Virus Warning
>>
>>Dear Friends,
>>
>>I just got this message by e-mail. This is very important information
>>that
>>you need to read.
>>
>>>>Return-path: <ndunn@gibson.com>
>>>>X-Sender: ndunn@mail.nash.gibson.com

>>>Date: Wed, 19 Mar 1997 13:23:51 -0600
>>>To: jburrows@gibson.com,mcarter@gibson.com,scarver@gibson.com,
>>> ldunbar@gibson.com,pjerniga@gibson.com,rolsen@gibson.com,
>>> eorstrom@gibson.com,sam@gibson.com,bsulcer@gibson.com,
>>> mwagner@gibson.com,jyarboro@gibson.com,dyokie@gibson.com,
>>> dwilson@gibson.com,mwatts@gibson.com,mgarcia@gibson.com,
>>> wbeavers@gibson.com
>>>From: Nick Dunn <ndunn@gibson.com>
>>>Subject: Virus Warning
>>>
>>>Please distribute as widely as possible:
>>>
>>> There is a computer virus that is being sent across the
>>Internet. If you receive an email message with the subject line
"Deeyenda",
>>>DO NOT read the message, DELETE it immediately. Please read the
>>messages below.
>>> Some miscreant is sending email under the title "Deeyenda"
>>>nationwide, if you get anything like this DON'T DOWNLOAD THE FILE!
It has
>a
>virus that rewrites your hard drive, obliterating anything on it.
>>>Please be careful and forward this mail to anyone you care about.
>>>
>>> FCC WARNING !!!!! ----- DEEYENDA PLAGUES INTERNET ----
>>>
>>> The internet community has again been plagued by another
>>computer virus. This message is being spread throughout the
internet,
> including USENET posting, EMAIL, and other interent activities..
>>>The reason for all the attention is because of the nature of this
virus an
>d
>the
> potential security risks it makes.
> Instead of a destructive trojan virus (most viruses!), this virus,
>referred to as Deeyenda Maddick, performs a comprehensive search on
your
>computer, looking for valuable information, such as email and login
>passwords, credit cards, personal info, etc. The Deeyenda virus also
has
>the capability to stay memory resident while running a host of
applications
>and operation systems, such as Windows 3.11 and Windows 95.
>>>
>What this means to internet users is that when a login and PASSWORD
are sen
>t
>to the server, this virus can COPY this information and SEND IT OUT TO

AN
>UNKNOWN ADDRESS (varies).
>>>
> The reason for this warning is because the Deeyenda virus is
virtually
>undetectable. Once attacked, your computer will be unsecure.
Although
>it can attack any O/S, this virus is most likely to attack those users
>viewing Java enhanced Web Pages (Netscape 2.0+ and Microsoft Internet
>Explorer 3.0+ which are running on Windows 95) . Researchers at
Princeton
>University have found this virus on a number of World Wide Web pages
>and fear it s spread.
>>>
>Please pass this on, for we must alert the general public of the
security
>risks.
>>>
>>Enrique Corbacho
>>Gibson Musical Instruments
>>Tel. (615) 391-2127
>>Fax (615) 885-6742 or 615 871 4060
>>e-mail: ecorbach@gibson.com
>>
>**********
>Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
>**********

This one is a HOAX!!! Just like the other email viruses.

73,
Joe

1004. When will RS-16's transponder be turned on?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: brkille@mindspring.com
Message-ID: <5h1t4b$ua6@camel1.mindspring.com>
Source record: 19458

Does anyone know when rs-16's transponder will be turned on? I have heard the beacon a couple times and it sounded good, so I am interested in trying the transponder. Thanks in advance for any information.
73, Bruce

1005. Re: RS16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc373d$4e064de0$6cc56cce@default>
Source record: 19459

Fred,

Same here, but I did hear it on 435.504. A week ago, it *was* transmitting on 29.408.

73 de VE7MDL ....Erik.

Fred N Benardella <WA2HFI@ix.netcom.com> wrote in article <5h0nnh$31o@dfw-ixnews4.ix.netcom.com>...
> I've listened for RS16 on 29.408 and still have yet to hear it (the beacon). Or should I be listening on 29.451? Also have not tried the 435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10 working? Any info appreciated.
> Thank you, Fred WA2HFI EN34is (MN)
>

1006. P3D Converter?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: geoffc@xtra.co.nz
Message-ID: <5h2lji$k4e$1@wolfman.xtra.co.nz>
Source record: 19460

Hi guys,
Looking for a design/kit for a S Band to 2M downconverter for use with
P3D.

Tnx in advance
73 de Geoff ZL3TGC

1007. Pointer to Ham Radio FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970504580001@wd1v.mv.com>
Source record: 19461
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1008. Mac Ham Software - Free on WWW

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970503330001@wd1v.mv.com>
Source record: 19462
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Mac information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1009. Pointer to Digital Oscilloscope FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970502160001@wd1v.mv.com>
Source record: 19463
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
Digital Scope.FAQ Main Menu
(in order of appearance)

* WELCOME! This FAQ Welcomes YOU
* DSO INDUSTRY TRENDS Whats happening in DSO technology this year?
* DSO FUNDAMENTALS - A TUTORIAL and Keywords List - What are the current
buzzwords?
* DSO FORM FACTORS What types of DSOs are there?
* PRIMARY DSO FUNCTIONS What can DSOs actually do?
* COMMON MISTAKES How can I really mess it up with a DSO?
* COMPARISONS How can I best compare various models?
* DSO APPLICATIONS What are the most common DSO applications?
* ADCs What speed do I really need on each channel?
* BANDWIDTH & TRIGGER What numbers & functions are right?
* ARCHIVAL & MEMORY How fast, how deep, & can I get more?
* DISPLAYS What am I really looking at?
* MEASUREMENTS How much is my signal changing over time?
* DIGITAL SIGNAL PROCESSING How can I obtain more useful data?
* DEMOS & PURCHASING How can I see & get the DSO I really need?

IF... you want the complete version
of this Digital Scope.FAQ file sent
to you automatically as an
ATTACHED TEXT FILE <47 k TEXT File>.

send me (john@wd1v.mv.com).........
an EMAIL where the subject contains
the text "subscribe scope.faq".....

or

go to my Home Page.

Best regards,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v
```

1010. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703231322.FAA07200@mailbox1.ucsd.edu>
Source record: 19464

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 73dc0.wrk; Sun, 23 Mar 1997 14:31:00 -1
Received: from [195.120.135.127] by infocomm.it id 73d50.wrk; Sun, 23 Mar 1997 14:30:44 -1
Received: from [195.120.135.127] by infocomm.it id 73cd0.wrk; Sun, 23 Mar 1997 14:30:28 -1
Received: from [195.120.135.127] by infocomm.it id 73c61.wrk; Sun, 23 Mar 1997 14:30:14 -1
Received: from [195.120.135.127] by infocomm.it id 73ba0.wrk; Sun, 23 Mar 1997 14:29:54 -1
Received: from [195.120.135.127] by infocomm.it id 73b00.wrk; Sun, 23 Mar 1997 14:29:34 -1
Received: from [195.120.135.127] by infocomm.it id 73ab0.wrk; Sun, 23 Mar 1997 14:29:22 -1
Received: from [195.120.135.127] by infocomm.it id 73a30.wrk; Sun, 23 Mar 1997 14:29:08 -1
Received: from [195.120.135.127] by infocomm.it id 739b0.wrk; Sun, 23 Mar 1997 14:28:54 -1
Received: from [195.120.135.127] by infocomm.it id 73930.wrk; Sun, 23 Mar 1997 14:28:40 -1
Received: from [195.120.135.127] by infocomm.it id 738c0.wrk; Sun, 23 Mar 1997 14:28:26 -1
Received: from [195.120.135.127] by infocomm.it id 73851.wrk; Sun, 23 Mar 1997 14:28:12 -1
Received: from [195.120.135.127] by infocomm.it id 737c0.wrk; Sun, 23 Mar 1997 14:27:56 -1
Received: from [195.120.135.127] by infocomm.it id 73740.wrk; Sun, 23 Mar 1997 14:27:42 -1
Received: from [195.120.135.127] by infocomm.it id 736b0.wrk; Sun, 23 Mar 1997 14:27:24 -1
Received: from [195.120.135.127] by infocomm.it id 73610.wrk; Sun, 23 Mar 1997 14:27:04 -1
Received: from [132.239.1.53] by infocomm.it id 73560.wrk; Sun, 23 Mar 1997 14:26:46 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA06678 for <ham-space-list@mailbox.ucsd.edu>; Sun, 23 Mar
1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05482
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 04:31:08 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05462
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 04:31:05 -0800 (PST)
Message-Id: <199703231231.EAA05462@noc.ucsd.edu>
Date: Sun, 23 Mar 97 04:31:03 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #107
To: Ham-Space@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

```
2 20441 98.5380 167.2978 0012620 105.7850 254.4724 14.30111768373703
LO-19
1 20442U 90005G 97080.26608133 .00000007 00000-0 19196-4 0 548
2 20442 98.5471 167.9014 0013221 104.9193 255.3457 14.30225546373727
FO-20
1 20480U 90013C 97080.47551300 -.00000010 00000-0 52984-4 0 9530
2 20480 99.0331 58.6017 0540482 215.9765 140.3797 12.83236835333456
AO-21
1 21087U 91006A 97080.12385931 .00000094 00000-0 82657-4 0 08028
2 21087 82.9404 116.7654 0035503 151.5394 208.7711 13.74579418308052
UO-22
1 21575U 91050B 97080.23796780 -.00000026 00000-0 52769-5 0 7598
2 21575 98.3152 143.8465 0007618 149.5341 210.6229 14.37060857297854
KO-23
1 22077U 92052B 97080.82003760 -.00000037 00000-0 10000-3 0 6493
2 22077 66.0817 328.1626 0013025 235.0705 124.9067 12.86301121216518
KO-25
1 22828U 93061F 97080.77275034 -.00000003 00000-0 16070-4 0 5213
2 22828 98.5477 157.2100 0010577 118.4487 241.7761 14.28171383149733
IO-26
1 22826U 93061D 97080.15688628 -.00000009 00000-0 13648-4 0 05539
2 22826 98.5510 156.5338 0009605 135.5543 224.6413 14.27829477181527
AO-27
1 22825U 93061C 97080.18169766 -.00000003 00000-0 16314-4 0 05658
2 22825 98.5518 156.3331 0009312 135.0145 225.1798 14.27720142181513
FO-29
1 24278U 96046B 97080.19187264 -.00000043 00000-0 -10174-4 0 00739
2 24278 98.5527 133.3834 0352218 54.2410 309.0944 13.52629651029227
Mir
1 16609U 86017A 97080.14608745 .00000682 00000-0 14298-4 0 01427
2 16609 51.6515 168.3545 0010901 201.7849 158.2725 15.60732823633280

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
March 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

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End of Ham-Space Digest V97 #107
******************************
```

1011. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703231322.FAA07198@mailbox1.ucsd.edu>
Source record: 19465
Body handling: HTML body converted to readable text

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 73d51.wrk; Sun, 23 Mar 1997 14:30:44 -1
Received: from [195.120.135.127] by infocomm.it id 73ce0.wrk; Sun, 23 Mar 1997 14:30:28 -1
Received: from [195.120.135.127] by infocomm.it id 73c60.wrk; Sun, 23 Mar 1997 14:30:14 -1
Received: from [195.120.135.127] by infocomm.it id 73c00.wrk; Sun, 23 Mar 1997 14:30:00 -1
Received: from [195.120.135.127] by infocomm.it id 73b60.wrk; Sun, 23 Mar 1997 14:29:44 -1
Received: from [195.120.135.127] by infocomm.it id 73ae0.wrk; Sun, 23 Mar 1997 14:29:30 -1
Received: from [195.120.135.127] by infocomm.it id 73a60.wrk; Sun, 23 Mar 1997 14:29:12 -1
Received: from [195.120.135.127] by infocomm.it id 739d0.wrk; Sun, 23 Mar 1997 14:28:58 -1
Received: from [195.120.135.127] by infocomm.it id 73940.wrk; Sun, 23 Mar 1997 14:28:42 -1
Received: from [195.120.135.127] by infocomm.it id 738d0.wrk; Sun, 23 Mar 1997 14:28:26 -1
Received: from [195.120.135.127] by infocomm.it id 73850.wrk; Sun, 23 Mar 1997 14:28:12 -1
Received: from [195.120.135.127] by infocomm.it id 737b0.wrk; Sun, 23 Mar 1997 14:27:56 -1
Received: from [195.120.135.127] by infocomm.it id 73741.wrk; Sun, 23 Mar 1997 14:27:42 -1
Received: from [195.120.135.127] by infocomm.it id 736e0.wrk; Sun, 23 Mar 1997 14:27:28 -1
Received: from [195.120.135.127] by infocomm.it id 73670.wrk; Sun, 23 Mar 1997 14:27:16 -1
Received: from [195.120.135.127] by infocomm.it id 735d0.wrk; Sun, 23 Mar 1997 14:27:00 -1
Received: from [132.239.1.53] by infocomm.it id 73560.wrk; Sun, 23 Mar 1997 14:26:46 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA06678 for ; Sun, 23 Mar 1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05482
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 04:31:08 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05462
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 04:31:05 -0800 (PST)
Message-Id: <199703231231.EAA05462@noc.ucsd.edu>
Date: Sun, 23 Mar 97 04:31:03 PST
From: Ham-Space Mailing List and Newsgroup
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #107
To: Ham-Space@ucsd.edu

Ham-Space Digest Sun, 23 Mar 97 Volume 97 : Issue 107

Today's Topics:
ARLK023 Keplerian data
ARLS007 Mir fire remains "hot" topic during MIREX school contacts
HELP WITH TRAKBOX
Link budget
Mir QSO's in Europe ?
My First MIR Packet Contact! <<<<< : >>>>> (2 msgs)
New ham web site
P3D Converter?
RS16 (2 msgs)
SURLPUS SAT DISH
When will RS-16's transponder be turned on?

Send Replies or notes for publication to:
Send subscription requests to:
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Mar 1997 13:56:59 -0500
From: w1aw@arrl.org
Subject: ARLK023 Keplerian data

SB KEP @ ARL $ARLK023
ARLK023 Keplerian data

ZCZC SK23
QST de W1AW
Keplerian Bulletin 23 ARLK023

Date: 21 Mar 1997 18:48:51 -0500
From: w1aw@arrl.org
Subject: ARLS007 Mir fire remains "hot" topic during MIREX school contacts

SB SPACE @ ARL $ARLS007
ARLS007 Mir fire remains "hot" topic during MIREX school contacts

ZCZC AS07
QST de W1AW
Space Bulletin 007 ARLS007

Date: 22 Mar 1997 16:42:58 GMT
From: nieman@ix.netcom.com (FRED NIEMAN)
Subject: HELP WITH TRAKBOX

I just purchased a trakbox fron another ham and I am having trouble
loading the elements. I am using telix software and it doesn't seem to
work. When I start to upload elements file it reads the first couple of
lines then locks up. Is there a better software or please give me some
setup help for this software. Thanks in advance. Fred KC6VLL.

Date: Fri, 21 Mar 97 11:01:40 CST
From: "Johan Dijkhuis"
Subject: Link budget

On Wed, 19 Mar 1997 19:07:57 +0100,
Jordi Soriano Goma wrote:

>Hello
>
>I have problems with a link budget.
>
>I don't understand if the power of the transponders refers to all the
>band (p.e. 250 Khz) and It's divided between all the users or if the
>output power refers only to each channel (p.e. 15 Khz).
>
>Thank you.
>
>73. Jordi.
>
As far as I know it always revers to the total downlink power, so you have
to divide by the number of users. Ussually the beacons are stronger than
the users ever get, so you can use the beacon power for the calcultation
and take a bit extra.
73 Johan pa3fpj@pi8daz.#twe.nld.eu/ pa3fpj@amsat.org

Date: Sat, 22 Mar 1997 21:45:50 -0800
From: Adriaan
Subject: Mir QSO's in Europe ?

This is a multi-part message in MIME format.

Hi,

Have the crew made some QSO's to Europe stations on VHF last days ??

Cuagn, Adriaan
////
(o o)
--ooOO--(_)--OOoo--
VHF DX AmateurRadio Station PE1KHP JO22XE
Home site http://home.pi.net/~adpe1khp/home.htm
Packet Radio pe1khp@pi8apd.#gld.nld.eu

Use 70cm, don't give it to the LPD-boys

Member of the dutch radioclub VERON (IARU), member of VHF
commitee and chair-man of the local-club VERON Apeldoorn

Radioamateurs in Apeldoorn

Welkom op de site van radioamateurs in Apeldoorn. Nieuw is het geluid wat te horen is aan het einde
van deze pagina. Laat eens horen wat jullie er van vinden. En vooral in welke mode er een test gemaakt wordt.
Ook het VHF nieuws is weer aangepast, met het laatste VHF nieuws en tevens
informatie over meteorenscatter en contesten en bakens. Kijk vooral naar de bakenlijst
die aangepast is aan het nieuwe band plan op tweemeter. Daar zijn de nieuwe frequenties te vinden van,
niet alleen de Nederlandse bakens, maar ook van die in het buitenland staan opgesteld. Ook de
site van de Veron afdeling Apeldoorn is update gemaakt. Met daarin activiteiten als vossenjachten,
lezingen, bestuursmededelingen, repeaters en het nieuws uit de uitzendingen van PI4APD. En tevens
zijn daar een aantal fotoboeken te vinden oa de velddag en de verkoping.

De lijst van Radio activiteiten in Apeldoorn

Veron afdeling 05 Apeldoorn

VHF nieuws

Dit is Jos PA3GXM

Dit is Adriaan PE1KHP

Dit is jamboree on the air in Apeldoorn

Digitale stad Apeldoorn

Meer Radioamateur links in de wereld

Elke reactie is welkom, dit alleen nog per email. Ook foto's zijn erg welkom in jpg formaat.
Dit voor andere achtergronden of als versiering van deze pagina's.
Vooral van bijzondere stations zoek ik nog foto's, zoals omzetters-, baken-, contest staions.

Cuagn Adriaan.

U bent de ste bezoeker vandaag

© 23 -maart- 1997 Adriaan pe1khp

Date: 22 Mar 1997 01:27:11 GMT
From: Philip Chien
Subject: My First MIR Packet Contact! <<<<< : >>>>>

In article <33314D2F.7C50@someaddress.net> Mike Cat,
JoeQPublic@someaddress.net writes:
>Does anyone know what version/sort of PMS MIR is running? I would like
>to get a list of help for it BEFORE I make contact the next time so I'll
>know what I'm doing.

Mike -

Congrats on getting through to Mir. And yeah, the interference is pretty horendous.

Check out the following web page for the NASA Johnson Space Center Amateur Radio Club.

http://www.phoenix.net/~mbordel/jscarc/

Go to Mir Links and you will find some *fascinating* information on Mir's amateur radio activities, including background information, images, a tutorial on the Mir PMS system (including the information you requested on the packet BBS), and a whole lot more.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

Date: Sat, 22 Mar 1997 05:12:26 GMT
From: ooraargg@fznegg.pbz (Oevna)
Subject: My First MIR Packet Contact! <<<<< : >>>>>

On Thu, 20 Mar 1997 09:43:59 -0500, Mike Cat
wrote:

>, last night (or today UTC), I made
>my first contact (YES! FINALLY!):
>
>First MIR Contact on Packet Radio
>Time 07:50 UTC Thursday 20 MAR 1997 (it was a 72 degree pass)
>
>Home station setup:
Mine,as follows
> ICOM HT T7A
used FT-470
> TNC: Kantronics KAM Plus
homebrew baycom
> Computer: Gateway 2000 P5-100
free 286
> Software: Used STSPlus version 9650 and Hyperterminal under Win95
again, baycom
> Xmit: 145.200 (no compensation for Doppler
> Rcv: 145.800 lots of QRM from APRS on 145.790)
> Power out: 60 Watts (using rfconcepts amp)
homebrew 20W, from an old BC tel radiotelephone
> Antenna: M-Squared Eggbeater in the attic (3rd floor of house) with
> optional reflector kit.
..1/4 wave made out of used 14 gauge hose wire & an so-239
>
>
>The session follows:
whatever.....I guess we all get the star stuck on our foreheads &
fuck it up for the QRP ers.....

Date: Fri, 21 Mar 1997 16:51:18 -0800
From: Vancouver Electronics
Subject: New ham web site

http://home.paclink.com/users/ab7on/

Date: Sun, 23 Mar 1997 07:19:51 GMT
From: geoffc@xtra.co.nz (Geoff Clark)
Subject: P3D Converter?

Hi guys,
Looking for a design/kit for a S Band to 2M downconverter for use with
P3D.

Tnx in advance
73 de Geoff ZL3TGC

Date: Sat, 22 Mar 1997 19:40:23 GMT
From: orion**@capital.net
Subject: RS16

On Sat, 22 Mar 1997 15:47:13 GMT, Fred N Benardella
wrote:

>I've listened for RS16 on 29.408 and still have yet to hear it (the beacon). Or should I be listening on 29.451? Also have not tried the 435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10 working? Any info appreciated.
>Thank you, Fred WA2HFI EN34is (MN)

I've heard the beacon loud and clear on 29.408 on numerous occasions.
Are you listening at the right times for the satellite's pass?

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

Date: 23 Mar 1997 03:33:20 GMT
From: "Erik Skovgaard"
Subject: RS16

Fred,

Same here, but I did hear it on 435.504. A week ago, it *was* transmitting
on 29.408.

73 de VE7MDL ....Erik.

Fred N Benardella wrote in article
<5h0nnh$31o@dfw-ixnews4.ix.netcom.com>...
> I've listened for RS16 on 29.408 and still have yet to hear it (the
beacon). Or should I be listening on 29.451? Also have not tried the
435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10
working? Any info appreciated.

> Thank you, Fred WA2HFI EN34is (MN)
>

Date: 21 Mar 1997 20:06:04 GMT
From: "pboshea"
Subject: SURLPUS SAT DISH

I AM IN A POSITION TO ACQUIRE A SURPLUS SATELLITE DISH WHICH I BELIEVE WAS
USED IN THE 10 Ghz RANGE....
QUESTION
CAN THIS DISH BE USED TO RECEIVE OTHER FREQUENCIESOR IS IT FREQUENCY
SPECIFIC
ITS RATHER LARGE APPROX 10ft IN DIAMETER
THANKS IN ADVANCE

PAT O'SHEA

Date: Sun, 23 Mar 1997 00:23:48 GMT
From: brkille@mindspring.com (Bruce Kille)
Subject: When will RS-16's transponder be turned on?

Does anyone know when rs-16's transponder will be turned on? I have
heard the beacon a couple times and it sounded good, so I am
interested in trying the transponder. Thanks in advance for any
information.
73, Bruce

Date: (null)
From: (null)

SB SPACE ARL ARLS007
ARLS007 Mir fire remains ''hot'' topic during MIREX school contacts

Ham-astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space
station, assured students at Booker T. Washington High School in
Houston, Texas, this week that all aboard the space station are in
good shape after a fire aboard Mir late last month. About three dozen
students got to chat with Linenger March 17 and posed more than a
dozen questions during the ten-minute contact. Linenger also
discussed the effects of the fire on experiments and described the
escape arrangements available to those aboard Mir.

On March 11, students

1012. Test

Newsgroup: rec.radio.amateur.space
Date: 1997-03-23 00:00:00 UTC
From: William Nolle <wa8inz@cris.com>
Message-ID: <5h4d4a$p3f@chronicle.concentric.net>
Source record: 19466

Organisation: None

##
This message is create by Dynamic Mail - a most advanced bulk email software
for the online marketer to extract MILLIONS of email address from the internet
, send message to unlimited email addresses, or post ads to any number of selected
newsgroup. For more information please send email to : apexpi@tig.com.au
or visit our web site at : http://homepages.tig.com.au/~apexpi/dynamail.htm
##

Sorry for the bandwidth, just a test.

1013. Re: WXSAT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <333676CB.15AD@ix.netcom.com>
Source record: 19372

Ken Durham wrote:
>
> Are there any weather sats operational over the USA
> other than NOAA-12 and NOAA-14? Is NOAA-9 still on
> the air? Does METEOSAT transmit except when over Europe?
> There are METEOSAT images available from the UK, but
> I haven't seen any mention of the output frequency on
> the weather FAQs.
<snip>
Ken,
These are the only active wxsats (the Russian Meteors are currently
turned off.) The other Russian sats, OKEAN and SICH, only transmit over
Russia. NOAA K (NOAA-15) is due for launch later this year. METEOSAT
is a European Geostationary Sat its US equivilants are GOES 8 (East) and
GOES 9 (West), they transmit on 1.691 Ghz. You'll need some special
equipment to receive them (i.e. dish or loop yagi, downconverter, etc).

Regards,
Rolf

1014. test - ignore

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: bainj@cuug.ab.ca
Message-ID: <5h650s$r2i@cuugnet.cuug.ab.ca>
Source record: 19373

as per title
tnx

1015. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703241326.FAA13126@mailbox1.ucsd.edu>
Source record: 19374

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 74750.wrk; Mon, 24 Mar 1997 14:35:42 -1
Received: from [195.120.135.127] by infocomm.it id 74690.wrk; Mon, 24 Mar 1997 14:35:18 -1
Received: from [195.120.135.127] by infocomm.it id 74580.wrk; Mon, 24 Mar 1997 14:34:50 -1
Received: from [195.120.135.127] by infocomm.it id 74490.wrk; Mon, 24 Mar 1997 14:34:20 -1
Received: from [195.120.135.127] by infocomm.it id 743a0.wrk; Mon, 24 Mar 1997 14:33:52 -1
Received: from [195.120.135.127] by infocomm.it id 742e0.wrk; Mon, 24 Mar 1997 14:33:32 -1
Received: from [195.120.135.127] by infocomm.it id 74240.wrk; Mon, 24 Mar 1997 14:33:10 -1
Received: from [195.120.135.127] by infocomm.it id 74120.wrk; Mon, 24 Mar 1997 14:32:42 -1
Received: from [195.120.135.127] by infocomm.it id 74040.wrk; Mon, 24 Mar 1997 14:32:10 -1
Received: from [195.120.135.127] by infocomm.it id 73ec0.wrk; Mon, 24 Mar 1997 14:31:26 -1
Received: from [195.120.135.127] by infocomm.it id 73da0.wrk; Mon, 24 Mar 1997 14:30:54 -1
Received: from [195.120.135.127] by infocomm.it id 73cd0.wrk; Mon, 24 Mar 1997 14:30:28 -1
Received: from [195.120.135.127] by infocomm.it id 73bd0.wrk; Mon, 24 Mar 1997 14:30:00 -1
Received: from [195.120.135.127] by infocomm.it id 73ae0.wrk; Mon, 24 Mar 1997 14:29:30 -1
Received: from [195.120.135.127] by infocomm.it id 73a30.wrk; Mon, 24 Mar 1997 14:29:06 -1
Received: from [195.120.135.127] by infocomm.it id 73910.wrk; Mon, 24 Mar 1997 14:28:38 -1
Received: from [132.239.1.53] by infocomm.it id 734a0.wrk; Mon, 24 Mar 1997 14:26:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA11315 for <ham-space-list@mailbox.ucsd.edu>; Mon, 24 Mar
1997 03:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id CAA16121
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:29 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA16102
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:23 -0800 (PST)
Message-Id: <199703241010.CAA16102@noc.ucsd.edu>
Date: Mon, 24 Mar 97 02:10:21 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #109
To: Ham-Space@ucsd.edu

<<< Questo messaggio ♦ la parte 3 di un precedente messaggio >>>

les envia un mensaje de correo electronico con un archivo de Microsoft Word infectado con un virus, anexo al mensaje. Vuestras computadoras NO podrian ser infectadas con el virus si abren y leen el mensaje (recuerden, es IMPOSIBLE que contraigan virus desde mensajes de correo electronico). Vuestras computadoras *si podrian*, sin embargo, ser infectadas al ustedes abrir el documento de Word infectado.

Deberian ustedes preocuparse por la posibilidad de recibir archivos infectados, anexos a un mensaje de correo electronico que les envien? Si y no. De acuerdo a un articulo publicado hace poco en la lista de correo Macintosh Evangelist, hay actualmente:

- De 10.000 a 11.000 virus de DOS
- 12 virus de Windows
- 35 virus de Mac
- 200 o mas virus de macros; de entre los cuales el 70 o el 90% son multiplataforma
- 6 virus de Unix

Esos 10.000 u 11.000 virus de DOS afectan a toda maquina que corra DOS, Windows y Windows '95 (pero no a las Mac), y muchos de los 200 o mas virus de macros afectan a todas las maquinas (PC y Mac). A proposito, las macros son series de comandos (normalmente comandos de Microsoft Word) que permiten agrupar varias tareas en un solo comando.

En el TourBus hemos hablado de esto un par de veces antes, pero, como pueden ustedes cuidarse de contraer un virus informatico al bajar archivos de Internet? La respuesta es: NUNCA abran un archivo sin antes haberlo revisado con un antivirus. Inclusive si el archivo les ha sido enviado por su jefe, su pareja o algun miembro de su iglesia, REVISEN EL ARCHIVO ANTES DE ABRIRLO.

Para terminar: como pueden protegerse de los virus "Good Times", "Irina", "Deeyenda" y "Penpal Greetings"? NO TIENEN QUE HACERLO! ELLOS SON HOAXES, NO EXISTEN!

Algunas direcciones para saber mas de este tema:

http://ciac.llnl.gov/ciac/CIACHoaxes.html
http://www.fcc.gov/Bureaus/Miscellaneous/Public_Notices/pnmc5036.txt
==========
Para suscribirse al TourBus, envie un mensaje sin subject a Listserv@aol.com, con el siguiente comando:

SUBSCRIBE TOURBUS Nombres apellidos

Tambien pueden visitar el TourBus en http://www.tourbus.com.

LENGUAJE BINARIO **********
Revista electronica sobre computacion, Internet y temas afines
Suscribase enviando un SUB BINARIO a Maiser@uaa.dped.uaa.mx
Editor: Jorge Gomez Jimenez (Jorge.gomez@caracas.bbs.ve)
****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
****

End of Ham-Space Digest V97 #109
****

1016. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703241327.FAA13138@mailbox1.ucsd.edu>
Source record: 19375

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 74780.wrk; Mon, 24 Mar 1997 14:35:50 -1
Received: from [195.120.135.127] by infocomm.it id 746b0.wrk; Mon, 24 Mar 1997 14:35:24 -1
Received: from [195.120.135.127] by infocomm.it id 745d0.wrk; Mon, 24 Mar 1997 14:34:58 -1
Received: from [195.120.135.127] by infocomm.it id 744b0.wrk; Mon, 24 Mar 1997 14:34:24 -1
Received: from [195.120.135.127] by infocomm.it id 743c0.wrk; Mon, 24 Mar 1997 14:33:58 -1
Received: from [195.120.135.127] by infocomm.it id 74300.wrk; Mon, 24 Mar 1997 14:33:34 -1
Received: from [195.120.135.127] by infocomm.it id 741d0.wrk; Mon, 24 Mar 1997 14:33:02 -1
Received: from [195.120.135.127] by infocomm.it id 740b0.wrk; Mon, 24 Mar 1997 14:32:24 -1
Received: from [195.120.135.127] by infocomm.it id 73fd0.wrk; Mon, 24 Mar 1997 14:32:00 -1
Received: from [195.120.135.127] by infocomm.it id 73ea0.wrk; Mon, 24 Mar 1997 14:31:24 -1
Received: from [195.120.135.127] by infocomm.it id 73d70.wrk; Mon, 24 Mar 1997 14:30:48 -1
Received: from [195.120.135.127] by infocomm.it id 73c80.wrk; Mon, 24 Mar 1997 14:30:18 -1
Received: from [195.120.135.127] by infocomm.it id 73b70.wrk; Mon, 24 Mar 1997 14:29:50 -1
Received: from [195.120.135.127] by infocomm.it id 73aa0.wrk; Mon, 24 Mar 1997 14:29:22 -1
Received: from [195.120.135.127] by infocomm.it id 73980.wrk; Mon, 24 Mar 1997 14:28:50 -1
Received: from [195.120.135.127] by infocomm.it id 738f0.wrk; Mon, 24 Mar 1997 14:28:32 -1
Received: from [132.239.1.53] by infocomm.it id 734a0.wrk; Mon, 24 Mar 1997 14:26:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA11315 for <ham-space-list@mailbox.ucsd.edu>; Mon, 24 Mar
1997 03:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id CAA16121
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:29 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA16102
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:23 -0800 (PST)
Message-Id: <199703241010.CAA16102@noc.ucsd.edu>
Date: Mon, 24 Mar 97 02:10:21 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #109
To: Ham-Space@ucsd.edu

Ham-Space Digest Mon, 24 Mar 97 Volume 97 : Issue 109

Today's Topics:
ANS-081 WEEKLY BULLETINS
Looking for keplerian data of the moon ?
P3D Converter?
RS-15 alive?
sun and moon keps maybe
Test
VIRUS EN INTERNET

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 24 Mar 1997 00:26:30 GMT
From: "BJ Arts" <bjarts@uslink.net>
Subject: ANS-081 WEEKLY BULLETINS

SB SAT @ AMSAT $ANS-081.01
P3-D CHARGE REGULATORS ARRIVE

HR AMSAT NEWS SERVICE BULLETIN 081.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.01

Phase 3-D team members Josef Szabo and Andras Szimler, both from the
Amateur Radio Club Station HA5BME, accompanied Phase 3-D's flight Battery
Charge Regulators (BCRs) from Hungary to Orlando late last week and
successfully performed the all-important task of checkout and final
integration of these units into the Phase 3-D satellite.

The Battery Charge Regulators (there are three of them in the Phase 3-D
Spacecraft) are a critical part of Phase 3-D's power grid as they regulate
both the onboard power coming from the solar panels as well as the
ever-important charging functions of the main and auxiliary batteries in
the satellite.

BCR funding and construction was a joint effort between AMSAT-DL and a
Hungarian team under the leadership of Professor Dr. Andras (Bandi)
Gschwindt, HA5WH, at the Technical University of Budapest.

Stay tuned to ANS for continuing reports on the final integration progress of AMSAT's Phase 3-D International Satellite.

[ANS thanks Werner Haas, DJ5KQ, Lou McFadin, W5DID and Keith Baker, KB1SF for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-081.02
QUALCOMM TAPS ANTONIO AS VP

HR AMSAT NEWS SERVICE BULLETIN 081.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.02

Franklin P. Antonio becomes executive vice president and chief technology officer at Qualcomm of San Diego. Antonio, one of the founders of Qualcomm, will provide strategic technical guidance and engineering mentoring across all of Qualcomm's engineering programs. Franklin is a longtime friend and benefactor of AMSAT. He wrote and contributed all proceeds to AMSAT InstantTrack

[ANS thanks SpaceNews and Bill Tynan, W3XO, for this news.]

/EX

SB SAT @ AMSAT $ANS-081.03
MIR CONTACT

HR AMSAT NEWS SERVICE BULLETIN 081.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.03

Ham-astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space station, assured students at Booker T. Washington High School in Houston, Texas, this week that all aboard the space station are in good shape after a fire aboard Mir late last month. About three dozen students got to chat with Linenger March 17 and posed more than a dozen questions during the ten-minute contact. Linenger also discussed the effects of the fire on experiments and described the escape arrangements available to those aboard Mir.

On March 11, students at United South High School, Laredo, Texas, successfully spoke with Linenger via ham radio. Other Mir school QSOs are tentatively scheduled to happen between now and April 20, 1997.

Linenger will remain aboard Mir with Cosmonauts Vasily Tsibliev and Alexander Lazutkin until mid-May.

[ANS thanks the ARRL and Keith Baker, KB1SF, for this story.]

/EX

SB SAT @ AMSAT $ANS-081.04
AMATEUR SATELLITES

HR AMSAT NEWS SERVICE BULLETIN 081.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.04

Get ready to learn something NEW--from the EXCITING WORLD of Amateur Radio SATELLITES! Sign up for a fast-moving five-hour workshop on everything you need to get *on the birds.*

Become an expert operating through digital satellites, the *easy-sats,* low-orbit and high-altitude satellites such as AO-10, the upcoming Phase-3-D satellite, Russian satellites, and learn a bit about Russia's MIR space station and NASA's SAREX missions. you'll hear about needed equipment, and how to use FM, SSB, digital and CW modes, including dial-in access to a packet satellite without spending money for equipment, via a satellite gateway node. When you leave, you'll know:
*** Equipment Choices
(everything including pre-amps, power amps)
*** Equipment Set-up
*** Antennas, Rotators and Feedlines
*** Software for Tracking
*** Operating Protocol and Hints
*** What Information is Available for You from AMSAT and ARRL
*** Frequencies--What Countries or Regions You Can Work

WHAT: Amateur Satellites -- Today and Tomorrow
Be the Expert and start having Fun!

WHO: Ed Krome, K9EK, AMSAT expert from Columbus, IN, will be your instructor.

WHEN: Friday June 13, 2 PM - 7 PM. Arrive early to get materials.

WHERE: in association with the SeaPac Convention
Seaside Convention Center - Seaside, Oregon

HOW: Space is limited; to pre-register write or call Rosalie White, WA1STO, at ARRL HQ (Tel 860-594-0237, fax 860-594-0259) before June 4. Price is $20 for ARRL members and $25 for non-members. You'll receive free materials and 5 hours of practical information. Sponsored by ARRL and AMSAT. You can also purchase Satellite Experimenter's Handbook, from ARRL, beforehand, for $20 + $5 UPS shipping/handling.

This continuing education workshop is sponsored by AMSAT and ARRL Educational Activities Department. Those who take part all day will earn a certificate for 0.5 Continuing Education Units.

[ANS thanks Rosalie White, WA1STO, for this notice.]

/EX

SB SAT @ AMSAT $ANS-081.05
OSCAR-11 REPORT

HR AMSAT NEWS SERVICE BULLETIN 081.05 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.05

OSCAR-11 celebrated its 13th birthday on March 1st. and still going strong! Congratulations to the University of Surrey on a wonderful achievement. During the period 19-February to 18 March, good, steady signals have been received from the 145.826 MHz beacon. Good signals have also been received on 435 MHz, Saturday 15 March, 14:00 pass, when the satellite was being commanded by ground control.

Recent telemetry shows that the solar eclipses have reduced the internal temperatures by about eight degrees compared to the full sunlight condition. The battery voltage appears to be showing a tendency towards lower values, often around 13.5 volts. The spin period has varied from 300 to 382, but most of the time it is around 365 seconds.

The WOD survey of channels 1, 2, 3, 61, (magnetometers) dated 02-January-97 was transmitted until February 22nd. An ASCII file of this WOD is now on the WWW (in addition to the binary file), see below for URL. The WOD channels are now 40, 50, 52, 63, (Array voltage, battery charge, battery voltage, BCR status). This new WOD shows the effect of eclipses on the array voltage, and the battery voltage which varies from 14.0 down to 13.0 volts. The plots also show the effect of satellite spin, which modulates the current, and voltages. The BCR (battery charge regulator) switches from between unit A and unit B, several times during the WOD. A short file of this interesting WOD is also on the WWW site, and will be updated when the WOD is changed, and the maximum amount of data has been received.

Two AMSAT bulletins by Richard G3RWL have been uploaded. Topics have included OSCAR-11 status report, OSCAR-10 Keplers, and call for AMSAT-UK colloquium papers.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, but telemetry indicates that it has
partially failed, and delivering half power. Any reports of
reception on 2401 MHz. would be most welcome. Please e-mail
g3cwv@amsat.org.

The 435.035 MHz. beacon is normally OFF. However it can sometimes be
heard when the satellite is being commanded by ground control, i.e.
within range of Guildford, UK. Likely times are between 13:00 and
18:00 UTC, Fridays or at weekends. When the 435 beacon is
transmitting, the 145 beacon is normally OFF. The data transmitted
is mainly binary. Web site for OSCAR-11 data and some software -
http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, news item.]

/EX

SB SAT @ AMSAT $ANS-081.06
10 GHz EME RECORD

HR AMSAT NEWS SERVICE BULLETIN 081.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.06

On Wednesday, 12 March 1997, a new world record for EME on 10 GHz
was set in a QSO between Joe DJ7FJ and Greg ZL1GSG. The two-way QSO
took place at 08.30 UTC. DF7FJ operated from Schiltach in southwestern
Germany and ZL1GSG from Awhitu Peninsula / Manukau Heads southwest of
Auckland, New Zealand. The great circle distance between the QTH's is
approximately 18340 km or just under 10000 nautical miles. DF7FJ
and his team were using a 4.5m parabolic dish and a 50W traveling
wave tube power amplifier, while ZL1GSG used a 3m dish and a similar PA.

"O" reports were exchanged both ways..

The new world record came after a series of unsuccessful attempts and
one semi-successful attempt that saw ZL1GSG using a 1.8m dish from
Muriwai, on NZ's West Coast northwest of Auckland. Prior to the successful
QSO, a test run from Awhitu Peninsula confirmed on the weekend before that
moon echoes were clearly audible from the receiver's speaker even a few
meters away from ZL1GSG's van. Earlier echoes using the 1.8m dish had
been very faint. The change to a larger dish had clearly made the
difference.

On the night of the QSO, moon echoes were received by ZL1GSG well from
about an hour before sked time. A last-minute technical problem, caused
by a short in the cable that switched the waveguide TX/RX relay, put
the whole project in jeopardy just minutes before the QSO began. However,
Greg's policy of having a spare bit of next to everything provided a
makeshift solution only a few minutes into the sked window, and contact
was established almost immediately after ZL1GSG was QRV again. The signals
from Germany were clearly audible as had been the moon echoes.

Congratulations to Greg ZL1GSG and Joe DJ7FJ from their New Zealand
ground support team of the day: Bill ZL1TTH Tim ZL3VTV Ulrich ZL1DDL
Thanks go to many amateurs who helped with the provision of equipment,
time, and a QTH.

[ANS thanks Peter, G3PHO, Editor: RSGB Microwave Newsletter
for this report.]

/EX

SB SAT @ AMSAT $ANS-081.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 081.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.07

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Fred Andreas, ZR5FA, worked this bird most of the week using only 5W
into a 1/4 wave and maintaining coms in this configuration for almost the
entire pass. Unfortunately both RS-10 & RS-15 get very little traffic from
his neck of the woods ,which is a pity considering how easy they are to
work .
[ANS thanks Fred Andreas, ZR5FA, for this report.]

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode.
[ANS thanks Dick Montgomery,

1017. ScoutElmer Award for you!

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: myriad1@ix.netcom
Message-ID: <myriad1-ya02348000240397100206000 1@nntp.ix.netcom.com>
Source record: 19376
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.scouting.guide+girl,rec.scouting.issues

YOU DON'T NEED TO BE A SCOUT OR LEADER TO EARN THE ScoutElmer AWARD!!!
ScoutElmer Award for helping Scouts become ham ops

WHO QUALIFIES FOR THE AWARD?
1. Licensed ham op (any level)
2. Scout or Adult Leader (past or present) or...
3. Any ham that know someone (Scout or leader) currently active in a Scout unit.

WHAT IS REQUIRED FOR THE AWARD?
1. Agree to respond to Scouts via email with their questions about ham radio in your local area, for 1 month.

HOW DO I SIGN-UP FOR THE AWARD?
Email to the address below and fill in the blanks.... that's it!
1. Name & Ham Call Sign:

2. Email address:

3. Locations: (ie London, UK; Los Angeles, CA, USA; etc)

4. What do you want to do: (email only; email & phone; email, phone & ham class)

5. Your Scout affiliation & position (enter past affiliation and date if applies):
(If no current or past affiliation) Your Scout or Scout leader sponsor:

6. Optional comments for your ScoutElmer listing: (ie. ARC Club listing, Explorer post, Troop etc.)

WHAT DO I GET?
ScoutElmer Award recipients will receive special award logo graphic you can add to your website. You also get a certificate (suitable for framing). Lastly the satisfaction that you helped promote amateur radio in Scouting.

If you've already applied for the award, sorry for the email. You should receive confirmation in the next few days.
YIS
73
Mel Goldberg KO6TF
ASM Troop 319 & Webmaster Advisor
myriad1@ix.netcom.com
http://www.ocbsa.org/troop319/ham.htm

ScoutRadio WWW is a "good turn project" of Troop 319, Huntington Beach, California USA.

There are over 250,000 (500,000 worldwide) hams who are or have been envolved in the Scouting movement, helping their communities in times of natural disasters, emergencies and humanitarian aid. We hope you or your ARC can help local Scouts get into ham radio and keep the amateur radio service strong.

1018. Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: Bill Henderson <bill.henderson@zetnet.co.uk>
Message-ID: <19970324193223692 78@zetnet.co.uk>
Source record: 19377

I'm new to this aspect of the hobby.

Can any kind soul please suggest a satellite tracking program and
where to find it.

TIA
--
Bill Br of Cally, Perthshire, Scotland
e-mail bill.henderson@zetnet.co.uk
packet GM0VIT@GB7YEW.#79.GBR.EU

1019. Re: WXSAT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970324202800.PAA23372@ladder01.news.aol.com>
Source record: 19378

Hi
At present, only NOAA12 and 14 are operational over North America..Meteor 3/5 was shut down as of March 20, but its just as well as it was a sick bird indeed!.

I believe that NOAA has another bird scheduled for launch this summer. Its anybodies guess what the russians will do..There are a few Meteor class birds up there, but are either shut down, or only operational over Europe.

Jim
K2TL
http://members.aol.com/jkktl/ham.htm

1020. Re: SURLPUS SAT DISH

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970324203100.PAA23564@ladder01.news.aol.com>
Source record: 19379

the size of the dish determines the gain..the feed horn determines the frequency!..
generally speaking..
a 10 ft dish will give you lots of gain just about anywhere!..the higher the frequency, the more gain, and vis versa.

Jim
K2TL
http://members.aol.com/jkktl/ham.htm

1021. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703241326.FAA13122@mailbox1.ucsd.edu>
Source record: 19380

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 74700.wrk; Mon, 24 Mar 1997 14:35:32 -1
Received: from [195.120.135.127] by infocomm.it id 74610.wrk; Mon, 24 Mar 1997 14:35:06 -1
Received: from [195.120.135.127] by infocomm.it id 74530.wrk; Mon, 24 Mar 1997 14:34:40 -1
Received: from [195.120.135.127] by infocomm.it id 74430.wrk; Mon, 24 Mar 1997 14:34:08 -1
Received: from [195.120.135.127] by infocomm.it id 74330.wrk; Mon, 24 Mar 1997 14:33:40 -1
Received: from [195.120.135.127] by infocomm.it id 74280.wrk; Mon, 24 Mar 1997 14:33:18 -1
Received: from [195.120.135.127] by infocomm.it id 74180.wrk; Mon, 24 Mar 1997 14:32:48 -1
Received: from [195.120.135.127] by infocomm.it id 74060.wrk; Mon, 24 Mar 1997 14:32:16 -1
Received: from [195.120.135.127] by infocomm.it id 73f20.wrk; Mon, 24 Mar 1997 14:31:38 -1
Received: from [195.120.135.127] by infocomm.it id 73e10.wrk; Mon, 24 Mar 1997 14:31:02 -1
Received: from [195.120.135.127] by infocomm.it id 73d00.wrk; Mon, 24 Mar 1997 14:30:34 -1
Received: from [195.120.135.127] by infocomm.it id 73c40.wrk; Mon, 24 Mar 1997 14:30:10 -1
Received: from [195.120.135.127] by infocomm.it id 73b40.wrk; Mon, 24 Mar 1997 14:29:42 -1
Received: from [195.120.135.127] by infocomm.it id 73a90.wrk; Mon, 24 Mar 1997 14:29:20 -1
Received: from [195.120.135.127] by infocomm.it id 739c0.wrk; Mon, 24 Mar 1997 14:28:58 -1
Received: from [195.120.135.127] by infocomm.it id 738f1.wrk; Mon, 24 Mar 1997 14:28:32 -1
Received: from [132.239.1.53] by infocomm.it id 734a0.wrk; Mon, 24 Mar 1997 14:26:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA11315 for <ham-space-list@mailbox.ucsd.edu>; Mon, 24 Mar
1997 03:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id CAA16121
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:29 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA16102
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 02:10:23 -0800 (PST)
Message-Id: <199703241010.CAA16102@noc.ucsd.edu>
Date: Mon, 24 Mar 97 02:10:21 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #109
To: Ham-Space@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also
have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, and Miguel A.
Menendez, EA1BCU, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
FO-29 is in Analog mode at the current time.
The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
03/21/97 00:00 utc JD 1200 bps PSK
03/28/97 10:45 utc Digi-Talker
04/01/97 00:30 utc JD 9600 bps FSK

/EX

SB SAT @ AMSAT $ANS-081.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 081.08 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.08

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
AO-10
Participants in the Amsat-UK Central England VHF Net reported good results
on AO-10. Malcom G7NFO had worked some interesting "DX" including TR8CA,
PP8KWA,ZS2BWB and PY0FF.
[ANS thanks John Heath, G7HIA, Net Controller, for this report.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
During the period 19-February to 18 March, good, steady
signals have been received from the 145.826 MHz. beacon. Good
signals have also been received on 435 MHz., Saturday 15 March, 14:00
pass, when the satellite was being commanded by ground control.
[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK. Beacon 2401.1428 Mhz.)
PACSAT (AO-16)
Russ Platt WJ9F, AO-16 Command Team , reports the digipeater on AO-16 has
been on for the last couple of months. In regards to the 2.4 GHz
transmitter, it does continue to work although WJ9F has not been leaving
it on for an entire orbit due to its high current load on the 10 v bus.
The battery charging scheme on the micros is managed during sunlight
by adjusting the RCPSK transmitter power up or down to charge and
not overcharge the batteries since we have no way to turn the solar
cells off. The S-band transmitter does not have the ability to vary
its output so it is a high current draw throughout the orbit. In the
past during Experimenters Days when we have turned on the S-Band
transmitter I had to scale back the output of the RCPSK transmitter
to levels that were difficult to receive and even with these low levels
the onboard software will still turn off the S-band TX if the Battery
voltage drops too low, which it did. I guess that's why we called them
Experimenter's Days! In the future I do plan to continue to turn on the
S-band TX as power allows. I hope this answers your questions.
[ANS thanks Russ Platt WJ9F, AO-16 Command Team for this report.]

AO-16 Data/Telemetry ON-LINE
uptime is 917/06:33:41. Time is Sun Mar 23 11:57:01 1997
Total Array C= 0.317 Bat Ch Cur=-0.070 Ifb= 0.079 I+10V= 0.319
TX:010C BCR:80 PWRC:5AE BT:3C WC:25 EDAC:EC

WOD Dump of Bus/Power Channels 10,13,1E,22,2D,33
Will dump for 24 hours / AO-16 Command Team <WJ9F>
Graphic information about WOD/Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/ao16.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE is transmitting on 2M and on S-band 2401.220 MHz.
The command team is keeping the S-band transmitter on as a
test signal for those working on getting S receive equipment going.
The S transmitter is running about .8W to a whip that sticks out the top of
the satellite near one edge. In the northern hemisphere the whip is
pointed away from the earth, it's toward the earth in the southern
hemisphere. It is quite loud with a typical satellite S-band receive
setup, but in the northern hemisphere it will fade as much as 20 dB with
rotation of the satellite. Doppler of course is large, approximately
100 KHz during a pass.
[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting

MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V
10V 14.036V
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.1528 MHz SSB,
1200 Baud PSK AX.25.)
(LUSAT-LO-19)
uptime is 641/22:29:45. Time is Sun Mar 23 12:34:55 1997
Total Array C= 0.333 Bat Ch Cur= 0.030 Ifb= 0.020 I+10V= 0.201
TX:110 BCR:34 PWRC:133AA BT:55 WC: 0
<BEACON>
22 de Enero de 1997.
7 years ! Gracias a todos los amigos que lo hicieron posible.
Amsat - LU8DYF.
Graphic information about Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

**Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT
lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.**

--

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

Date: 24 Mar 1997 00:26:37 GMT
From: "Geert PIRENS" <pass@glo.be>
Subject: Looking for keplerian data of the moon ?

Hello your all,

I'm looking for keplerian data of the moon, If some of you EME hams must
use this to I think?

Can someone tells mewhere to find it?

Bye

Pirens G. ONL2057

Date: 24 Mar 1997 00:16:34 GMT
From: mbv@flash.net (Ken Durham)
Subject: P3D Converter?

In article <5h2lji$k4e$1@wolfman.xtra.co.nz>, geoffc@xtra.co.nz says...
>
>Hi guys,
>Looking for a design/kit for a S Band to 2M downconverter for use with
>P3D.
>
>Tnx in advance
>73 de Geoff ZL3TGC
>~~~~~~~~~~~~~~~~~~~~~~
Geoff, the last two issues of the AMSAT Journal
have had converter articles. One indicated that
a kit would be available soon and the other listed
a source for the kit. The Journal alone is worth
the membership fee. If you join, ask them for the
last two issues.
Ken K5MBV

Date: 12 Mar 1997 18:04:38 GMT
From: jpbialas@mtu.edu (James P. Bialas)
Subject: RS-15 alive?

In article <5g59mergd1@independence.ecn.ou.edu>, John Stephen Patrick wrote:
>I've been tracking a few birds to get the hang of the QSOs... but
>whenever RS-15 comes by, I can never here it! I can here RS-10's
>beacon.... Has RS-15's orbit moved? Do I need new keps? What's the
>best 10m receive antenna for _INDOORS_ for the easy sats?

I just listened in on rs-15 recently, so as far as I know it should
still be alive. One thing to consider, rs-15 has a _very_ high orbit.
This makes receiving somewhat difficult, I use a large outdoor tri-band
beam for 10,15,and 20 meters and I still have trouble getting a good
signal sometimes. Also, due to its altitude, the more popular mode is CW,

listen for that instead of voice.

Good Luck, and listen for the MTU club station, w8yy, on the birds!

--

James Bialas, jpbialas@mtu.edu, kb8ynf, MTU ACM Vice President
---

Date: Mon, 10 Mar 1997 20:09:43 -0500
From: Tone <n2izl@dorsai.org>
Subject: sun and moon keps maybe

HI,
Got these keps for the sun and moon from a prgram called moonkeps.exe
thanks to Bruce Beford KA1ORB.
Have several problems though.
1 Instant Track accepts the moon kep and tracked ok.
but not the sun says numeric value out of range
2 WISP accepts both keps and works ok
3 Track-Box accepts moon kep but when you tell it to track it displays
AZ N EL N apparently not able to make the caculations.

MOON
1 00002U 9741.368723666 0.00000000 0.000000 0 12
2 00002 18.28970 0.231700 0584000 326.3632 29.68450 0.036600996 7
SUN
1 00001U 9580.092361111 0.00000000 0.000000 0 19
2 00001 23.44000 0.000000 0000000 282.8700 75.28030 0.002737909 5

Date: 23 Mar 1997 23:07:54 GMT
From: William Nolle<wa8inz@cris.com>
Subject: Test

Organisation: None

##This message is create by Dynamic Mail - a most advanced bulk email software for the online marketer to extract MILLIONS of email address from the internet , send message to unlimited email addresses, or post ads to any number of selected newsgroup. For more information please send email to : apexpi@tig.com.au or visit our web site at : http://homepages.tig.com.au/~apexpi/dynamail.htm##Sorry for the bandwidth, just a test.

Date: 22 Mar 1997 01:01:32 GMT
From: Fernando_J._Garcia@evnet.satlink.net (Fernando J. Garcia)
Subject: VIRUS EN INTERNET

Igual, lo mejor es no abrir mails no solicitados...

@G-Fer@
****
Send via E.v. Net BBS UUCP (admin@evnet.satlink.net)
****
.uaa.mx>
Subject: (BINARIO) Hoax!
Date: Sat, 08 Mar 97 09:51:00 -0500
Reply-To: binario@uaa.dped.uaa.mx
Sender: Maiser@uaa.dped.uaa.mx
Organization: Caracas BBS, Venezuela, 582-482-8487

Muchos de ustedes quizas reconozcan este logotipo ASCII:

```
/~~~~~~~~~|~~~~~~~~~~~~/~~~~~~~~|~~~~~~~~~~|~~~~~~~~~~~~~/~~~|~\
| "Why | Surf When / You Can | Ride The | Bus?" / | \
|__________|__________/__________|__________|___________/ | \
/ /______|----\
| Visit the TOURBUS website to see the Archives, |///////| |
| FAQ, and Subscription Information! |///////| |
| http://www.TOURBUS.com |///////| |
| |///////| |
~~~/~~~\~~/~~~\~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~/~~~\~~~~
\___/ \___/ T h e I n t e r n e t T o u r B u s \___/
```

Se trata del incansable autobus de Patrick Crispen y Bob Rankin. En la edicion del 6 de marzo, aparece un articulo sobre el tema de los hoax (avisos de virus en e-mail que realmente no existen) que intentaremos traducir medianamente para disfrute de los lectores de Lenguaje Binario. Hemos dejado deliberadamente en ingles las citas textuales que se hacen de los avisos de nuevos virus, pues en ese idioma es como han sido divulgados en mayor medida. Tambien hemos dejado en ingles la palabra "hoax" ("enga~o") por cuanto consideramos que ya la misma ha pasado a formar parte de la terminologia del correo electronico. Les instamos a que envien este mensaje a sus relacionados para contribuir a minimizar el efecto de los anuncios de virus falsos.

==========
VIRUS EN E-MAILS

Los mayores hoaxes que transitan por la red son los mensajes que dicen que puedes contraer un virus informatico al leer mensajes que contengan ciertos subjects. Aqui estan algunos de los mensajes sobre virus falsos mas populares:

Here is some important information. Beware of a file called Goodtimes. ... If you get anything called "Good Times", DON'T read it or download it. It is a virus that will erase your hard drive. Forward this to all your friends. It may help them a lot.

o

There is a computer virus that is being sent across the Internet.
If you receive

1022. Re: HELP WITH TRAKBOX

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: randyh@shasta.gvg.tek.com
Message-ID: <3336b4ed.1902876@news.tek.com>
Source record: 19381

On 22 Mar 1997 16:42:58 GMT, nieman@ix.netcom.com(FRED NIEMAN) wrote:

>I just purchased a trakbox fron another ham and I am having trouble
>loading the elements. I am using telix software and it doesn't seem to
>work. When I start to upload elements file it reads the first couple of
>lines then locks up. Is there a better software or please give me some
>setup help for this software. Thanks in advance. Fred KC6VLL.

Fred,

Try slowing down the baud rate from the PC to theTB. The cpu may be
having trouble taking in the messages as fast as the PC is able to
send them. My TB would drop characters if I ran it fast. Since I am
not home (and I have the faster cpu upgrade installed) I can't
recommend a baud rate. Cut the baud rate down and try it again.

Randy

1023. Norad / US Spacecom Satellite Catalog Number

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: eagle28@ix.netcom.com
Message-ID: <3336d3f5.216184@nntp.ix.netcom.com>
Source record: 19382

Hello all,
I am a radio technician in the USMC and have been using STSPLUS
to track various satellites and have noticed some disparities in the
satellite catalog numbers from various sources. For example I have
the TLE file (964) that lists TDRS-1 as #13969, TDRS-3 as #19548, etc
and the satellite sit report from Goddard lists TDRS-1 as #13967,
TDRS-3 as #19544, etc.
Can anyone shed some light on this for me. I would greatly
appreciate any assistance provided.

Best Reguards,
Jerry

Lineage = 18Q9116 / KAVN9927 / KBMD9044

That which I post is intended to be freely shared by all.
I know their may be errors, please correct them as found.

1024. Analog (Voice) Satellite Frequencies FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2403972146250001@cqtlm-ppp075.dowco.com>
Source record: 19383
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space,rec.ham-radio

```
Amateur Analog (Voice) Satellite Frequencies as of March 24, 1997
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.908 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. The
ground controlers seem to be experimenting with the various beacons,
```

therefore it is difficult to predict which will be on, 29.408 seems to be
on most passes.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely
uplinked to it with a handheld on low power. On the other hand reception
of the 70cm downlink signal is more difficult without a directional antenna
most of the time. Therefore it is important to make sure
that you can hear the satellite downlink before you transmit therefor
avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of
writing this satellite was reported to be in Analog mode.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of
writing this satellite was reported to be in Analog mode until March 21.

* STS-83 is scheduled to launch on April 3rd, 1997 at approximately
2:01 p.m. EST (1901 UTC). The launch window is 2 hours 30 minutes long.
STS-83 will include a SAREX package.

CALL SIGNS:

James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

QSLs: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street,
Newington, CT 06111-1494, USA. Include the following information in your
QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or
packet). In addition, you must also include a SASE using a large, business-
sized envelope if you wish to receive a card.

This FAQ is constantly being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

- errors or omissions to ve7vdx@dowco.com

1025. Re: Linux and KANSAS CITY Rotor Interface with Sattrack

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <3336DB6C.7B2C5750@sat.cide.upm.es>
Source record: 19384

Pierre-Francois Monet wrote:

> I'm running Sattrack V3.1 under Linux on my PC to track ham's satellites .
> I just purchased a KANSAS CITY interface , and I'm looking for the C code
> to be included into satctrl.c & sattrack.h to make this KCT interface
> running .

Hi Pierre,

Before you will get involved with programming for an interface program
to the KCT, you should check how *accurate* is SatTrack v3.1 to track
satellites. Especially those high elliptic objects. The author has
reckoned that sattrarck is not doing a good tracking for these objects,
and I can tell you that little orbits like Mir, also fail totally.

All this problems has been solved in SatTrack v4.0.

Best,

--
Rafael,
Madrid (Spain)

1026. Re: HELP WITH TRAKBOX

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <3336D9DF.538E7F03@sat.cide.upm.es>
Source record: 19385

FRED NIEMAN wrote:

> I just purchased a trakbox fron another ham and I am having trouble
> loading the elements. I am using telix software and it doesn't seem to
> work. When I start to upload elements file it reads the first couple of
> lines then locks up. Is there a better software or please give me some
> setup help for this software. Thanks in advance. Fred KC6VLL.

I was using Telix to upload the kepler elements to TrakBox long time
ago, after that I moved to SatSked, and finally minicom (Linux).

There is a problem in how fast the data is sent to TrakBox. You should
check the line pace for ASCII transfers in your Telix program. A good
value for me is 100ms per line.

73,

--
Rafael,
Madrid (Spain)

1027. Re: P3D Converter?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5h4h53$f7d@library.airnews.net>
Source record: 19467

In article <5h2lji$k4e$1@wolfman.xtra.co.nz>, geoffc@xtra.co.nz says...
>
>Hi guys,
>Looking for a design/kit for a S Band to 2M downconverter for use with
>P3D.
>
>Tnx in advance
>73 de Geoff ZL3TGC
>~~~~~~~~~~~~~~~~~~~~~~
Geoff, the last two issues of the AMSAT Journal
have had converter articles. One indicated that
a kit would be available soon and the other listed
a source for the kit. The Journal alone is worth
the membership fee. If you join, ask them for the
last two issues.
Ken K5MBV

1028. Looking for keplerian data of the moon ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc37e7$12dd5740$LocalHost@pass>
Source record: 19468

Hello your all,

I'm looking for keplerian data of the moon, If some of you EME hams must use this to I think?

Can someone tells mewhere to find it?

Bye

Pirens G. ONL2057

1029. ANS-081 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc37ea$1ecc1f20$17bc92ce@bjarts.uslink.net>
Source record: 19469

SB SAT @ AMSAT $ANS-081.01
P3-D CHARGE REGULATORS ARRIVE

HR AMSAT NEWS SERVICE BULLETIN 081.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.01

Phase 3-D team members Josef Szabo and Andras Szimler, both from the Amateur Radio Club Station HA5BME, accompanied Phase 3-D's flight Battery Charge Regulators (BCRs) from Hungary to Orlando late last week and successfully performed the all-important task of checkout and final integration of these units into the Phase 3-D satellite.

The Battery Charge Regulators (there are three of them in the Phase 3-D Spacecraft) are a critical part of Phase 3-D's power grid as they regulate both the onboard power coming from the solar panels as well as the ever-important charging functions of the main and auxiliary batteries in the satellite.

BCR funding and construction was a joint effort between AMSAT-DL and a Hungarian team under the leadership of Professor Dr. Andras (Bandi) Gschwindt, HA5WH, at the Technical University of Budapest.

Stay tuned to ANS for continuing reports on the final integration progress of AMSAT's Phase 3-D International Satellite.

[ANS thanks Werner Haas, DJ5KQ, Lou McFadin, W5DID and Keith Baker, KB1SF for the information that went into this bulletin item.]

/EX

SB SAT @ AMSAT $ANS-081.02
QUALCOMM TAPS ANTONIO AS VP

HR AMSAT NEWS SERVICE BULLETIN 081.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.02

Franklin P. Antonio becomes executive vice president and chief technology officer at Qualcomm of San Diego. Antonio, one of the founders of Qualcomm, will provide strategic technical guidance and engineering mentoring across all of Qualcomm's engineering programs. Franklin is a longtime friend and benefactor of AMSAT. He wrote and contributed all proceeds to AMSAT InstantTrack

[ANS thanks SpaceNews and Bill Tynan, W3XO, for this news.]

/EX

SB SAT @ AMSAT $ANS-081.03
MIR CONTACT

HR AMSAT NEWS SERVICE BULLETIN 081.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.03

Ham-astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space station, assured students at Booker T. Washington High School in Houston, Texas, this week that all aboard the space station are in good shape after a fire aboard Mir late last month. About three dozen students got to chat with Linenger March 17 and posed more than a dozen questions during the ten-minute contact. Linenger also discussed the effects of the fire on experiments and described the escape arrangements available to those aboard Mir.

On March 11, students at United South High School, Laredo, Texas, successfully spoke with Linenger via ham radio. Other Mir school QSOs are tentatively scheduled to happen between now and April 20, 1997.

Linenger will remain aboard Mir with Cosmonauts Vasily Tsibliev and Alexander Lazutkin until mid-May.

[ANS thanks the ARRL and Keith Baker, KB1SF, for this story.]

/EX

SB SAT @ AMSAT $ANS-081.04
AMATEUR SATELLITES

HR AMSAT NEWS SERVICE BULLETIN 081.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.04

Get ready to learn something NEW--from the EXCITING WORLD of Amateur Radio SATELLITES! Sign up for a fast-moving five-hour workshop on everything you need to get *on the birds.*

Become an expert operating through digital satellites, the *easy-sats,* low-orbit and high-altitude satellites such as AO-10, the upcoming Phase-3-D satellite, Russian satellites, and learn a bit about Russia's MIR space station and NASA's SAREX missions. you'll hear about needed equipment, and how to use FM, SSB, digital and CW modes, including dial-in access to a packet satellite without spending money for equipment, via a satellite gateway node. When you leave, you'll know:
*** Equipment Choices
(everything including pre-amps, power amps)
*** Equipment Set-up
*** Antennas, Rotators and Feedlines
*** Software for Tracking

*** Operating Protocol and Hints
*** What Information is Available for You from AMSAT and ARRL
*** Frequencies--What Countries or Regions You Can Work

WHAT: Amateur Satellites -- Today and Tomorrow
Be the Expert and start having Fun!

WHO: Ed Krome, K9EK, AMSAT expert from Columbus, IN, will be your instructor.

WHEN: Friday June 13, 2 PM - 7 PM. Arrive early to get materials.

WHERE: in association with the SeaPac Convention
Seaside Convention Center - Seaside, Oregon

HOW: Space is limited; to pre-register write or call Rosalie White, WA1STO, at ARRL HQ (Tel 860-594-0237, fax 860-594-0259) before June 4. Price is $20 for ARRL members and $25 for non-members. You'll receive free materials and 5 hours of practical information. Sponsored by ARRL and AMSAT. You can also purchase Satellite Experimenter's Handbook, from ARRL, beforehand, for $20 + $5 UPS shipping/handling.

This continuing education workshop is sponsored by AMSAT and ARRL Educational Activities Department. Those who take part all day will earn a certificate for 0.5 Continuing Education Units.

[ANS thanks Rosalie White, WA1STO, for this notice.]

/EX

SB SAT @ AMSAT $ANS-081.05
OSCAR-11 REPORT

HR AMSAT NEWS SERVICE BULLETIN 081.05 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.05

OSCAR-11 celebrated its 13th birthday on March 1st. and still going strong! Congratulations to the University of Surrey on a wonderful achievement. During the period 19-February to 18 March, good, steady signals have been received from the 145.826 MHz beacon. Good signals have also been received on 435 MHz, Saturday 15 March, 14:00 pass, when the satellite was being commanded by ground control.

Recent telemetry shows that the solar eclipses have reduced the internal temperatures by about eight degrees compared to the full sunlight condition. The battery voltage appears to be showing a tendency towards lower values, often around 13.5 volts. The spin period has varied from 300 to 382, but most of the time it is around 365 seconds.

The WOD survey of channels 1, 2, 3, 61, (magnetometers) dated 02-January-97 was transmitted until February 22nd. An ASCII file of

this WOD is now on the WWW (in addition to the binary file), see below for URL. The WOD channels are now 40, 50, 52, 63, (Array voltage, battery charge, battery voltage, BCR status). This new WOD shows the effect of eclipses on the array voltage, and the battery voltage which varies from 14.0 down to 13.0 volts. The plots also show the effect of satellite spin, which modulates the current, and voltages. The BCR (battery charge regulator) switches from between unit A and unit B, several times during the WOD. A short file of this interesting WOD is also on the WWW site, and will be updated when the WOD is changed, and the maximum amount of data has been received.

Two AMSAT bulletins by Richard G3RWL have been uploaded. Topics have included OSCAR-11 status report, OSCAR-10 Keplers, and call for AMSAT-UK colloquium papers.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, but telemetry indicates that it has partially failed, and delivering half power. Any reports of reception on 2401 MHz. would be most welcome. Please e-mail g3cwv@amsat.org.

The 435.035 MHz. beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, i.e. within range of Guildford, UK. Likely times are between 13:00 and 18:00 UTC, Fridays or at weekends. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary. Web site for OSCAR-11 data and some software - http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, news item.]

/EX

SB SAT @ AMSAT $ANS-081.06
10 GHz EME RECORD

HR AMSAT NEWS SERVICE BULLETIN 081.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.06

On Wednesday, 12 March 1997, a new world record for EME on 10 GHz was set in a QSO between Joe DJ7FJ and Greg ZL1GSG. The two-way QSO took place at 08.30 UTC. DF7FJ operated from Schiltach in southwestern Germany and ZL1GSG from Awhitu Peninsula / Manukau Heads southwest of Auckland, New Zealand. The great circle distance between the QTH's is approximately 18340 km or just under 10000 nautical miles. DF7FJ and his team were using a 4.5m parabolic dish and a 50W traveling wave tube power amplifier, while ZL1GSG used a 3m dish and a similar PA.

"O" reports were exchanged both ways..

The new world record came after a series of unsuccessful attempts and one semi-successful attempt that saw ZL1GSG using a 1.8m dish from Muriwai, on NZ's West Coast northwest of Auckland. Prior to the successful QSO, a test run from Awhitu Peninsula confirmed on the weekend before that moon echoes were clearly audible from the receiver's speaker even a few meters away from ZL1GSG's van. Earlier echoes using the 1.8m dish had been very faint. The change to a larger dish had clearly made the difference.

On the night of the QSO, moon echoes were received by ZL1GSG well from about an hour before sked time. A last-minute technical problem, caused by a short in the cable that switched the waveguide TX/RX relay, put the whole project in jeopardy just minutes before the QSO began. However, Greg's policy of having a spare bit of next to everything provided a makeshift solution only a few minutes into the sked window, and contact was established almost immediately after ZL1GSG was QRV again. The signals from Germany were clearly audible as had been the moon echoes.

Congratulations to Greg ZL1GSG and Joe DJ7FJ from their New Zealand ground support team of the day: Bill ZL1TTH Tim ZL3VTV Ulrich ZL1DDL Thanks go to many amateurs who helped with the provision of equipment, time, and a QTH.

[ANS thanks Peter, G3PHO, Editor: RSGB Microwave Newsletter for this report.]

/EX

SB SAT @ AMSAT $ANS-081.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 081.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.07

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM Downlink 145.8MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,

Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Fred Andreas, ZR5FA, worked this bird most of the week using only 5W into a 1/4 wave and maintaining coms in this configuration for almost the entire pass. Unfortunately both RS-10 & RS-15 get very little traffic from his neck of the woods ,which is a pity considering how easy they are to work .
[ANS thanks Fred Andreas, ZR5FA, for this report.]

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T- and K-mode.
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Fred Andreas, ZR5FA, has been following RS-15 "night" passes closely from ZS the past week and noticed the downlink signal on voice to be extremely strong lately (on par with RS-10) ,despite the apparent charging problem .There has been no noted activity on RS-15 from the African continent of late .
[ANS thanks Fred Andreas, ZR5FA, for this report.]

Be aware that RS-15 has battery charging problems. When the satellite is in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy to hear on the downlink!)

RS-16
RS-16's 70 cm, 435.504 Mhz beacon on RS-16 operational.
The 10 meter beacon is not active at this time. Transponder is not operational.

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 operating normally. Downloading data at a rate of 650 to 750 BPS.
.
KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 operating normally. Downloading data at a rate of 660 to 720 BPS.

These data rates result in accumulations of 600K to 900K per pass dependent on the duration the downlinking station is in the satellite footprint.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
Operating normally and lots of activity heard over North America and Europe.
As of NOV 2, the AO-27 schedule is as follows:
TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite enters the sun for a duration of 18 Minutes. This is a "back to US Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for their messages about the satellite turning on later than expected. He reports he's deliberately letting the "turn on" time drift later (for about 4-5 Minutes) so stations in the southern latitudes can also have a chance to work AO-27. Every few months he will be letting the turn on time drift like this to give more stations a chance to make contacts thru the satellite.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, and Miguel A. Menendez, EA1BCU, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud BPSK)
FO-29 is in Analog mode at the current time.
The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
03/21/97 00:00 utc JD 1200 bps PSK
03/28/97 10:45 utc Digi-Talker
04/01/97 00:30 utc JD 9600 bps FSK

/EX

SB SAT @ AMSAT $ANS-081.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 081.08 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-081.08

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz
CW/USB)
AO-10
Participants in the Amsat-UK Central England VHF Net reported good results
on AO-10. Malcom G7NFO had worked some interesting "DX" including TR8CA,
PP8KWA,ZS2BWB and PY0FF.
[ANS thanks John Heath, G7HIA, Net Controller, for this report.]

OSCAR-11
(Downlink 145.825MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
During the period 19-February to 18 March, good, steady
signals have been received from the 145.826 MHz. beacon. Good
signals have also been received on 435 MHz., Saturday 15 March, 14:00
pass, when the satellite was being commanded by ground control.
[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK. Beacon 2401.1428 Mhz.)
PACSAT (AO-16)
Russ Platt WJ9F, AO-16 Command Team , reports the digipeater on AO-16 has
been on for the last couple of months. In regards to the 2.4 GHz
transmitter, it does continue to work although WJ9F has not been leaving
it on for an entire orbit due to its high current load on the 10 v bus.
The battery charging scheme on the micros is managed during sunlight
by adjusting the RCPSK transmitter power up or down to charge and
not overcharge the batteries since we have no way to turn the solar
cells off. The S-band transmitter does not have the ability to vary
its output so it is a high current draw throughout the orbit. In the
past during Experimenters Days when we have turned on the S-Band
transmitter I had to scale back the output of the RCPSK transmitter
to levels that were difficult to receive and even with these low levels
the onboard software will still turn off the S-band TX if the Battery
voltage drops too low, which it did. I guess that's why we called them
Experimenter's Days! In the future I do plan to continue to turn on the
S-band TX as power allows. I hope this answers your questions.
[ANS thanks Russ Platt WJ9F, AO-16 Command Team for this report.]

AO-16 Data/Telemetry ON-LINE
uptime is 917/06:33:41. Time is Sun Mar 23 11:57:01 1997
Total Array C= 0.317 Bat Ch Cur=-0.070 Ifb= 0.079 I+10V= 0.319
TX:010C BCR:80 PWRC:5AE BT:3C WC:25 EDAC:EC

WOD Dump of Bus/Power Channels 10,13,1E,22,2D,33
Will dump for 24 hours / AO-16 Command Team <WJ9F>
Graphic information about WOD/Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/ao16.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)

DOVE is transmitting on 2M and on S-band 2401.220 MHz.
The command team is keeping the S-band transmitter on as a
test signal for those working on getting S receive equipment going.
The S transmitter is running about .8W to a whip that sticks out the top of
the satellite near one edge. In the northern hemisphere the whip is
pointed away from the earth, it's toward the earth in the southern
hemisphere. It is quite loud with a typical satellite S-band receive
setup, but in the northern hemisphere it will fade as much as 20 dB with
rotation of the satellite. Doppler of course is large, approximately
100 KHz during a pass.
[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V
10V 14.036V
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.1528 MHz SSB,
1200 Baud PSK AX.25.)
(LUSAT-LO-19)
uptime is 641/22:29:45. Time is Sun Mar 23 12:34:55 1997
Total Array C= 0.333 Bat Ch Cur= 0.030 Ifb= 0.020 I+10V= 0.201
TX:110 BCR:34 PWRC:133AA BT:55 WC: 0
<BEACON>
22 de Enero de 1997.
7 years ! Gracias a todos los amigos que lo hicieron posible.
Amsat - LU8DYF.
Graphic information about Telemetry values can find it in:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

--

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

1030. WXSAT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5h4p7h$tgh@library.airnews.net>
Source record: 19470

Are there any weather sats operational over the USA
other than NOAA-12 and NOAA-14? Is NOAA-9 still on
the air? Does METEOSAT transmit except when over Europe?
There are METEOSAT images available from the UK, but
I haven't seen any mention of the output frequency on
the weather FAQs.
The WXSAT program and my old scanner (with modified IF
for 40Khz bandwidth) yields pretty good pictures, but
with only two sats, there aren't enough passes to get
many images per day.
Ken K5MBV

1031. Re: WXSAT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-24 00:00:00 UTC
From: boyer@rd.bbc.co.uk
Message-ID: <5h5l05$bso@bbcnews.rd.bbc.co.uk>
Source record: 19471

Ken Durham (mbv@flash.net) wrote:
: Are there any weather sats operational over the USA
: other than NOAA-12 and NOAA-14? Is NOAA-9 still on
: the air?
No is the answer. Meteor 3-5 and Meteor 2-21 do, but they are off at the
moment. the geostationary satellites such ate meteosat are on around 1.7G.

J.

1032. Re: Looking for keplerian data of the moon ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: "Roberto f." <roberto@netwide.net>
Message-ID: <01bc38de$464a4960$068bd4d0@miseno.netwide.net>
Source record: 19386

Easy... just go to LogSat's home page at http://www.logsat.com and follow
the link to the Keplerian elements. Along with the elements for *real*
satellites, you'll also find those for the moon.

--
Roberto Franceschetti ik8sqi

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

Geert PIRENS <pass@glo.be> wrote in article
<01bc37e7$12dd5740$LocalHost@pass>...
> Hello your all,
>
> I'm looking for keplerian data of the moon, If some of you EME hams must
> use this to I think?
>
> Can someone tells mewhere to find it?
>
>
> Bye
>
>
> Pirens G. ONL2057
>
>
>

1033. CRETE HOLIDAYS

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc38ee36238280f1915cc1@dummy.forthnet.gr>
Source record: 19387

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO
31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR
FAX AT ++30 81 761382.

1034. Aero Engineering Undergrad wants to hang out with you guys!! :>)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ssnow27716@aol.com
Message-ID: <19970325081400.DAA06126@ladder01.news.aol.com>
Source record: 19388

Hi,

I'm an Aerospace Engineering undergrad checking out this newsgroup. New to all this satellite tracking stuff. Just got out of lower division. Trying to stay ahead of the game! Figured this group was a great place to start. My loves are Astronomy & Physics and a bunch of other stuff!!

Just now joining my school's microsatellite design team. I'll probably start out with the grunt work until I get more literate. Have a few shareware satellite tracking programs & astromony trackers....have fun playing with those. And, I've got the URL for NASA's real time shuttle tracker. Primitive compared to you guys...I'm sure!! :>)
I've seen labs at school...doing exactly what you all are doing....but, I'm not at that level, yet. :>(Anyone wanna help "edumocate" me?? :>)

Can you tell me more? What are you all keeping track of satellites for? Are you downloading data? Uploading? Trying to hack govt stuff? Re-direct spy satellites? Decoding secret messages? Trying to knock down missiles in the boost phase? What? :>)

How can I join in? What are you doing with all this Kep stuff?
In fact, what is all this Kep stuff? I'm assuming they're orbital path data...but, don't yet know how to use em! :>(

To be frank, [actually I'm Stan ;>)].....I'm not seriously interested in tracking satellites as a career. But, I do want to know what you're all talking about and if I can get more fun outa this PC!

I'm happy in anything related to Flight Test Engineering....air....space....anything. Even Balloon launces!! And, I'm sure I'll get shuffled around....so, I try to keep an open mind and broad background.. For now, I'm more into Remote Sensing component design and I have a senior project in mind where I'm going to need the help of some good ME's, AE's, and EE's. I need people who can help me "visualize" and track a low frequency radio source If that's not possible, I'll settle for a few blips on an O-scope. Whatever I learn from you all....I'm sure will help.

Just direct email me at SSnow27716@aol.com
Thanks,

SSnow27716@aol.com
C/3C USAF ROTC
Aerospace Engineering, Junior ; Airframe & Powerplant Mechanic

"Peacetime is going to be hell on me! :>(" ...remember who said that? :>)

SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech

1035. Re: What are the frequencies used in radio astronomy?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ssnow27716@aol.com
Message-ID: <19970325081400.DAA06135@ladder01.news.aol.com>
Source record: 19389

Searchin for little green buggers, huh?

Cool !!!! :>)

I'm new here. Finally something to which I'm more literate than some of you guys!! And, now I feel like I can contribute to this area!! Thanks!! No offense!! :>)

Ok....Radio Astronomy.....

Where do you want to begin?
True Astronomers would love to "see" in everything from Radio, Microwave, IR, Visible, UV, X-ray, Gamma, and beyond! But, there's these annoying Ham guys cluttering up the sky! ;>) j/k. Anytime you wanna talk Astro or Astophys...just yell.

Seriously.....NASA's SETI program....last I checked...had 60 seporate sky surveys....some broad band searches.....some only in a few wavelengths. Just depends on many factors these guys took into account. (I have some of that info around here on my hard-drive...could look.) Also, the Aricebo (bad spelling?) Telescope under Cornell University has assisted me with sky data in the past....they're on the web.

Popular Mechanics also published a neat little article on amatuer radio and the home PC as related to project Argus (I believe that was the name.) :>) Can't remember the name of the organization running it....have their brochure around here somewhere (They're on the web...try searching under "argus AND seti"). For a membership fee....they'll send you info on how to build your home base "ET phone home" unit and assign you to a section of the sky in the "waterhole". You can use a 10ft analog dish, some equipment, and your soundcard....to look for irregularities in signals. Then, cut & past & send them to a pro for analysis.....stuff like that.

I can tell you that I'm looking for Low frequency observations of re-entry craft...not really aliens or UFO's.. And, most the frequencies I ran accross were scattered in the the kHZ to GHz range. I want full view of the Hz-MHz. :>(USAF Space Command also publishes several classified & unclassified catalogs...though they're not really into tracking Morse code from lil green men....mostly small rocks and bad guy stuff. Many of the Air Force and Naval labs on the web might answer a few questions for you. And, the Air Force 2025 plan highlights the implementation of a Planetary Defense System against big rocks & snowballs....as important to national security. So, you may see a greater concern over viewing the sky in a full sphere from here to Pluto in a few years and a tighter relationship between Astronomy and the AF.

Here's a few links for you:

aol://4344:535.astrdisc.3605650.493779699
http://www.dtic.mil/defenselink/factfile/chapter1/spacecom.html
http://agcwww.bio.ns.ca/misc/geores/sotw/jpl.html
http://www.stsci.edu/pubinfo/Pictures.html
http://www.aip.org/

http://www.dtic.mil/airforcelink/sites/sites_com.html
http://web.fie.com/fedix/afosr.html
http://skyview.gsfc.nasa.gov/cgi-bin/v2.3/skyview_advanced

You can have whatever info of mine that you'd like...but, I'm more into Plasma Sheath stuff. Think the SETI program's real neato....but, I'm caught up in other stuff.

I'm here looking for info on the equipment & techniques for radio imaging. Want to learn the process from antenna design to DSP on my PC. If you learn anything...please let me know....email's the best way to catch me.

SSnow27716@aol.com
C/3C USAF ROTC
Aerospace Engineering, Junior ; Airframe & Powerplant Mechanic

"Peacetime is going to be hell on me!! :>(" - Patton

SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech

1036. Re: Satellite sked

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ssnow27716@aol.com
Message-ID: <19970325081500.DAA06137@ladder01.news.aol.com>
Source record: 19390

What's a "sked"? Sorry. :>(Please educate me.
Just direct email me at SSnow27716@aol.com
Thanks.

SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech

1037. Re: WXSAT reception

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ssnow27716@aol.com
Message-ID: <19970325081400.DAA06128@ladder01.news.aol.com>
Source record: 19391

In article <332C1A03.7200@icss.net>, Brian Burke <burkefam@icss.net> writes:

>The Chinese Fen Yung used to transmit in color. Don't know if its still
>around. Brian
>
>

Nope....it's dead!! I zapped it with my ground based laser! ;>)

Say.....is there a catalog listing the positions of ALL satellites in orbit?
How much of these are classified? Or is that readilly known to you guys?...just your best guess.

Just direct email me at SSnow27716@aol.com
Thanks

SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech

1038. Re: SURLPUS SAT DISH

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ssnow27716@aol.com
Message-ID: <19970325081500.DAA06136@ladder01.news.aol.com>
Source record: 19392

Say....anyone want to tell me where you acquired the cheapest possible equipment like this surplus dish.?

Interested in observing a low freq source.....from dish to squiggly lines on my PC.

Can you describe the system better? And the vendors? Student budget, here.
Thanks.

Also....looking for access to a spectrometer that can cover from 20Hz-200MHz. (This is the range I'd like to be able to study.)

Any suggestions.
Just direct email me at SSnow27716@aol.com
SSnow27716@aol.com

SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech

1039. Re: P3D Converter?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Javier <javiers@ntserver.codeinf.com>
Message-ID: <333780D1.4089@ntserver.codeinf.com>
Source record: 19393

Ken Durham wrote:
>
> In article <5h2lji$k4e$1@wolfman.xtra.co.nz>, geoffc@xtra.co.nz says...
> >
> >Hi guys,
> >Looking for a design/kit for a S Band to 2M downconverter for use with
> >P3D.
> >
> >Tnx in advance
> >73 de Geoff ZL3TGC
> >~~~~~~~~~~~~~~~~~~~~~~~
> Geoff, the last two issues of the AMSAT Journal
> have had converter articles. One indicated that
> a kit would be available soon and the other listed
> a source for the kit. The Journal alone is worth
> the membership fee. If you join, ask them for the
> last two issues.
> Ken K5MBV
Hi! I have built two Down East Microwave converter for 2.4Ghz and it works very well with the preamp. in the antenna (small dish of 60 cm. diameter) It is easy to build and no need alignement(only for the first oscilator in 96 Mhz.).
You can get more informattion about the kit in:
http://downeastmicrowave.com
Hope that helps a little.
73's de Javier EA4CMV

1040. AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ik2wxx@ctrade.it
Message-ID: <3337a1b2.251116@news.protec.it>
Source record: 19394

I've been out from the newsgroup and the radio quite a while.
Amsat does not send AO-13 keps anymore....where did AO-13 go ?

Roberto Sonzogni

ik2wxx@ctrade.it
http://www.geocities.com/SunsetStrip/4249/

PAGINE DISPONIBILI:
Compleanni Musicisti (+ di 1000) .../complean.htm
Musicisti Italiani Indipendenti .../mii.htm
File MIDI Italiani .../midi_ita.htm
"i 5 Cereali" .../5cereali.htm

1041. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703251328.FAA21248@mailbox1.ucsd.edu>
Source record: 19395

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 74cb0.wrk; Tue, 25 Mar 1997 14:38:22 -1
Received: from [195.120.135.127] by infocomm.it id 74c80.wrk; Tue, 25 Mar 1997 14:38:16 -1
Received: from [195.120.135.127] by infocomm.it id 74c30.wrk; Tue, 25 Mar 1997 14:38:06 -1
Received: from [195.120.135.127] by infocomm.it id 74bc0.wrk; Tue, 25 Mar 1997 14:37:56 -1
Received: from [195.120.135.127] by infocomm.it id 74b70.wrk; Tue, 25 Mar 1997 14:37:48 -1
Received: from [195.120.135.127] by infocomm.it id 74b20.wrk; Tue, 25 Mar 1997 14:37:36 -1
Received: from [195.120.135.127] by infocomm.it id 74ac0.wrk; Tue, 25 Mar 1997 14:37:26 -1
Received: from [195.120.135.127] by infocomm.it id 74a80.wrk; Tue, 25 Mar 1997 14:37:16 -1
Received: from [195.120.135.127] by infocomm.it id 74a30.wrk; Tue, 25 Mar 1997 14:37:06 -1
Received: from [195.120.135.127] by infocomm.it id 749c0.wrk; Tue, 25 Mar 1997 14:36:56 -1
Received: from [195.120.135.127] by infocomm.it id 74950.wrk; Tue, 25 Mar 1997 14:36:44 -1
Received: from [195.120.135.127] by infocomm.it id 748f0.wrk; Tue, 25 Mar 1997 14:36:30 -1
Received: from [195.120.135.127] by infocomm.it id 748a0.wrk; Tue, 25 Mar 1997 14:36:20 -1
Received: from [195.120.135.127] by infocomm.it id 74850.wrk; Tue, 25 Mar 1997 14:36:10 -1
Received: from [195.120.135.127] by infocomm.it id 74800.wrk; Tue, 25 Mar 1997 14:36:00 -1
Received: from [195.120.135.127] by infocomm.it id 74790.wrk; Tue, 25 Mar 1997 14:35:50 -1
Received: from [132.239.1.53] by infocomm.it id 74540.wrk; Tue, 25 Mar 1997 14:34:42 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA20381 for <ham-space-list@mailbox.ucsd.edu>; Tue, 25 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA02429
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:31:13 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA02399
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:31:08 -0800 (PST)
Message-Id: <199703251231.EAA02399@noc.ucsd.edu>
Date: Tue, 25 Mar 97 04:31:07 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #111
To: Ham-Space@ucsd.edu

Ham-Space Digest Tue, 25 Mar 97 Volume 97 : Issue 111

Today's Topics:
AO-13 ?
Looking for keplerian data of the moon ?
Norad / US Spacecom Satellite Catalog Number
RS-10/11
SURLPUS SAT DISH
test - ignore
Tracking software
WXSAT (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 25 Mar 1997 09:59:44 GMT
From: ik2wxx@ctrade.it (Roberto Sonzogni)
Subject: AO-13 ?

I've been out from the newsgroup and the radio quite a while.
Amsat does not send AO-13 keps anymore....where did AO-13 go ?

Roberto Sonzogni

ik2wxx@ctrade.it
http://www.geocities.com/SunsetStrip/4249/

PAGINE DISPONIBILI:
Compleanni Musicisti (+ di 1000) .../complean.htm
Musicisti Italiani Indipendenti .../mii.htm
File MIDI Italiani .../midi_ita.htm
"i 5 Cereali" .../5cereali.htm

Date: 25 Mar 97 05:33:37 GMT
From: "Roberto f." <roberto@netwide.net>
Subject: Looking for keplerian data of the moon ?

Easy... just go to LogSat's home page at http://www.logsat.com and follow
the link to the Keplerian elements. Along with the elements for *real*
satellites, you'll also find those for the moon.

--
Roberto Franceschetti ik8sqi

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

Geert PIRENS <pass@glo.be> wrote in article
<01bc37e7$12dd5740$LocalHost@pass>...
> Hello your all,
>
> I'm looking for keplerian data of the moon, If some of you EME hams must
> use this to I think?
>
> Can someone tells mewhere to find it?
>
>
> Bye
>
>
> Pirens G. ONL2057
>
>
>

Date: Mon, 24 Mar 1997 19:29:15 GMT
From: eagle28@ix.netcom.com (Gerald "Jerry" Rosengreen)
Subject: Norad / US Spacecom Satellite Catalog Number

Hello all,
I am a radio technician in the USMC and have been using STSPLUS
to track various satellites and have noticed some disparities in the
satellite catalog numbers from various sources. For example I have
the TLE file (964) that lists TDRS-1 as #13969, TDRS-3 as #19548, etc
and the satellite sit report from Goddard lists TDRS-1 as #13967,
TDRS-3 as #19544, etc.
Can anyone shed some light on this for me. I would greatly
appreciate any assistance provided.

Best Reguards,
Jerry

Lineage = 18Q9116 / KAVN9927 / KBMD9044

That which I post is intended to be freely shared by all.
I know their may be errors, please correct them as found.

Date: Wed, 12 Mar 1997 16:02:01 -0600
From: Gary Watts <gwatts@bensoft.com>
Subject: RS-10/11

Anthony,
I dont want to spoil your fun but here are a few problems that you will
have.
1. you will most likely chirp while the pll in your ht locks up
on your transmit frequency
2. correct procedure is to STAY on one receive frequency and and vary your
transmit frequency to compsate for doppler shift to stay on your downlink
frequency.. With a ht you will be all over the the place?
3. Make sure the mic is disabled since any audio getting into the
mic/transmitter will cause fm'ing of the downlink signal
4. low transmit power level.. granted it dont take a lot of power to work
RS-10 but 10 - 25 watts would be more reliable

Yes.. US Hams can do CW and SSB thru the RS-10 Satellite
Check out www.amsat.org
they have a LOT of good information there

Good luck.
Give it a try.. see if you can at leat hear yourself
:-)

for example
145.850 up
29.385 down
+ or - for doppler

I hope I have the freqs right.. it has been a few years
:-)

Gary Watts de N0OXV
Kansas City Mo
81 GL1100I

On Wed, 12 Mar 1997, Anthony wrote:

> I'm new at using amateur satellites. What I need to know is how do I
> go about using RS-10. What I already know is that I could use my hand
> held for the up-link and my shortwave for down-link. Are amatuer's
> only allowed to use cw, but not voice.
>
> Thanks,
>
> Anthony
> KB2YZV
>
>

Date: 24 Mar 1997 20:31:25 GMT
From: jkktl@aol.com (Jkktl)
Subject: SURLPUS SAT DISH

the size of the dish determines the gain..the feed horn determines the
frequency!..
generally speaking..
a 10 ft dish will give you lots of gain just about anywhere!..the higher
the frequency, the more gain, and vis versa.

Jim
K2TL
http://members.aol.com/jkktl/ham.htm

Date: 24 Mar 1997 08:01:48 -0700
From: bainj@cuug.ab.ca (Bain)
Subject: test - ignore

as per title
tnx

Date: Mon, 24 Mar 1997 19:32:23 GMT
From: Bill Henderson <bill.henderson@zetnet.co.uk>
Subject: Tracking software

I'm new to this aspect of the hobby.

Can any kind soul please suggest a satellite tracking program and
where to find it.

TIA
--
Bill Br of Cally, Perthshire, Scotland
e-mail bill.henderson@zetnet.co.uk
packet GM0VIT@GB7YEW.#79.GBR.EU

Date: Mon, 24 Mar 1997 07:42:51 -0500
From: Rolf Mathson <rmathiso@ix.netcom.com>
Subject: WXSAT

Ken Durham wrote:
>
> Are there any weather sats operational over the USA
> other than NOAA-12 and NOAA-14? Is NOAA-9 still on
> the air? Does METEOSAT transmit except when over Europe?
> There are METEOSAT images available from the UK, but
> I haven't seen any mention of the output frequency on
> the weather FAQs.
<snip>
Ken,
These are the only active wxsats (the Russian Meteors are currently
turned off.) The other Russian sats, OKEAN and SICH, only transmit over
Russia. NOAA K (NOAA-15) is due for launch later this year. METEOSAT

is a European Geostationary Sat its US equivilants are GOES 8 (East) and
GOES 9 (West), they transmit on 1.691 Ghz. You'll need some special
equipment to receive them (i.e. dish or loop yagi, downconverter, etc).

Regards,
Rolf

Date: 24 Mar 1997 10:28:21 GMT
From: boyer@rd.bbc.co.uk (John Boyer)
Subject: WXSAT

Ken Durham (mbv@flash.net) wrote:
: Are there any weather sats operational over the USA
: other than NOAA-12 and NOAA-14? Is NOAA-9 still on
: the air?
No is the answer. Meteor 3-5 and Meteor 2-21 do, but they are off at the
moment. the geostationary satellites such ate meteosat are on around 1.7G.

J.

End of Ham-Space Digest V97 #111
****

1042. Re: Any news on HALO Space Launch 1??

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33381A01.459E@concentric.net>
Source record: 19396

HAL5's "Proof of Concept" rockoon mission -- to have taken place from Cerro Gordo, North Carolina on Saturday, March 22, 1997 -- was scrubbed due to safety concerns. Project HALO team members are meeting to determine the date and place for the next attempt.

1043. Re: Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5h8cr7$3gv$1@news.mhv.net>
Source record: 19397

In article <19970324193223692 78@zetnet.co.uk>, Bill Henderson
<bill.henderson@zetnet.co.uk> wrote:
>I'm new to this aspect of the hobby.
>
>Can any kind soul please suggest a satellite tracking program and
>where to find it.
>
>TIA
>--
>Bill Br of Cally, Perthshire, Scotland
>e-mail bill.henderson@zetnet.co.uk
>packet GM0VIT@GB7YEW.#79.GBR.EU

STSPLUS at the Nasa Spacelink web site.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

1044. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E7Lq8A.1o9@pe1chl>
Source record: 19398

In <3337a1b2.251116@news.protec.it> ik2wxx@ctrade.it (Roberto Sonzogni) writes:

>I've been out from the newsgroup and the radio quite a while.
>Amsat does not send AO-13 keps anymore....where did AO-13 go ?

Down in the atmosphere (and maybe in the ocean?)

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1045. mars space prob

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: s <kero123@isp.fr>
Message-ID: <3338883E.48AE@isp.fr>
Source record: 19399

hi
Where i can see keplerian elements of mars space prob or other space prob?

Thank to send me a email.

1046. Re: RS16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Dan O'Connell <oconneld@OIT.EDU>
Message-ID: <Pine.OSF.3.95.970325111935.5824A-100000@internet.oit.edu>
Source record: 19400

On Sat, 22 Mar 1997, Fred N Benardella wrote:

> I've listened for RS16 on 29.408 and still have yet to hear it (the beacon). Or should I be listening on 29.451? Also have not tried the 435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10 working? Any info appreciated.
> Thank you, Fred WA2HFI EN34is (MN)
>
>
I hav'nt heard it yet either, I am now assuming that it is using 2 up
70 cm down ? Dan WA7TDZ

1047. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: orion**@capital.net
Message-ID: <333a382f.3155440@news.capital.net>
Source record: 19401

On Tue, 25 Mar 1997 09:59:44 GMT, ik2wxx@ctrade.it (Roberto Sonzogni)
wrote:

>I've been out from the newsgroup and the radio quite a while.
>Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>
>Roberto Sonzogni

Into the atmosphere. It burned up in December of '96.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

1048. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33383EBA.5056@codem.com>
Source record: 19402

Roberto Sonzogni wrote:
>
> I've been out from the newsgroup and the radio quite a while.
> Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>

SB SAT @ AMSAT $ANS-329.01
AO-13's ENGINEERING BEACON CEASED TRANSMITTING

HR AMSAT NEWS SERVICE BULLETIN 329.01 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 24, 1996
TO ALL RADIO AMATEURS BT
BID: $ANS-329.01

Graham Ratcliff, VK5AGR, of the A0-13 command team, reports that
the AO-13's Engineering Beacon ceased transmitting during the Q block
time-stamped AMSAT Day Number 6902 i.e. 24Nov96 @ 05:38:16
approximately MA 31 or 32 on Orbit Number 6481.

Graham confirmed this loss of signal with Elgar VK5ED who was also
monitoring the telemetry when the transmission stopped.

Further attempts to command AO-13 to date have been unsuccessful!

Therefore, it is with GREAT SADNESS that we must assume that
AO-13 is DEAD!!!!

[ANS thanks Graham Ratcliff, VK5AGR, of the A0-13 command
team, for this sad news.]

/EX

SB SAT @ AMSAT $ANS-329.02
AO-13's LAST DAYS

HR AMSAT NEWS SERVICE BULLETIN 329.02 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 24, 1996
TO ALL RADIO AMATEURS BT
BID: $ANS-329.02

ANS has put together a compilation of reports about the last days of
AO-13's life. Most of the reports are from the command team, but a few
came into the ANS desk via the internet.

AO-13 is still alive as of Nov23 13:35 UTC Orbit #6479..
BUT: The Telemetry sensor for Panel 3 is dead and shows ZERO mA
since Orbit #6478 which appeared here this morning at
3:06 utc..

Thus it looks like that AO-13 lost one of it's six solar panels.
Also the SERI temperature sensor now jumped to over +80 deg Celsius,
which is a substantial increase.
73s de Peter Guelzow, DB2OS

N QST ** AO-13 Only One Solar Panel Still Working **
After AO-13's last perigee (6479/6480) only solar panel #5 is
still working. Therefore, all transponders have been switched
off to conserve power. The Engineering Beacon will be left
running with the Hi-gain antennas from MA 20 to MA 200 and
with the Lo-gain (omnis) from MA 200 through perigee to MA 20.
Peter/DB2OS James/G3RUH Graham/VK5AGR Stacey/W4SM

Since AOS of orbit 6480 in Ft. Worth, TX, only panel #5 has been
producing current. The transponder is still functioning at 2217 UTC.
AOS was at approximately 2019 UTC. It can't last much longer!
The BIRTH ANNOUNCEMENT on the Beacon is very appropriate!
73 - Keith, W5IU

Telemetry captured from 04:37:38 to 04:42:54 UT, Sunday Nov. 24,
Orbit 6481, MA 001 to 003, shows, that Panel 5 is still delivering
power.
Viktor W. Kudielka,. OE1VKW

This last message came from A0-13 a few days before it lost the ability
to send TLM. ANS believes this is a fond farewell to us from an old
friend.

M QST de AO-13 BIRTH ANNOUNCEMENT 1996 Nov 20 0240 EST
My child, P3D, began "thinking" today when its IHU was activa-
ted. I'm glad I lived long enough to learn of this wonderful
event. I wish P3D a long, functional life. Do not grieve for
me when I'm gone. I'm only metal, plastic, & sand. My "life"
came from enriching the lives of those who built, commanded &
utilized me, and it's been a good "life". Danke Karl, et al. No
regrets. The baton will soon be passed. AO-13 signing off....

[Edited by ANS editor B.J. Arts, WT0N.]

++++++++++++++++++

73 Larry

--
N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1049. P3D LAUNCH BULLETIN

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc3950$7f863500$1dbc92ce@bjarts.uslink.net>
Source record: 19403

SB SAT @ AMSAT $ANS-083.01
PHASE 3-D LAUNCH DELAYED

HR AMSAT NEWS SERVICE BULLETIN 083.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 24, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-083.01

In a formal announcement from Paris on March 24th, the European Space Agency (ESA) said that the second test flight of their new Ariane 5 booster has now been re-scheduled from July to mid-September, 1997. It is this flight, Ariane 502, on which Phase 3-D is currently manifested.

According to their latest announcement, this action was being taken by ESA and CNES (the French Space Agency which manages the Ariane 5 program for ESA) in order to "improve (the booster's) robustness, increase the operational margins and allow for degraded operating modes".

In a joint statement a day after the ESA announcement, Phase 3-D Project Leader and AMSAT-DL President, Dr. Karl Meinzer, DJ4ZC, along with AMSAT-NA President Bill Tynan, W3XO, expressed continuing confidence that ESA and CNES will succeed in completing all the tasks necessary for a successful flight test of Ariane 502.

"Naturally, we are disappointed that our launch will not be as soon as we had hoped", said Meinzer. "However, I am pleased that ESA and CNES are taking care to improve the operational margins for the Ariane 5 booster. This action helps give us renewed confidence in the overall probability for a successful launch of our satellite," he said.

Both Meinzer and Tynan emphasized, however, that this launch delay, like the earlier ones, means that the total cost of the Phase 3-D Project will increase significantly. Even before the latest ESA announcement, AMSAT-DL and AMSAT-NA were projecting a combined budget shortfall of about two hundred thousand dollars (US) in the money needed to complete their respective tasks on the project.

"This shortfall can only increase now as a result of this latest schedule change", said Tynan. Both AMSAT leaders urged everyone to continue doing as much as they possibly can to insure the needed funds will be in place for the completion and launch of Phase 3-D.

Stay tuned to the AMSAT News Service for further details on the completion, testing and launch of the AMSAT Phase 3-D International Satellite.

[ANS thanks Karl Meinzer, DJ4ZC, Werner Haas, DJ5KQ, Bill Tynan, W3XO, and Keith Baker, KB1SF, for the information that went into this bulletin item.]

/EX

--

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

1050. NORAD Two-Line Orbital Element Sets (TLE965)

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5h9gh8$qid@blackbird.afit.af.mil>
Source record: 19404

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #965 -
Alouette 1
1 00424U 62049A 97082.33987744 .00000049 00000-0 46953-4 0 2764
2 00424 80.4662 8.3006 0024509 36.8751 323.4073 13.67890060720501
ATS 1
1 02608U 66110A 97078.03154193 -.00000123 00000-0 10000-3 0 67
2 02608 14.5441 349.8946 0006885 98.9655 261.1113 1.00287218 27620
ATS 3
1 03029U 67111A 97083.24926512 -.00000114 00000-0 10000-3 0 6367
2 03029 14.9031 356.7756 0011746 279.0585 250.4040 1.00272651107577
Starlette
1 07646U 75010A 97081.54635540 -.00000123 00000-0 17669-4 0 422
2 07646 49.8232 130.2630 0205942 69.8201 292.4713 13.82192214117466
LAGEOS
1 08820U 76039A 97082.27617794 .00000030 00000-0 00000+0 0 2739
2 08820 109.8286 121.6414 0043801 68.0556 292.4862 6.38664437231656
ETS-2
1 09852U 77014A 97075.24812633 -.00000382 00000-0 10000-3 0 1024
2 09852 13.5625 29.8496 0004469 149.6479 210.3788 1.00013830 20365
GOES 2
1 10061U 77048A 97078.58548946 .00000047 00000-0 10000-3 0 8145
2 10061 12.7179 33.9831 0009671 148.5621 30.0480 1.00258497 17205
IUE
1 10637U 78012A 97077.48084448 -.00000046 00000-0 10000-3 0 3725
2 10637 35.9077 79.1808 1350950 64.9779 19.2855 1.00082635 22681
GOES 3
1 10953U 78062A 97083.19765825 -.00000094 00000-0 10000-3 0 7920
2 10953 11.7401 36.8945 0001202 324.6150 144.4884 1.00264511 21865

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SeaSat 1
1 10967U 78064A 97080.90125149 .00000011 00000-0 48166-4 0 5619
2 10967 107.9962 29.3906 0002934 266.6361 93.4445 14.38158408981375
Nimbus 7
1 11080U 78098A 97082.53812521 -.00000050 00000-0 -77753-5 0 6577
2 11080 98.9110 296.6562 0008653 299.7057 60.3236 13.83685250929806
GOES 5
1 12472U 81049A 97077.99949741 .00000024 00000-0 10000-3 0 9888
2 12472 8.6309 47.4416 0004105 72.9389 287.1720 1.00323179 15850
Cosmos 1383
1 13301U 82066A 97083.07187195 .00000018 00000-0 37441-5 0 5747
2 13301 82.9283 288.5797 0026689 185.9985 174.0853 13.68081328735647
LandSat 4
1 13367U 82072A 97083.18664695 .00000006 00000-0 11081-4 0 555
2 13367 98.0373 130.9855 0007512 357.8596 2.2566 14.57198018781316
DMSP B5D2-1
1 13736U 82118A 97084.20914476 .00000053 00000-0 40645-4 0 2007
2 13736 98.6201 274.0514 0008179 294.8453 65.1880 14.25823790741114
IRAS
1 13777U 83004A 97083.51949156 .00000388 00000-0 29683-3 0 6141
2 13777 98.9683 269.1107 0013932 44.4734 315.7544 13.99275019392571
Cosmos 1447
1 13916U 83021A 97082.56377565 .00000037 00000-0 22721-4 0 6663
2 13916 82.9481 344.4051 0039250 91.9524 268.6113 13.74353219702110
TDRS 1
1 13969U 83026B 97083.17901385 -.00000296 00000-0 00000+0 0 7241
2 13969 9.3759 41.0255 0004028 311.2546 204.8005 1.00266119 24197
GOES 6
1 14050U 83041A 97071.31208863 -.00000014 00000-0 10000-3 0 6325
2 14050 7.4707 51.1272 0004269 32.9400 77.2104 1.00224929108889
AO-10
1 14129U 83058B 96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
LandSat 5
1 14780U 84021A 97082.57713765 .00000012 00000-0 12884-4 0 5998
2 14780 98.2971 145.8154 0002877 122.4765 237.6712 14.57071508694642
UO-11
1 14781U 84021B 97081.90045434 .00000113 00000-0 26887-4 0 9596
2 14781 97.8258 66.6257 0010828 282.7200 77.2797 14.69534230698586
Cosmos 1574
1 15055U 84062A 97083.90527839 .00000025 00000-0 11116-4 0 8660
2 15055 82.9540 38.9035 0026340 282.6804 77.1403 13.73645684639523
Cosmos 1602
1 15331U 84105A 97083.39655295 .00000210 00000-0 21772-4 0 5488
2 15331 82.5329 210.4767 0021662 99.7395 260.6271 14.84856921674559
ERBS
1 15354U 84108B 97083.10536415 -.00000125 00000-0 10237-4 0 2642
2 15354 56.9967 339.5363 0006256 63.8820 296.2842 14.95025936678705
NOAA 9
1 15427U 84123A 97083.88259301 .00000049 00000-0 49613-4 0 823
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2 15427 98.9096 154.4513 0014078 237.6045 122.3761 14.13845122633298
Mir
1 16609U 86017A 97083.15546444 .00002126 00000-0 31254-4 0 1457
2 16609 51.6528 153.2092 0010777 214.8552 145.1759 15.60752488633754
SPOT 1
1 16613U 86019A 97082.81278218 -.00000044 00000-0 00000+0 0 465
2 16613 98.7979 155.8376 0001303 102.8530 257.2787 14.19990452259995
Cosmos 1766
1 16881U 86055A 97083.99918927 .00000231 00000-0 24849-4 0 4643
2 16881 82.5172 267.5375 0020636 126.0350 234.2782 14.83827677575480
EGP
1 16908U 86061A 97080.89656592 -.00000083 00000-0 10000-3 0 1627
2 16908 50.0089 223.2047 0011602 0.1480 359.9357 12.44416228150989
NOAA 10
1 16969U 86073A 97083.84944193 .00000022 00000-0 27483-4 0 122
2 16969 98.5400 79.0947 0011936 255.8207 104.1644 14.25023356546572
MOS-1
1 17527U 87018A 97083.22290669 -.00000043 00000-0 00000+0 0 5251
2 17527 98.8963 144.5372 0019226 274.7138 85.1821 14.00417434514187
GOES 7
1 17561U 87022A 97080.36685443 -.00000171 00000-0 10000-3 0 3305
2 17561 3.6064 67.5776 0007252 245.5521 263.2600 1.00264945 20089
Kvant-1
1 17845U 87030A 97082.83531069 .00002375 00000-0 34180-4 0 9340
2 17845 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013567813
DMSP B5D2-3
1 18123U 87053A 97083.79725539 .00000013 00000-0 29129-4 0 8497
2 18123 98.7645 275.4259 0014044 170.4564 189.6887 14.15469509504190
RS-10/11
1 18129U 87054A 97081.12016086 .00000040 00000-0 27030-4 0 3347
2 18129 82.9242 303.0965 0012882 98.3471 261.9145 13.72376049488290
Meteor 2-16
1 18312U 87068A 97084.09675973 .00000015 00000-0 28684-6 0 5523
2 18312 82.5566 129.2851 0012716 145.4173 214.7822 13.84093110485035
Meteor 2-17
1 18820U 88005A 97082.81333293 .00000050 00000-0 31011-4 0 2110
2 18820 82.5424 184.6525 0015482 219.2209 140.7831 13.84770878462225
DMSP B5D2-4
1 18822U 88006A 97083.06560546 -.00000001 00000-0 17838-4 0 4899
2 18822 98.3814 267.7570 0005342 272.3803 87.6764 14.23220359474384
Glonass 34
1 19163U 88043A 97083.20563368 .00000027 00000-0 10000-3 0 1651
2 19163 65.3728 76.4057 0010578 150.3243 209.7405 2.13102320 68208
Glonass 36
1 19165U 88043C 97080.91667734 .00000033 00000-0 10000-3 0 5718
2 19165 65.3564 76.4333 0004988 325.5035 34.4893 2.13101830 68779
METEOSAT 3
1 19215U 88051A 97081.02564505 -.00000067 00000-0 00000+0 0 3102
2 19215 3.8264 66.3399 0004035 162.9357 197.4106 0.96947116 19870
OKEAN 1
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1 19274U 88056A 97080.31665631 .00000299 00000-0 34197-4 0 1625
2 19274 82.5134 12.1735 0018377 296.1999 63.7324 14.82594794470434
Meteor 3-2
1 19336U 88064A 97081.75043681 .00000051 00000-0 10000-3 0 5599
2 19336 82.5424 329.3092 0016051 261.7191 98.2107 13.16980979416143
Glonass 39
1 19503U 88085C 97083.76316125 -.00000003 00000-0 10000-3 0 4572
2 19503 65.4862 315.2341 0012022 168.9236 191.1727 2.13101654 66320
NOAA 11
1 19531U 88089A 97083.83329424 .00000038 00000-0 45083-4 0 9001
2 19531 99.1635 114.9310 0011654 168.8628 191.2803 14.13125601438080
TDRS 3
1 19548U 88091B 97063.65320704 -.00000197 00000-0 10000-3 0 2754
2 19548 3.0118 70.5854 0003980 307.8135 103.8290 1.00264087 18143
Glonass 40
1 19749U 89001A 97082.86181328 .00000027 00000-0 10000-3 0 6676
2 19749 65.3311 75.9255 0007784 255.3506 104.5761 2.13101541 63816
Glonass 41
1 19750U 89001B 97081.03952509 .00000032 00000-0 10000-3 0 5779
2 19750 65.3368 76.0556 0008686 233.0028 126.9482 2.13101724 63798
GPS BII-01
1 19802U 89013A 97080.35640461 .00000034 00000-0 00000+0 0 3781
2 19802 55.4613 99.5894 0033774 197.6375 162.3067 2.00566305 59277
Akebono
1 19822U 89016A 97081.10851997 .00005677 00000-0 31739-3 0 8902
2 19822 75.1257 321.8645 3718164 255.5610 61.2325 7.96726405188769
Meteor 2-18
1 19851U 89018A 97081.45927742 .00000040 00000-0 22524-4 0 5501
2 19851 82.5180 59.1968 0012810 279.1968 80.7743 13.84427906407332
MOP-1
1 19876U 89020B 97078.42636409 -.00000089 00000-0 00000+0 0 2524
2 19876 2.5412 70.7379 0018350 282.4843 77.7048 0.97108892 9295
TDRS 4
1 19883U 89021B 97078.05360941 -.00000287 00000-0 10000-3 0 3163
2 19883 0.4376 86.5743 0003187 259.6671 168.6922 1.00269448201864
GPS BII-02
1 20061U 89044A 97081.19428756 -.00000002 00000-0 10000-3 0 3655
2 20061 54.0865 274.8499 0163836 224.1277 134.6013 2.00562938 57032
Nadezhda 1
1 20103U 89050A 97083.81790698 .00000055 00000-0 42215-4 0 1117
2 20103 82.9544 261.6989 0037994 354.0662 6.0052 13.73875913387210
GPS BII-03
1 20185U 89064A 97079.39873278 .00000030 00000-0 00000+0 0 4056
2 20185 55.2550 100.0381 0017618 337.6152 22.3858 2.00556114 55577
GMS 4
1 20217U 89070A 97082.30965856 -.00000375 00000-0 10000-3 0 5439
2 20217 2.3515 73.5332 0001075 111.5421 227.4289 1.00270629 28215
INTERCOSMOS 24
1 20261U 89080A 97084.06226170 .00000140 00000-0 33478-4 0 5752
2 20261 82.5865 91.3215 1242590 122.9143 249.7706 12.47394035340924
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GPS BII-04
1 20302U 89085A 97079.56192902 -.00000038 00000-0 10000-3 0 3869
2 20302 53.1784 214.6869 0027012 192.4301 167.4622 2.00572019 54378
Meteor 3-3
1 20305U 89086A 97083.55066046 .00000044 00000-0 10000-3 0 7800
2 20305 82.5418 290.7399 0007789 355.3734 4.7299 13.04418695354756
COBE
1 20322U 89089A 97081.48719687 -.00000237 00000-0 -12332-3 0 2911
2 20322 98.9344 97.8917 0009311 347.8988 12.1954 14.03457753375961
Kvant-2
1 20335U 89093A 97082.83531069 .00002375 00000-0 34180-4 0 8483
2 20335 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013416825
GPS BII-05
1 20361U 89097A 97084.07150718 -.00000046 00000-0 00000+0 0 1905
2 20361 56.1661 42.1818 0089839 140.5515 220.0722 2.00566753 43940
COSMOS 2054 (Altair-1)
1 20391U 89101A 97076.72917062 -.00000152 00000-0 00000+0 0 5249
2 20391 4.3599 61.7257 0001993 226.7912 133.4132 1.00270353 26743
SPOT 2
1 20436U 90005A 97081.24882215 -.00000044 00000-0 00000+0 0 2021
2 20436 98.7329 157.1346 0000530 95.6665 264.4572 14.20025678371306
UO-14
1 20437U 90005B 97080.77328644 .00000041 00000-0 32607-4 0 2568
2 20437 98.5205 164.3186 0012558 106.2724 253.9842 14.29952621373725
AO-16
1 20439U 90005D 97081.00088468 -.00000043 00000-0 63777-8 0 538
2 20439 98.5370 167.2839 0011731 102.5647 257.6850 14.30000537373779
DO-17
1 20440U 90005E 97083.30428691 -.00000016 00000-0 10616-4 0 553
2 20440 98.5431 170.3494 0012303 96.8971 263.3601 14.30144101374137
WO-18
1 20441U 90005F 97080.29176462 -.00000026 00000-0 64616-5 0 578
2 20441 98.5380 167.2978 0012620 105.7850 254.4724 14.30111768373703
LO-19
1 20442U 90005G 97080.26608133 .00000007 00000-0 19196-4 0 548
2 20442 98.5471 167.9014 0013221 104.9193 255.3457 14.30225546373727
GPS BII-06
1 20452U 90008A 97080.48181977 -.00000006 00000-0 10000-3 0 2915
2 20452 54.0581 155.4666 0065453 98.6666 262.0931 2.00557932 52378
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2 20478 99.0961 155.8132 0005107 196.1943 163.9059 13.93971830283705
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2 20479 99.0315 59.4363 0539695 213.7187 142.8466 12.83349882333566
FO-20
1 20480U 90013C 97080.47551300 -.00000010 00000-0 52984-4 0 9530
2 20480 99.0331 58.6017 0540482 215.9765 140.3797 12.83236835333456
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2 20508 82.9512 36.1124 0043825 306.6627 53.0502 13.73519423354424
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2 20510 82.5259 328.4103 0019798 126.7044 233.5991 14.78674492380612
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1 20608U 90043B 97082.24899931 .00000187 00000-0 29221-4 0 2565
2 20608 89.9277 170.9875 0104954 158.8042 201.7544 14.64985711367148
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1 20619U 90045A 97079.94376883 -.00000009 00000-0 10000-3 0 3792
2 20619 65.0557 314.4700 0026060 211.0177 148.8981 2.13102479 53208
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2 20620 65.0597 314.3522 0008546 54.3707 305.7660 2.13102528 53305
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1 20621U 90045C 97081.53774832 -.00000004 00000-0 10000-3 0 9701
2 20621 65.0843 314.4582 0010799 193.1100 166.9291 2.13102795 53278
Kristall
1 20635U 90048A 97082.83531069 .00002375 00000-0 34180-4 0 6408
2 20635 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013387656
ROSAT
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2 20638 52.9916 120.8129 0010605 251.7575 108.2258 15.07576216374459
Meteor 2-19
1 20670U 90057A 97084.17861974 -.00000044 00000-0 -52422-4 0 2438
2 20670 82.5474 124.7121 0015331 180.8991 179.2143 13.84123766340616
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2 20712 17.7409 136.2103 7182067 228.9392 42.5591 2.35864916 49715
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2 20724 55.1027 97.4432 0137023 189.8623 169.9213 2.00564324 47041
Feng Yun1-2
1 20788U 90081A 97083.54385218 .00000109 00000-0 10000-3 0 2915
2 20788 98.8190 85.4229 0015193 73.2338 287.0621 14.01409432335361
Meteor 2-20
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2 20830 56.0926 40.2065 0062955 94.8612 265.8387 2.00571656 47661
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1 20959U 90103A 97083.15745294 .00000033 00000-0 00000+0 0 1641
2 20959 55.2943 99.5430 0113262 245.3257 113.5477 2.00570371 46292
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2 20978 98.5666 158.2395 0080178 61.8868 299.0390 14.32730968329900
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2 21007 65.3311 75.4788 0031955 174.9584 185.1039 2.13101084 48875
Glonass 49
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2 21008 65.3094 75.2665 0008470 271.1120 88.8004 2.13098728 48958
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RS-12/13
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2 21140 1.0911 78.2385 0001187 201.5202 76.9697 1.00218861 24371
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2 21152 82.9247 297.9678 0040784 283.5550 76.1053 13.73544666302264
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2 21218 64.7982 313.8901 0006598 300.4560 59.5374 2.13102530 46418
GRO
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Meteor 3-4
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2 21232 82.5412 175.1402 0013403 177.4059 182.7138 13.16474738284321
NOAA 12
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2 21263 98.5433 100.6584 0012467 174.5927 185.5387 14.22696214304367
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2 21552 56.3731 38.0352 0073592 256.4303 102.7322 2.00569456 41887
ERS-1
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TDRS 5
1 21639U 91054B 97078.45644906 .00000064 00000-0 10000-3 0 1513
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Meteor 3-5
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2 21701 56.9853 71.6414 0005378 97.5717 262.5929 14.96577645302139
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2 21798 98.9288 107.1191 0012939 150.0436 210.1477 14.14027583274590
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1 21854U 92005B 97081.31857620 .00000028 00000-0 00000+0 0 4267
2 21854 65.2633 74.9393 0016719 9.9708 350.0791 2.13104781 40038
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JERS-1
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Glonass 57
1 22057U 92047B 97081.11363969 -.00000005 00000-0 00000+0 0 3079
2 22057 64.6619 313.8936 0008278 331.3145 28.7065 2.13102813 36084
Glonass 58
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S80/T
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2 22078 66.0795 326.6575 0014546 228.0811 131.8960 12.86585040216590
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GPS BIIA-17
1 22275U 92089A 97079.39623687 -.00000021 00000-0 00000+0 0 8691
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TDRS 6
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1 22446U 93007A 97082.50197627 -.00000004 00000-0 10000-3 0 8628
2 22446 54.0290 275.6845 0110503 11.0077 349.2236 2.00565559 30169
Glonass 59
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NOAA 13
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GPS BIIA-22
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Meteor 2-21
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2 22782 82.5499 127.3250 0020950 282.4196 77.4624 13.83070468179476
UFO F2
1 22787U 93056A 97 72.23671468 .00000000 00000-0 10000-3 0 7106
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SPOT 3
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STELLA
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AO-27
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IO-26
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KO-25
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METEOSAT 6
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HST Array
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2 22920 28.4726 85.7207 0003879 231.1168 128.9064 15.07762440181831
Meteor 3-6
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TUBSAT-B
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GOES 8
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MSTI 2
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2 23101 97.0739 279.8768 0011531 7.9635 352.1803 15.57068180162824
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STRV-1B
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Nadezhda 4
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Glonass 67
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1 23233U 94057A 97083.89541935 .00000073 00000-0 62631-4 0 1612
2 23233 98.7905 144.0174 0013401 102.3735 257.8934 14.12787902132469
OKEAN 1-7
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2 23327 0.6014 95.1620 0001859 334.0930 55.5348 1.00270889 8810
RESURS 1-3
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Glonass 69
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Glonass 70
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LUCH (Altair-2)
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RS-15
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NOAA 14
1 23455U 94089A 97083.89744563 .00000144 00000-0 10366-3 0 9822
2 23455 98.9804 35.0340 0009299 164.7059 195.4394 14.11655297115053
Glonass 71
1 23511U 95009A 97081.05121924 -.00000006 00000-0 00000+0 0 3129
2 23511 64.5482 314.4649 0004869 220.8024 139.2265 2.13104191 15892
Glonass 72
1 23512U 95009B 97083.04993472 -.00000004 00000-0 00000+0 0 3168
2 23512 64.5402 314.3967 0006570 331.2925 28.7383 2.13101605 15930
Glonass 73
1 23513U 95009C 97083.34029392 -.00000004 00000-0 00000+0 0 3466
2 23513 64.5437 314.3988 0011825 200.9520 159.0634 2.13103429 15948
GMS 5
```

```
1 23522U 95011B 97069.66639625 -.00000312 00000-0 10000-3 0 2101
2 23522 0.4401 8.4962 0000751 179.5029 0.0565 1.00266073 7121
DMSP B5D2-8
1 23533U 95015A 97083.89484205 .00000108 00000-0 81982-4 0 9130
2 23533 98.8472 88.8226 0007378 348.4022 11.6983 14.12781339103267
OSC 1
1 23545U 95017A 97082.46743867 .00000435 00000-0 14031-3 0 2090
2 23545 69.9707 242.0012 0013395 163.9511 196.2034 14.45496366104016
OSC 2
1 23546U 95017B 97082.84644290 .00000095 00000-0 43944-4 0 2439
2 23546 69.9766 241.3685 0012267 154.9524 205.2209 14.45511032104070
Microlab 1
1 23547U 95017C 97082.84219911 .00000162 00000-0 62599-4 0 1811
2 23547 69.9772 241.0183 0012690 157.0235 203.1464 14.45668530104088
OFEQ 3
1 23549U 95018A 97082.99855681 .00007661 00000-0 16055-3 0 4932
2 23549 143.3611 142.2714 0201041 346.1541 13.3772 15.22649908108915
GFZ-1
1 23558U 86017JE 97083.56412557 .00002454 00000-0 30983-4 0 2206
2 23558 51.6509 137.0040 0005131 192.4022 167.6848 15.64157703633861
ERS-2
1 23560U 95021A 97081.25456594 -.00000031 00000-0 46224-5 0 3462
2 23560 98.5511 157.3118 0001237 99.5292 260.6031 14.32249008100374
Spektr
1 23579U 95024A 97082.83531069 .00002375 00000-0 34180-4 0 6014
2 23579 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013105137
GOES 9
1 23581U 95025A 97082.70946530 .00000075 00000-0 10000-3 0 3338
2 23581 0.1767 93.1532 0002538 266.6670 301.4339 1.00279100 6724
Helios 1A
1 23605U 95033A 97083.60407259 .00000074 00000-0 23159-4 0 4570
2 23605 98.1483 21.6625 0001681 69.0430 291.0952 14.63824536 91584
UPM SAT 1
1 23606U 95033B 97083.86313872 .00000162 00000-0 37303-4 0 2613
2 23606 98.1288 23.9061 0008586 23.1919 336.9672 14.67367434 91874
CERISE
1 23607U 95033C 97082.35422625 .00000058 00000-0 19032-4 0 1638
2 23607 98.1303 22.1685 0007157 29.4143 330.7462 14.67008616 91667
TDRS 7
1 23613U 95035B 97081.60521294 .00000087 00000-0 00000+0 0 3168
2 23613 1.2563 81.4223 0003595 259.2237 246.3926 1.00278016 6177
Glonass 74
1 23620U 95037A 97083.59318595 .00000009 00000-0 00000+0 0 2642
2 23620 64.8187 194.5879 0018394 166.4198 193.6327 2.13102990 12980
Glonass 75
1 23621U 95037B 97082.36351722 -.00000005 00000-0 00000+0 0 2722
2 23621 64.8251 194.6341 0018240 177.8602 182.1439 2.13102357 12955
Glonass 76
1 23622U 95037C 97083.82920134 .00000012 00000-0 00000+0 0 2776
2 23622 64.8177 194.5877 0036591 165.2333 194.8796 2.13102583 12987
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Prognoz-M2
1 23632U 95039A 97079.84382510 -.00000627 00000-0 00000+0 0 1217
2 23632 70.6480 248.0880 7527062 328.1230 336.4160 0.26349400 1586
SICH-1
1 23657U 95046A 97081.68537953 .00000150 00000-0 19670-4 0 1555
2 23657 82.5335 304.2122 0026156 224.6758 135.2345 14.73539201 83840
RADARSAT
1 23710U 95059A 97082.17340711 .00000142 00000-0 72025-4 0 2508
2 23710 98.5797 90.8806 0001268 58.0484 302.0818 14.29988611 72119
Glonass 79
1 23734U 95068A 97080.19332531 -.00000029 00000-0 00000+0 0 2611
2 23734 64.8213 194.6218 0017813 323.9510 35.9182 2.13102077 9874
Glonass 78
1 23735U 95068B 97083.66072931 .00000010 00000-0 00000+0 0 2475
2 23735 64.8153 194.4939 0006902 210.3800 149.5839 2.13124990 9941
Glonass 77
1 23736U 95068C 97084.18181076 .00000015 00000-0 00000+0 0 2335
2 23736 64.8090 194.4931 0007583 198.3959 161.5844 2.13102843 9954
XTE
1 23757U 95074A 97084.18823944 .00000537 00000-0 15853-4 0 1359
2 23757 22.9837 298.7701 0013556 181.1532 178.8936 14.97795194 67643
Polar
1 23802U 96013A 97080.81642604 .00000121 00000-0 00000+0 0 1196
2 23802 86.3776 23.0254 6538487 272.5196 19.9051 1.36265238 5346
1996010E
1 23824U 96010E 97080.37317262 .00000394 00000-0 10000-3 0 1891
2 23824 47.4071 168.9746 6838749 105.3933 338.4316 2.83938650 9252
GPS BIIA-25
1 23833U 96019A 97083.09937232 -.00000058 00000-0 00000+0 0 1632
2 23833 54.6199 336.5853 0026847 142.8809 217.3544 2.00565444 7291
Priroda
1 23848U 96023A 97082.83531069 .00002375 00000-0 34180-4 0 2907
2 23848 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013 52227
MSX
1 23851U 96024A 97083.50000000 -.00000047 00000-0 00000+0 0 2176
2 23851 99.4091 75.0297 0008119 103.4877 73.8481 13.97391725 46640
SAX
1 23857U 96027A 97082.78362916 .00001290 00000-0 51806-4 0 602
2 23857 3.9550 232.2578 0013931 91.6958 268.4724 14.91763895 48966
MSTI 3
1 23868U 96031A 97081.60624030 .00000910 00000-0 19879-4 0 1251
2 23868 97.1192 273.2344 0007865 235.4665 124.5823 15.46762121 47843
TOMS-EP
1 23940U 96037A 97083.58964062 .00001816 00000-0 82069-4 0 974
2 23940 97.4233 351.5912 0014295 77.8609 282.4236 15.22148802 40275
GPS BIIA-26
1 23953U 96041A 97080.02662391 .00000031 00000-0 00000+0 0 1237
2 23953 55.1430 97.1732 0033177 328.5743 31.3586 2.00555039 5026
ADEOS
1 24277U 96046A 97082.25841877 -.00000044 00000-0 00000+0 0 1546
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2 24277 98.6080 161.1390 0001836 82.1625 277.9764 14.27646736 31101
FO-29
1 24278U 96046B 97083.22454597 -.00000083 00000-0 -50302-4 0 665
2 24278 98.5517 136.0037 0352151 46.4239 316.5538 13.52629158 29638
FAST
1 24285U 96049A 97083.14977081 .00001216 00000-0 11767-3 0 742
2 24285 82.9745 78.5564 2206925 143.1470 234.3830 10.81904127 23224
1996049B
1 24286U 96049B 97083.07914046 .00001022 00000-0 96323-4 0 856
2 24286 82.9922 78.7234 2206586 142.9145 234.7019 10.82316063 23216
Microsat
1 24291U 96050A 97080.43488895 .00031179 62863-5 22642-3 0 1599
2 24291 62.7941 68.5001 0566949 136.9320 227.7612 14.75844060 29953
MO-30
1 24305U 96052B 97082.89094966 .00000204 00000-0 20364-3 0 842
2 24305 82.9283 57.6059 0031311 79.7715 280.6940 13.73091658 27354
GPS BIIA-27
1 24320U 96056A 97082.87541274 -.00000003 00000-0 00000+0 0 726
2 24320 54.6192 277.0928 0050403 98.9939 261.5968 2.00573180 3741
SAC-B/HETE
1 24645U 96061A 97082.91627427 .00000510 00000-0 32587-4 0 544
2 24645 37.9757 11.8585 0049403 330.3043 29.4919 15.14918085 21127
Soyuz TM-25
1 24717U 97003A 97082.83531069 .00002375 00000-0 34180-4 0 270
2 24717 51.6513 154.8217 0010148 212.9456 147.0348 15.60752013633701
INTELSAT 801
1 24742U 97009A 97083.97355595 .00000117 00000-0 00000+0 0 415
2 24742 0.0168 263.5973 0002455 157.1745 159.2226 1.00274398 299
1997009B
1 24743U 97009B 97083.43132870 .00105707 17869-5 43603-2 0 164
2 24743 6.8523 343.9665 7325472 196.1920 112.9418 2.26300820 526
ZEYA
1 24744U 97010A 97082.42414011 .00002019 00000-0 69951-4 0 224
2 24744 97.2817 349.0890 0009293 42.0736 318.1088 15.30961763 2962
1997010B
1 24745U 97010B 97083.20504010 .00000981 00000-0 35023-4 0 152
2 24745 97.2815 349.8762 0007913 43.6643 316.5224 15.31195922 3083
1997010C
1 24746U 97010C 97084.19019957 .00008346 00000-0 20376-3 0 150
2 24746 97.2769 351.2021 0033115 175.9871 184.1648 15.40525305 3252
1997010D
1 24747U 97010D 97082.52930534 .00009123 00000-0 24182-3 0 141
2 24747 97.2774 349.4385 0023230 188.0601 172.0257 15.38281325 2905
TEMPO 2
1 24748U 97011A 97084.17046054 -.00000069 00000-0 00000+0 0 400
2 24748 0.5687 265.7404 0008084 94.3201 134.1444 1.00272796 274
1997011B
1 24749U 97011B 97083.87649401 .00122883 -26180-6 12579-2 0 186
2 24749 25.7331 66.9369 6126392 200.1412 117.8057 3.95528054 658
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1051. Auto Tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5h9jk5$krv@dsk92.itg.ti.com>
Source record: 19405

Does the Auto Tracker rotor and radio control hardware compare favorably with the KCT and other hardware? It looks like it would be very user friendly with Wintrak Pro. Anyone have experience with this box and other hardware?

Ken K5MBV

1052. HELP required....

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Keith Haywood <g8hxe@zetnet.co.uk>
Message-ID: <19970325235338717 38@zetnet.co.uk>
Source record: 19406

Hi, I'm just getting started again on the satellite scene after a break of many years (I was last active on OSCAR6 and 7 !). Please can anyone give me the 70 cm UPLINK frequencies for the current satellites - the low orbit ones only please. I have looked in the back issues of the limited number of magazines that I have but can't find them.

Thanks and 73's Keith.

--
Keith Haywood. Manchester. U/K.
email home g8hxe@zetnet.co.uk
work k.m.haywood@man0505.wins.icl.co.uk
packet g8hxe@gb7odm

1053. Re: Looking for keplerian data of the moon ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: drx1001@ibm.net
Message-ID: <5h9lff$23ha$1@news-s01.ny.us.ibm.net>
Source record: 19407

In article <01bc37e7$12dd5740$LocalHost@pass>, "Geert PIRENS" <pass@glo.be> wrote:
>Hello your all,
>I'm looking for keplerian data of the moon, If some of you EME hams must
>use this to I think?
>Can someone tells mewhere to find it?
>Bye
>Pirens G. ONL2057
look in www.amsat.com I think the address is correct if not do search for
amsat.Their home page should get you going in the right direction
good luck KF4FCO-em70 tim

1054. Re: Looking for keplerian data of the moon ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Casey McCullough <askey@erols.com>
Message-ID: <333887DD.45BB@erols.com>
Source record: 19408

tim wrote:
>
> In article <01bc37e7$12dd5740$LocalHost@pass>, "Geert PIRENS" <pass@glo.be> wrote:
> >Hello your all,
> >I'm looking for keplerian data of the moon, If some of you EME hams must
> >use this to I think?
> >Can someone tells mewhere to find it?
> >Bye
> >Pirens G. ONL2057
> look in www.amsat.com I think the address is correct if not do search for
> amsat.Their home page should get you going in the right direction
> good luck KF4FCO-em70 tim

Close on the address: try www.amsat.org

Regards

1055. ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls008.1997@arrl.org>
Source record: 19409
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS008
ARLS008 Phase 3D delayed

ZCZC AS08
QST de W1AW
Space Bulletin 008 ARLS008
From ARRL Headquarters
Newington, CT March 25, 1997
To all radio amateurs

SB SPACE ARL ARLS008
ARLS008 Phase 3D delayed

Modifications to the Ariane 5 rocket's electrical systems and software will mean another costly delay for the Phase 3D Amateur Radio satellite. The European Space Agency (ESA) announced March 24, that the Ariane 502 which will carry Phase 3D aloft from Kourou, French Guyana, has been rescheduled for a mid-September launch. ESA said the schedule change was in response to recommendations of a board of inquiry that looked into the causes for the failure of the Ariane 501 launch last year.

''This additional action, which does not call into question the design of the launcher nor its flight readiness, is intended to improve its robustness, increase the operational margins and allow for degraded operating modes,'' an ESA press release said.

AMSAT-NA President Bill Tynan, W3XO, said a complete analysis had not yet been done but that he believed the delay would add ''on the order of 100,000 dollars'' to Phase 3D's cost. That's on top of an estimated 200,000 dollars combined funding shortfall that AMSAT-NA and AMSAT-DL were reporting in late February. So far, AMSAT-DL has invested nearly 2 million dollars in Phase 3D, compared to nearly 1.4 million dollars for AMSAT-NA. ''Every month adds costs,'' Tynan concluded.

Phase 3D fund-raising efforts will continue. Earlier this year, the Japanese AMSAT group, JAMSAT, helped bridge the funding gap by transferring 50,000 dollars to AMSAT-NA. The money represented excess donations from JAMSAT members for the Phase 3D SCOPE camera. The completed SCOPE camera, designed and built entirely by JAMSAT, has been installed and successfully powered up at the Phase 3D Integration Laboratory in Orlando, Florida, where preparation and testing continue.

Tynan emphasized that the Phase 3D team plans to take maximum advantage of the schedule change to perform additional testing. ''It's not time being wasted,'' Tynan said, adding that the Phase 3D team ''will use the delay to be even more sure about the spacecraft's readiness.''

Prior to announcement of the latest delay, AMSAT-NA Vice President Keith Baker, KB1SF, had been reporting that AMSAT was racing to meet the early July launch schedule and that work on the satellite was moving along swiftly.

A series of pictures of Phase 3D work in progress is available via the AMSAT-NA Web site at http://www.amsat.org. Depending on its workload, the integration team hopes to be able to update these photos as work progresses.
NNNN
/EX

1056. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2503972021320001@cqtlm-ppp094.dowco.com>
Source record: 19410

In article <3337a1b2.251116@news.protec.it>, ik2wxx@ctrade.it wrote:

> I've been out from the newsgroup and the radio quite a while.
> Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>
> Roberto Sonzogni

It burned up in the atmosphere around Christmas time.

1057. Re: mars space prob

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Foo <foo@usa.net>
Message-ID: <3338AB9E.668E@usa.net>
Source record: 19411

s wrote:
>
> hi
> Where i can see keplerian elements of mars space prob or
> other space prob?
>
> Thank to send me a email.

Such a probe would not be in orbit; how could it have Keps?

1058. Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-03-25 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <3338C8A1.3545@cyberramp.net>
Source record: 19412

http://www.cyberramp.net/~rnewland

1059. Mailing List Reflector

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3339B31F.4FBE@primenet.com>
Source record: 19272
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

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1060. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3339C6F9.1ED1@ix.netcom.com>
Source record: 19273

Todd Jonz wrote:
>
> w1aw@arrl.org writes:
>
> > The European Space Agency (ESA) announced March 24, that the Ariane
> > 502 which will carry Phase 3D aloft from Kourou, French Guyana, has
> > been rescheduled for a mid-September launch....AMSAT-NA President
> > Bill Tynan, W3XO, said a complete analysis had not yet been done but
> > that he believed the delay would add ''on the order of 100,000
> > dollars'' to Phase 3D's cost.
>
> Perhaps I'm just being particularly thick today, but I can't imagine why
> it would cost $50K/month *not* to launch this bird. Any thoughts?
>
> Todd, KB6JXT

It's like when the Post Office raise the rates for postage - they have to pay the extra storage costs!

Sorry, I couldn't resist, but I, too, am curious why the delay costs so much.

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1061. HALO Space Launch Attempt

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: Ron Creel <rcreel@tng.net>
Message-ID: <3338a7c5.0@news.tng.net>
Source record: 19413

This is a multi-part message in MIME format.

---------------------------------30262576114313
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii

Hello,

I am attaching a short note about our attempt on Saturday.

Please note that referenced URL should be: iquest.com/~hal5 --
leave off the "www" for some unknown reason.

If you have any other questions, I'd be happy to receive e-mail
messages and try to answer questions as best I can.

Ron Creel

---------------------------------30262576114313
Content-Transfer-Encoding: 7bit
Content-Type: text/plain

Proud of Space Launch Attempt

Yes, I'm very proud of the HALO (High Altitude Lift Off) Space Launch
Attempt which the HAL5 (Huntsville Alabama L5 Society) made on March
22 in North Carolina. Note: See more about HALO on our web page at
http://www.iquest.com/~hal5

Everything was going great - the 54,000 cubic foot balloon launch
platform (largest balloon we had inflated thus far) was ready. The
Federal Aviation Administration had given us an extension on our
balloon launch window, rocket systems were ready, and the wind was
even cooperating.

Then the unexpected jumped up to squelch our efforts. Several squib
devices were erroneously activated by their connected timer. The timer
was evidently miscued by stray signals from the color TV camera onboard
the balloon gondola containing the HALO rocket. This removed our
redundancy for assuring that the balloon could untimately be made safe
(i.e. cut down) after the planned rocket ignition over the Atlantic
Ocean.

Therfore, for safety reasons, the balloon launch and subsequent HALO
rocket launch were postponed. Since we had nearly exhausted our
supply of helium and the predictions of wind conditions for the next
day were not favorable, (and the all-volunteer team had jobs to go to
on Monday) a decision was ultimately made to come back for another

launch attempt at another time.

In the face of this extreme disappointment, I am very proud of all of the HALO team. A great amount of time, effort, and funds have been expended by a very dedicated team of "amateurs" to get the HALO Space Launch attempt to this point of progress. Yes, we are very disappointed at getting so close to our goal and being slapped in the face. But we are not discouraged.

We are determined and we'll be back!

Ron Creel, HALO Team Member

---------------------------------30262576114313--

1062. Re: mars space prob

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <334ee137.2173404370@news.sci.fi>
Source record: 19414

Foo <foo@usa.net> wrote:

>s wrote:
>>
>> hi
>> Where i can see keplerian elements of mars space prob or
>> other space prob?
>>
>> Thank to send me a email.
>
>Such a probe would not be in orbit; how could it have Keps?

While the Mars probe is not orbiting the Earth, it does not have any NASA two line elements, which could be plugged into any traditional satellite tracking programs.

The Mars probe definitely has classical keplerian heliocentric (relative to the sun) elements. Many programs intended for calculation of the position of planets and comets will accept these heliocentric keplerian elements, thus if you can find the elements for the Mars probe, you can calculate the position for it using these programs.

During the complex Earth-Venus-Earth-Jupiter flight path of the Galileo space probe, elements were published for each leg in sci.space.tech or sci.space.science newsgroups. These groups would be a better place to ask for them. Also NASA and JPL www-pages might be a good place to search.

Paul OH3LWR

1063. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: ik2wxx@ctrade.it
Message-ID: <3338e334.1761520@news.protec.it>
Source record: 19415

On Tue, 25 Mar 1997 20:41:00 GMT, orion**@capital.net wrote:

>>Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>Into the atmosphere. It burned up in December of '96.
This is the worse news I would expect....
AO-13 was my first and only satellite.

Next year I will live in a new house, and I hope to go on satellite again. Which active satellites have the mode B now (2m down, 70cm up) ?

Is Phase3D on air yet ?

Roberto Sonzogni

ik2wxx@ctrade.it
http://www.geocities.com/SunsetStrip/4249/

PAGINE DISPONIBILI:
Compleanni Musicisti (+ di 1000) .../complean.htm
Musicisti Italiani Indipendenti .../mii.htm
File MIDI Italiani .../midi_ita.htm
"i 5 Cereali" .../5cereali.htm

1064. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703261619.IAA12696@mailbox1.ucsd.edu>
Source record: 19416

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 8b940.wrk; Wed, 26 Mar 1997 17:28:40 -1
Received: from [195.120.135.127] by infocomm.it id 8b8f0.wrk; Wed, 26 Mar 1997 17:28:30 -1
Received: from [195.120.135.127] by infocomm.it id 8b8a0.wrk; Wed, 26 Mar 1997 17:28:20 -1
Received: from [195.120.135.127] by infocomm.it id 8b840.wrk; Wed, 26 Mar 1997 17:28:10 -1
Received: from [195.120.135.127] by infocomm.it id 8b800.wrk; Wed, 26 Mar 1997 17:28:00 -1
Received: from [195.120.135.127] by infocomm.it id 8b790.wrk; Wed, 26 Mar 1997 17:27:50 -1
Received: from [195.120.135.127] by infocomm.it id 8b740.wrk; Wed, 26 Mar 1997 17:27:40 -1
Received: from [195.120.135.127] by infocomm.it id 8b6f0.wrk; Wed, 26 Mar 1997 17:27:30 -1
Received: from [195.120.135.127] by infocomm.it id 8b690.wrk; Wed, 26 Mar 1997 17:27:20 -1
Received: from [195.120.135.127] by infocomm.it id 8b640.wrk; Wed, 26 Mar 1997 17:27:10 -1
Received: from [195.120.135.127] by infocomm.it id 8b5d0.wrk; Wed, 26 Mar 1997 17:27:00 -1
Received: from [195.120.135.127] by infocomm.it id 8b580.wrk; Wed, 26 Mar 1997 17:26:50 -1
Received: from [195.120.135.127] by infocomm.it id 8b530.wrk; Wed, 26 Mar 1997 17:26:40 -1
Received: from [195.120.135.127] by infocomm.it id 8b4e0.wrk; Wed, 26 Mar 1997 17:26:30 -1
Received: from [195.120.135.127] by infocomm.it id 8b490.wrk; Wed, 26 Mar 1997 17:26:20 -1
Received: from [195.120.135.127] by infocomm.it id 8b440.wrk; Wed, 26 Mar 1997 17:26:10 -1
Received: from [132.239.1.54] by infocomm.it id 8b340.wrk; Wed, 26 Mar 1997 17:25:46 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA03917 for <ham-space-list@mailbox.ucsd.edu>; Wed, 26 Mar
1997 04:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05474
sendmail 8.8.5/UCSD8.3
Wed, 26 Mar 1997 04:31:25 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05438
sendmail 8.8.5/UCSD8.3
Wed, 26 Mar 1997 04:31:19 -0800 (PST)
Message-Id: <199703261231.EAA05438@noc.ucsd.edu>
Date: Wed, 26 Mar 97 04:31:17 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #113
To: Ham-Space@ucsd.edu

Ham-Space Digest Wed, 26 Mar 97 Volume 97 : Issue 113

Today's Topics:
AO-13 ? (2 msgs)
ARLS008 Phase 3D delayed
HELP WITH TRAKBOX
Looking for keplerian data of the moon ?
mars space prob (2 msgs)
P3D LAUNCH BULLETIN
WXSAT reception

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 25 Mar 1997 20:41:00 GMT
From: orion**@capital.net
Subject: AO-13 ?

On Tue, 25 Mar 1997 09:59:44 GMT, ik2wxx@ctrade.it (Roberto Sonzogni)
wrote:

>I've been out from the newsgroup and the radio quite a while.
>Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>
>Roberto Sonzogni

Into the atmosphere. It burned up in December of '96.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

Date: Wed, 26 Mar 1997 11:53:44 GMT
From: ik2wxx@ctrade.it (Roberto Sonzogni)
Subject: AO-13 ?

On Tue, 25 Mar 1997 20:41:00 GMT, orion**@capital.net wrote:

>>Amsat does not send AO-13 keps anymore....where did AO-13 go ?
>Into the atmosphere. It burned up in December of '96.
This is the worse news I would expect....
AO-13 was my first and only satellite.

Next year I will live in a new house, and I hope to go on satellite again. Which
active satellites have the mode B now (2m down, 70cm up) ?

Is Phase3D on air yet ?

Roberto Sonzogni

ik2wxx@ctrade.it
http://www.geocities.com/SunsetStrip/4249/

PAGINE DISPONIBILI:
Compleanni Musicisti (+ di 1000) .../complean.htm
Musicisti Italiani Indipendenti .../mii.htm
File MIDI Italiani .../midi_ita.htm
"i 5 Cereali" .../5cereali.htm

Date: 25 Mar 1997 20:18:11 -0500
From: w1aw@arrl.org
Subject: ARLS008 Phase 3D delayed

SB SPACE @ ARL $ARLS008
ARLS008 Phase 3D delayed

ZCZC AS08
QST de W1AW
Space Bulletin 008 ARLS008

Date: Mon, 24 Mar 1997 20:45:35 +0100
From: "Rafael Garcia (EA4RJ)" <rgarcia@hp433.cide.upm.es>
Subject: HELP WITH TRAKBOX

FRED NIEMAN wrote:

> I just purchased a trakbox fron another ham and I am having trouble
> loading the elements. I am using telix software and it doesn't seem to
> work. When I start to upload elements file it reads the first couple of
> lines then locks up. Is there a better software or please give me some
> setup help for this software. Thanks in advance. Fred KC6VLL.

I was using Telix to upload the kepler elements to TrakBox long time
ago, after that I moved to SatSked, and finally minicom (Linux).

There is a problem in how fast the data is sent to TrakBox. You should
check the line pace for ASCII transfers in your Telix program. A good
value for me is 100ms per line.

73,

--
Rafael,
Madrid (Spain)

Date: Tue, 25 Mar 1997 21:20:13 -0500
From: Casey McCullough <askey@erols.com>
Subject: Looking for keplerian data of the moon ?

tim wrote:
>
> In article <01bc37e7$12dd5740$LocalHost@pass>, "Geert PIRENS" <pass@glo.be> wrote:
> >Hello your all,
> >I'm looking for keplerian data of the moon, If some of you EME hams must
> >use this to I think?
> >Can someone tells mewhere to find it?
> >Bye
> >Pirens G. ONL2057
> look in www.amsat.com I think the address is correct if not do search for
> amsat.Their home page should get you going in the right direction
> good luck KF4FCO-em70 tim

Close on the address: try www.amsat.org

Regards

Date: Tue, 25 Mar 1997 23:52:46 -0500
From: Foo <foo@usa.net>
Subject: mars space prob

s wrote:
>
> hi
> Where i can see keplerian elements of mars space prob or
> other space prob?
>
> Thank to send me a email.

Such a probe would not be in orbit; how could it have Keps?

Date: Wed, 26 Mar 1997 09:06:26 GMT
From: keinanen@sci.fi (Paul Kein&#65533;nen)
Subject: mars space prob

Foo <foo@usa.net> wrote:

>s wrote:
>>
>> hi
>> Where i can see keplerian elements of mars space prob or

>> other space prob?
>>
>> Thank to send me a email.
>
>Such a probe would not be in orbit; how could it have Keps?

While the Mars probe is not orbiting the Earth, it does not have any
NASA two line elements, which could be plugged into any traditional
satellite tracking programs.

The Mars probe definitely has classical keplerian heliocentric
(relative to the sun) elements. Many programs intended for calculation
of the position of planets and comets will accept these heliocentric
keplerian elements, thus if you can find the elements for the Mars
probe, you can calculate the position for it using these programs.

During the complex Earth-Venus-Earth-Jupiter flight path of the
Galileo space probe, elements were published for each leg in
sci.space.tech or sci.space.science newsgroups. These groups would be
a better place to ask for them. Also NASA and JPL www-pages might be a
good place to search.

Paul OH3LWR

Date: 25 Mar 1997 19:11:57 GMT
From: "BJ Arts" <bjarts@uslink.net>
Subject: P3D LAUNCH BULLETIN

SB SAT @ AMSAT $ANS-083.01
PHASE 3-D LAUNCH DELAYED

HR AMSAT NEWS SERVICE BULLETIN 083.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 24, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-083.01

In a formal announcement from Paris on March 24th, the European Space
Agency (ESA) said that the second test flight of their new Ariane 5
booster has now been re-scheduled from July to mid-September, 1997. It
is this flight, Ariane 502, on which Phase 3-D is currently manifested.

According to their latest announcement, this action was being taken by ESA
and CNES (the French Space Agency which manages the Ariane 5 program for
ESA) in order to "improve (the booster's) robustness, increase the
operational margins and allow for degraded operating modes".

In a joint statement a day after the ESA announcement, Phase 3-D Project
Leader and AMSAT-DL President, Dr. Karl Meinzer, DJ4ZC, along with AMSAT-NA
President Bill Tynan, W3XO, expressed continuing confidence that ESA and
CNES will succeed in completing all the tasks necessary for a successful
flight test of Ariane 502.

"Naturally, we are disappointed that our launch will not be as soon as we had hoped", said Meinzer. "However, I am pleased that ESA and CNES are taking care to improve the operational margins for the Ariane 5 booster. This action helps give us renewed confidence in the overall probability for a successful launch of our satellite," he said.

Both Meinzer and Tynan emphasized, however, that this launch delay, like the earlier ones, means that the total cost of the Phase 3-D Project will increase significantly. Even before the latest ESA announcement, AMSAT-DL and AMSAT-NA were projecting a combined budget shortfall of about two hundred thousand dollars (US) in the money needed to complete their respective tasks on the project.

"This shortfall can only increase now as a result of this latest schedule change", said Tynan. Both AMSAT leaders urged everyone to continue doing as much as they possibly can to insure the needed funds will be in place for the completion and launch of Phase 3-D.

Stay tuned to the AMSAT News Service for further details on the completion, testing and launch of the AMSAT Phase 3-D International Satellite.

[ANS thanks Karl Meinzer, DJ4ZC, Werner Haas, DJ5KQ, Bill Tynan, W3XO, and Keith Baker, KB1SF, for the information that went into this bulletin item.]

/EX

--

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

Date: Fri, 14 Mar 1997 09:23:06 +0000
From: Mike <Mike@miti.demon.co.uk>
Subject: WXSAT reception

Hi,

I am just getting into WXSAT reception and would appreciate any help.

I am using the WXSAT programme, which utilises the PC's soundcard to decode the pictures. I am using 137 MHz and have had some success with NOAA's 12 & 14 and Meteor 3-5. Are there any other sats that I should be looking for in this band?

Also, re. the WXSAT prog; I can get it to produce a live picture OK, but if I try to auto record it doesn't want to know. Also, in the parameters window there are many different parameters to adjust...can anyone give me a rundown of the optimum settings please? Do any of the sats available on 137 MHz send colour pics, or are they all monochrome.

Thanks in advance for any help

Mike
(G0UOH)
****

mike@miti.demon.co.uk

Buckinghamshire, U.K.

Date: (null)
From: (null)

SB SPACE ARL ARLS008
ARLS008 Phase 3D delayed

Modifications to the Ariane 5 rocket's electrical systems and software will mean another costly delay for the Phase 3D Amateur Radio satellite. The European Space Agency (ESA) announced March 24, that the Ariane 502 which will carry Phase 3D aloft from Kourou, French Guyana, has been rescheduled for a mid-September launch. ESA said the schedule change was in response to recommendations of a board of inquiry that looked into the causes for the failure of the Ariane 501 launch last year.

''This additional action, which does not call into question the design of the launcher nor its flight readiness, is intended to improve its robustness, increase the operational margins and allow for degraded operating modes,'' an ESA press release said.

AMSAT-NA President Bill Tynan, W3XO, said a complete analysis had not yet been done but that he believed the delay would add ''on the order of 100,000 dollars'' to Phase 3D's cost. That's on top of an estimated 200,000 dollars combined funding shortfall that AMSAT-NA and AMSAT-DL were reporting in late February. So far, AMSAT-DL has invested nearly 2 million dollars in Phase 3D, compared to nearly 1.4 million dollars for AMSAT-NA. ''Every month adds costs,'' Tynan concluded.

Phase 3D fund-raising efforts will continue. Earlier this year, the Japanese AMSAT group, JAMSAT, helped bridge the funding gap by transferring 50,000 dollars to AMSAT-NA. The money represented excess donations from JAMSAT members for the Phase 3D SCOPE camera. The completed SCOPE camera, designed and built entirely by JAMSAT, has been installed and successfully powered up at the Phase 3D Integration Laboratory in Orlando, Florida, where preparation and testing continue.

Tynan emphasized that the Phase 3D team plans to take maximum advantage of the schedule change to perform additional testing. ''It's not time being wasted,'' Tynan said, adding that the Phase 3D team ''will use the delay to be even more sure about the spacecraft's readiness.''

Prior to announcement of the latest delay, AMSAT-NA Vice President Keith Baker, KB1SF, had been reporting that AMSAT was racing to meet the early July launch schedule and that work on the satellite was moving along swiftly.

A series of pictures of Phase 3D work in progress is available via the AMSAT-NA Web site at http://www.amsat.org. Depending on its workload, the integration team hopes to be able to update these photos as work progresses.
NNNN
/EX

End of Ham-Space Digest V97 #113
****

1065. Re: P3D LAUNCH BULLETIN

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5hbjsp$p6a@dsk92.itg.ti.com>
Source record: 19417

Wonder if it wouldn't be less expensive to
find another launch vehicle? At this rate
we are *never* going to get off the ground!
What was the original launch schedule? How
many times has it been rescheduled? How many
unsuccesful launches has this agency had?
Ken K5MBV
~~~~~~

In a formal announcement from Paris on March 24th, the European Space Agency (ESA) said that the second test flight of their new Ariane 5 booster has now been re-scheduled from July to mid-September, 1997. It is this flight, Ariane 502, on which Phase 3-D is currently manifested.

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This shortfall can only increase now as a result of this latest schedule change", said Tynan. Both AMSAT leaders urged everyone to continue doing as much as they possibly can to insure the needed funds will be in place for the completion and launch of Phase 3-D.

Stay tuned to the AMSAT News Service for further details on the completion, testing and launch of the AMSAT Phase 3-D International Satellite.
~~~~~~

[ANS thanks Karl Meinzer, DJ4ZC, Werner Haas, DJ5KQ, Bill Tynan, W3XO, and Keith Baker, KB1SF, for the information that went into this bulletin item.]

1066. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33397118.7596@codem.com>
Source record: 19418

Roberto Sonzogni wrote:
>
> This is the worse news I would expect....
> AO-13 was my first and only satellite.
>
Don't give up. There's styill some life in AO-10.

> Is Phase3D on air yet ?

P3D launch has been rescheduled until September 1997.

73 Larry N1TX
--
N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1067. WXSAT

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: david@gryn.org
Message-ID: <6e4_9703261343@tor250.org>
Source record: 19419

Hi jkktl!

jkktl@aol.com wrote in a message to All:

> At present, only NOAA12 and 14 are operational over North
> America..Meteor 3/5 was shut down as of March 20, but its just as
> well as it was a sick bird indeed!.

Meteor 3-5 is still operational, at least here it is. I have been getting it
on its daylight (AM) pass over north america.

> I believe that NOAA has another bird scheduled for launch this
> summer. Its anybodies guess what the russians will do..There are a
> few Meteor class birds up there, but are either shut down, or only
> operational over Europe.

The Russians still have 3 stand-by birds to be used. The last I have heard
they are in the process of WX station re-organization, henze the reason for
partial day-time ops.

Dave...
david.bate@lodgeware.gryn.org
--
|Fidonet: David Bate 1:229/618
|Internet: david@gryn.org

1068. AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: david@gryn.org
Message-ID: <6e3_9703261343@tor250.org>
Source record: 19420

Hi ik2wxx!

ik2wxx@ctrade.it wrote in a message to All:

> I've been out from the newsgroup and the radio quite a while. Amsat
> does not send AO-13 keps anymore....where did AO-13 go ?

AO-13 decayed late last year....

Dave...
david.bate@lodgeware.gryn.org
--
|Fidonet: David Bate 1:229/618
|Internet: david@gryn.org

1069. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-26 00:00:00 UTC
From: todd@dogbreath.tj.org
Message-ID: <5hc3un$fbd@news.scruz.net>
Source record: 19421

w1aw@arrl.org writes:

> The European Space Agency (ESA) announced March 24, that the Ariane
> 502 which will carry Phase 3D aloft from Kourou, French Guyana, has
> been rescheduled for a mid-September launch....AMSAT-NA President
> Bill Tynan, W3XO, said a complete analysis had not yet been done but
> that he believed the delay would add ''on the order of 100,000
> dollars'' to Phase 3D's cost.

Perhaps I'm just being particularly thick today, but I can't imagine why it would cost $50K/month *not* to launch this bird. Any thoughts?

Todd, KB6JXT

1070. P3D Launch Delay

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <333AAC25.7883@ibag.com>
Source record: 19274

My understanding was that if Ariannespace couldn't put up P3D on the Arianne 502 by July 1st, 1997, they would make arrangements to put it up on an Arianne 4 instead by that date. I think it's time to call that promise due....now. I urge all AMSAT members to write Bill Tynan asking him and the AMSAT Board to make our demand made known to Ariannespace, now.

Rick Tannehill - W7RT

1071. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703271320.FAA20826@mailbox1.ucsd.edu>
Source record: 19275

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 73ab0.wrk; Thu, 27 Mar 1997 14:29:24 -1
Received: from [195.120.135.127] by infocomm.it id 73a80.wrk; Thu, 27 Mar 1997 14:29:18 -1
Received: from [195.120.135.127] by infocomm.it id 73a20.wrk; Thu, 27 Mar 1997 14:29:04 -1
Received: from [195.120.135.127] by infocomm.it id 739a0.wrk; Thu, 27 Mar 1997 14:28:52 -1
Received: from [195.120.135.127] by infocomm.it id 73950.wrk; Thu, 27 Mar 1997 14:28:42 -1
Received: from [195.120.135.127] by infocomm.it id 738f0.wrk; Thu, 27 Mar 1997 14:28:32 -1
Received: from [195.120.135.127] by infocomm.it id 73880.wrk; Thu, 27 Mar 1997 14:28:18 -1
Received: from [195.120.135.127] by infocomm.it id 73840.wrk; Thu, 27 Mar 1997 14:28:08 -1
Received: from [195.120.135.127] by infocomm.it id 737c0.wrk; Thu, 27 Mar 1997 14:27:56 -1
Received: from [195.120.135.127] by infocomm.it id 73780.wrk; Thu, 27 Mar 1997 14:27:48 -1
Received: from [195.120.135.127] by infocomm.it id 73750.wrk; Thu, 27 Mar 1997 14:27:42 -1
Received: from [195.120.135.127] by infocomm.it id 73700.wrk; Thu, 27 Mar 1997 14:27:32 -1
Received: from [195.120.135.127] by infocomm.it id 736b0.wrk; Thu, 27 Mar 1997 14:27:22 -1
Received: from [195.120.135.127] by infocomm.it id 73660.wrk; Thu, 27 Mar 1997 14:27:12 -1
Received: from [195.120.135.127] by infocomm.it id 73630.wrk; Thu, 27 Mar 1997 14:27:06 -1
Received: from [195.120.135.127] by infocomm.it id 735d0.wrk; Thu, 27 Mar 1997 14:26:58 -1
Received: from [132.239.1.53] by infocomm.it id 73530.wrk; Thu, 27 Mar 1997 14:26:40 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA19998 for <ham-space-list@mailbox.ucsd.edu>; Thu, 27 Mar
1997 04:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id EAA18231
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:31:16 -0800 (PST)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA18212
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:31:12 -0800 (PST)
Message-Id: <199703271231.EAA18212@noc.ucsd.edu>
Date: Thu, 27 Mar 97 04:31:11 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List

Subject: Ham-Space Digest V97 #115
To: Ham-Space@ucsd.edu

Ham-Space Digest Thu, 27 Mar 97 Volume 97 : Issue 115

Today's Topics:
ARLS008 Phase 3D delayed
WXSAT

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 26 Mar 1997 20:01:45 -0500
From: KD1YV <jimkd1yv@ix.netcom.com>
Subject: ARLS008 Phase 3D delayed

Todd Jonz wrote:
>
> w1aw@arrl.org writes:
>
> > The European Space Agency (ESA) announced March 24, that the Ariane
> > 502 which will carry Phase 3D aloft from Kourou, French Guyana, has
> > been rescheduled for a mid-September launch....AMSAT-NA President
> > Bill Tynan, W3XO, said a complete analysis had not yet been done but
> > that he believed the delay would add ''on the order of 100,000
> > dollars'' to Phase 3D's cost.
>
> Perhaps I'm just being particularly thick today, but I can't imagine why
> it would cost $50K/month *not* to launch this bird. Any thoughts?
>
> Todd, KB6JXT

It's like when the Post Office raise the rates for postage - they have to pay the extra
storage costs!

Sorry, I couldn't resist, but I, too, am curious why the delay costs so much.

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

Date: 24 Mar 1997 20:28:39 GMT
From: jkktl@aol.com (Jkktl)

Subject: WXSAT

Hi
At present, only NOAA12 and 14 are operational over North America..Meteor 3/5 was shut down as of March 20, but its just as well as it was a sick bird indeed!.

I believe that NOAA has another bird scheduled for launch this summer. Its anybodies guess what the russians will do..There are a few Meteor class birds up there, but are either shut down, or only operational over Europe.

Jim
K2TL
http://members.aol.com/jkktl/ham.htm

End of Ham-Space Digest V97 #115
****

1072. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: orion**@capital.net
Message-ID: <333cd640.17112790@news.capital.net>
Source record: 19276

On 26 Mar 1997 21:20:23 GMT, todd@dogbreath.tj.org (Todd Jonz) wrote:

>w1aw@arrl.org writes:
>
> > The European Space Agency (ESA) announced March 24, that the Ariane
> > 502 which will carry Phase 3D aloft from Kourou, French Guyana, has
> > been rescheduled for a mid-September launch....AMSAT-NA President
> > Bill Tynan, W3XO, said a complete analysis had not yet been done but
> > that he believed the delay would add ''on the order of 100,000
> > dollars'' to Phase 3D's cost.
>
>Perhaps I'm just being particularly thick today, but I can't imagine why
>it would cost $50K/month *not* to launch this bird. Any thoughts?
>
>
>Todd, KB6JXT
>
I thought so too. I am begining to think they are continually
postponing this launch just to keep the money rolling in.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

1073. ARLS009 ATV rocket launches set

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls009.1997@arrl.org>
Source record: 19277
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS009
ARLS009 ATV rocket launches set

ZCZC AS09
QST de W1AW
Space Bulletin 009 ARLS009
From ARRL Headquarters
Newington, CT March 27, 1997
To all radio amateurs

SB SPACE ARL ARLS009
ARLS009 ATV rocket launches set

The Aerospace States Association Rockets for Schools program has announced plans to launch three rockets during May that will carry Amateur TV (ATV) payloads. All launches will use 11-foot-long Super-Loki sounding rockets identical to the rocket used for the successful Wisconsin Rockets for Schools program launch in May 1996 described in ''New Heights for ATV'' (QST, Feb 1997).

On May 10, a Super-Loki rocket carrying an ATV payload on 439.25 MHz with GPS data on the audio is scheduled to be launched from Cape Henlopen State Park in Delaware. If successful, the event will mark Delaware's first suborbital rocket launch. Teams of students in grades 7 through 12 are being recruited to assist in designing and building various payload components. For the latest information on the Delaware launch, see http://www.dpi.state.de.us/dpi/launch/ on the Web or contact Sam Guccione, K3BY, e-mail sguccion@outland.dtcc.edu.

On May 17, two Super-Loki rockets carrying ATV payloads will be launched at separate times from Sheboygan, Wisconsin, on the shore of Lake Michigan (the site of the May 4, 1996, launch). Current plans call for the first to transmit ATV on 434.25 MHz with Morse code telemetry on the audio, and for the second to transmit ATV on 439.25 MHz with GPS data on the audio. The Super-Loki rocket, which uses solid propellant, can carry the payload to altitudes of more than 30 miles.

For the latest information on the Wisconsin launches, see http://phy.mtu.edu/rocket/ on the Web or contact Greg Heinen, KB9OBV, email heineng@orbitec.com, or Bryan Suits, WB8WKN, email suits@mtu.edu.

Meanwhile, Bill Brown, WB8ELK, reports that an RFI problem led to scrubbing the planned North Carolina launch from a balloon of an

amateur rocket carrying ATV and APRS systems on March 22. The group of space enthusiasts, which includes several hams, will reschedule the launch of the ''rockoon''--a rocket launched from a high-altitude balloon--for sometime in late April.

Brown said RFI to a timer mechanism caused the balloon's ''cutdown squibs'' to fire just prior to liftoff. The cutdown squibs are a means to bring the balloon down automatically if ground control is lost.

The Huntsville Alabama L5 Society (HAL5)--a chapter of the National Space Society (NSS)--has spent the past two years developing and testing components for the rockoon. The HAL5 program is called Project HALO, for High Altitude Lift-Off.

A new launch date has not yet been set. For more details check the HALO Web site at http://iquest.com/~hal5/HALO/SL-1/ or e-mail hal5 (at) iquest.com.
NNNN
/EX

1074. Re: P3D Launch Delay

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <333B5A2E.1E1B@muenster.de>
Source record: 19278

Hi

Richard L. Tannehill, P.E. wrote:
>
> My understanding was that if Ariannespace couldn't put up P3D on the
> Arianne 502 by July 1st, 1997, they would make arrangements to put it up
> on an Arianne 4 instead by that date. I think it's time to call that
> promise due....now. I urge all AMSAT members to write Bill Tynan asking
> him and the AMSAT Board to make our demand made known to Ariannespace,
> now.

Do we really want that? As far as I understand, Ariane 5 will give the bird a better (higher) orbit than Ariane 4 would (especially for the perigee...). Maybe we should accept a few months more to wait and get a better result!? (but maybe they could make a deal and get some kind of a reimbursement for the delay...?)

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Phone/Fax: +49-2533-7312]

1075. Re: P3D Launch Delay

Newsgroup: rec.radio.amateur.space
Date: 1997-03-27 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3354fb71.2311190857@news.sci.fi>
Source record: 19279

Oliver Welp <welp@muenster.de> wrote:

>Hi
>
>Richard L. Tannehill, P.E. wrote:
>>
>> My understanding was that if Ariannespace couldn't put up P3D on the
>> Arianne 502 by July 1st, 1997, they would make arrangements to put it up
>> on an Arianne 4 instead by that date. I think it's time to call that
>> promise due....now. I urge all AMSAT members to write Bill Tynan asking
>> him and the AMSAT Board to make our demand made known to Ariannespace,
>> now.
>
>Do we really want that? As far as I understand, Ariane 5 will give the
>bird a better (higher) orbit than Ariane 4 would (especially for the
>perigee...). Maybe we should accept a few months more to wait and get a
>better result!? (but maybe they could make a deal and get some kind of a
>reimbursement for the delay...?)
>

The real question is whether the Ariane 4 payload adapter is identical
to the Ariane 5 payload adapter and how much modification to the
satellite would be required to the satellite.

Since P3D is most likely going to be the only real payload (in
addition to some sand bags), the launch profile can be selected more
freely. Since a satellite is going to return to the same altitude
during each orbit as when the engines were turned off. To get a high
perigee, it would be preferable to let the engines run as long as
possible, i.e. use a light payload.

Paul OH3LWR

1076. Amsat Phase 3D Update.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5hf6sm$2qs_002@blpm01-238.mcn.net>
Source record: 19280
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.swap

Amsat needs donations to help complete the Phase 3D satellite project. Donations are tax deductable. Call Martha (301) 589-6062 to donate. For more information about Amsat and Phase 3D see http://www.amsat.org

Thanks
73 de KB7ADL
Vince

1077. Re: AO-13 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5hf7kqqta1@thor.atcon.com>
Source record: 19281

ik2wxx@ctrade.it (Roberto Sonzogni) wrote:

>I've been out from the newsgroup and the radio quite a while.
>Amsat does not send AO-13 keps anymore....where did AO-13 go ?

It stopped responding and is assumed 'down' probably asea, sometime
last December.

73,

Dean, VE1CBF VE1CBF@qsl.net
10-X 31826 FN96VC

- - ... ... - -

1078. Re: Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: mbrinkho@inetnebr.com
Message-ID: <5hfgdv$b2j@owl.inetnebr.com>
Source record: 19282

```
: Can any kind soul please suggest a satellite tracking program and
: where to find it.

Try LogSat for Windows at http://www.logsat.com.

--
Matt C. Brinkhoff, KB0RXC
mbrinkho@inetnebr.com
http://incolor.inetnebr.com/mbrinkho
Lincoln, Nebraska [EN10]
```

1079. Re: Satellite sked

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc3b3d$c0249cc0$09c56cce@default>
Source record: 19283

A ham radio abreviation of 'schedule'. Mostly used as in a scheduled time
for a contact.

73 de VE7MDL ....Erik.

ssnow27716@aol.com wrote in article
<19970325081500.DAA06137@ladder01.news.aol.com>...
>
> What's a "sked"? Sorry. :>(Please educate me.
> Just direct email me at SSnow27716@aol.com
> Thanks.
>
> SSnow27716@aol.com Aerospace Engineering, Junior. A&P Mech
>

1080. Re: Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Foo <foo@usa.net>
Message-ID: <333B62BF.F37@usa.net>
Source record: 19284

Bill Henderson wrote:
>
> Can any kind soul please suggest a satellite tracking program and
> where to find it.

STS-PLUS is very nice, although a bit of a CPU hog (You'll want
something with a math co-processor to use it at all well).

Has some nice features; many different views, and a number of
ham oriented features. Some of the function keys are less than
logical, but it's easy enough to get the basic features working
and when you spend some time with it you can do some really handy
things (multiple tracks at once, automatic alarms as birds come into
vies, built up list of birds you wish to track, special support for
shuttle launches and much more.)

This program is frequently seen in the background in some shots of
NASA during shuttle missions and such; I believe the author has made
some additions at NASA's specific request.

The newest version should be available at

http://www.grove.net/~tkelso/

1081. QRM on Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc3b3f$189dbb60$09c56cce@default>
Source record: 19285

The QRM on some of the sats is reaching a really bad level. I frequently hear people calling CQ although they cannot even receive the stonger signals. Before you transmit, please beware that many of us have rather sensitive receivers and that your CQ may interfere with on-going QSOs.

The general rule is, if you can't hear the beacon, don't transmit.

Another problem is drift due to the Doppler effect. A lot of people simply drift on top of other QSOs.

If you can't hear your own signal, try using one of the satellite tracking programs, such as STSPLUS to keep track of both the uplink and downling frequencies. It requires your computer clock to be very accurate (+/- 10 seconds), but it gives a good indication fo the rate of adjustment required on the uplink.

73 and hope to work you on the birds de VE7MDL ....Erik.

1082. Re: RS16

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc3b3d$6c4471c0$09c56cce@default>
Source record: 19286

Gents,

RS-16 does not seem to transmit on 10m these days. Try the beacon on
435.504 MHz which exhibits a strong signal. The transponder is not yet
enabled; at least it was not as of a few days ago.

73 de VE7MDL ....Erik.

Dan O'Connell <oconneld@OIT.EDU> wrote in article
<Pine.OSF.3.95.970325111935.5824A-100000@internet.oit.edu>...
>
>
> On Sat, 22 Mar 1997, Fred N Benardella wrote:
>
> > I've listened for RS16 on 29.408 and still have yet to hear it (the
beacon). Or should I be listening on 29.451? Also have not tried the
435.504 or 435.548 frequencies should I be listening there? Is the 2 to 10
working? Any info appreciated.
> > Thank you, Fred WA2HFI EN34is (MN)
> >
> >
> I hav'nt heard it yet either, I am now assuming that it is using 2 up
> 70 cm down ? Dan WA7TDZ
>
>

1083. Re: Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Foo <foo@usa.net>
Message-ID: <333B6405.2BCD@usa.net>
Source record: 19287

Follow-up to previous message:
Links for STS-PLUS and a lot of other trackers can be found at
the URL I gave. STS-PLUS can actually be found at:

http://www.dransom.com/stsplus.html

1084. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E7r673.2r7@pe1chl>
Source record: 19288

In <333cd640.17112790@news.capital.net> orion**@capital.net writes:

>>Perhaps I'm just being particularly thick today, but I can't imagine why
>>it would cost $50K/month *not* to launch this bird. Any thoughts?
>>
>>
>>Todd, KB6JXT
>>
>I thought so too. I am begining to think they are continually
>postponing this launch just to keep the money rolling in.

Yeah, right. They want some more money from you, and thus they convince
Arianespace to postpone the launch of their prestigious next-generation
launcher so they can claim $50K/month from you.

You must be pretty narrow-minded to believe that.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1085. Tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Bill Henderson <bill.henderson@zetnet.co.uk>
Message-ID: <19970328124231692 78@zetnet.co.uk>
Source record: 19289

I've replied to nearly everyone that sent me advice. The trouble is
that I've been forced to accept a new computer and I lost a few
messages during the transfer. If you haven't had a reply then I'm
sorry and still very grateful for your help.
--
Bill
e-mail : bill.henderson@zetnet.co.uk
packet : GM0VIT@GB7YEW.#79.GBR.EU

1086. Re: RFI, EMI, etc.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: Charlie.A.Brown@worldnet.att.net
Message-ID: <333c40af.1147602@netnews.worldnet.att.net>
Source record: 19290

On Fri, 28 Mar 1997 10:31:41 -0800, rertman@ix.netcom.com wrote:

>Anyone know how I can contact Bill Brown WB8ELK? I read he had an RFI
>problem with the rockoon. I'm an EMI/EMC engineer retired from Lockheed
>and will gladly provide FREE EMI/EMC/lightning protection help to Bill
>or any ham needing it.
>
>73 DE W1NMZ Dick Ertman rertman@ix.netcom.com

Bill can be reached at:
bbrown@hiwaay.net

73 DE Charlie KD4BCX

1087. WXSAT and R7100

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <333C17DD.4C27@codem.com>
Source record: 19291

I am pleased to report reasonably good NOAA-14 reception results using
and ICOM R7100 receiver connected to a SoundBlaster. The receiver
has WFM/FM/NFM modes, and I have achieved decent results from
both WFM and FM modes. Antenna is a M2 2MCP14 RHCP yagi and Mirage
preamp mounted on the mast.

I have experimented with several programs, including APTCAP and SBDSP,
but the easiest is Wxsat, available free from http://www.davee.com/.
Running Windoze 3.1 on a 50 MHz 486-DX2.

73 Larry N1TX
--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1088. Re: HELP required....

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <333C15E1.19AA@codem.com>
Source record: 19292

Keith Haywood wrote:
>
> Hi, I'm just getting started again on the satellite scene after a break of
> many years (I was last active on OSCAR6 and 7 !). Please can anyone
> give me the 70 cm UPLINK frequencies for the current satellites

You will note from the list below only Mir and AO-10 (not LEO) have 70
cm
uplinks...

Amateur Analog (Voice) Satellite Frequencies as of March 24, 1997

Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.908 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987
CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548
CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451
CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

---

* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. The
ground controlers seem to be experimenting with the various beacons,
therefore it is difficult to predict which will be on, 29.408 seems to be
on most passes.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely
uplinked to it with a handheld on low power. On the other hand reception
of the 70cm downlink signal is more difficult without a directional antenna
most of the time. Therefore it is important to make sure
that you can hear the satellite downlink before you transmit therefor
avoiding interfering with others already on this one channel satellite
repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of
writing this satellite was reported to be in Analog mode.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of
writing this satellite was reported to be in Analog mode until March 21.

* STS-83 is scheduled to launch on April 3rd, 1997 at approximately
2:01 p.m. EST (1901 UTC). The launch window is 2 hours 30 minutes long.
STS-83 will include a SAREX package.

CALL SIGNS:

James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

QSLs: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street,
Newington, CT 06111-1494, USA. Include the following information in your
QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or
packet). In addition, you must also include a SASE using a large, business-
sized envelope if you wish to receive a card.

This FAQ is constantly being updated and re-released on a weekly basis
on
or about Monday. Any constructive suggestions are always welcome.

- errors or omissions to ve7vdx@dowco.com
--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1089. * SpaceNews 31-Mar-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: "John A. Magliacane" <magliaco@email.njin.net>
Message-ID: <333C2D5F.5F55B6CD@email.njin.net>
Source record: 19293
Cross-posted to: rec.radio.amateur.misc;,rec.radio.amateur.space

```
This is a multi-part message in MIME format.

--------------4AF34F194C0FD37E151EFEAF
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD
-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -...
-..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW :
http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass
-=-=-=-=-=-=-=-

--------------4AF34F194C0FD37E151EFEAF
Content-Type: text/plain; charset=us-ascii; name="spc0331.txt"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="spc0331.txt"

SB NEWS @ AMSAT $SPC0331
* SpaceNews 31-Mar-97 *

BID: $SPC0331

=========
SpaceNews
=========

MONDAY MARCH 31, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* PHASE III-D LAUNCH DELAY *
============================
In a formal announcement from Paris on March 24th, the European Space
Agency ( ESA ) said that the second test flight of their new Ariane 5
booster has now been re-scheduled from July to mid-September, 1997. It
is this flight, Ariane 502, on which Phase 3-D is currently manifested.

According to their latest announcement, this action was being taken by ESA
and CNES (the French Space Agency which manages the Ariane 5 program for
```

ESA) in order to "improve (the booster's) robustness, increase the operational margins and allow for degraded operating modes".

In a joint statement a day after the ESA announcement, Phase 3-D Project Leader and AMSAT-DL President, Dr. Karl Meinzer, DJ4ZC, along with AMSAT-NA President Bill Tynan, W3XO, expressed continuing confidence that ESA and CNES will succeed in completing all the tasks necessary for a successful flight test of Ariane 502.

"Naturally, we are disappointed that our launch will not be as soon as we had hoped", said Meinzer. "However, I am pleased that ESA and CNES are taking care to improve the operational margins for the Ariane 5 booster. This action helps give us renewed confidence in the overall probability for a successful launch of our satellite," he said.

Both Meinzer and Tynan emphasized, however, that this launch delay, like the earlier ones, means that the total cost of the Phase 3-D Project will increase significantly. Even before the latest ESA announcement, AMSAT-DL and AMSAT-NA were projecting a combined budget shortfall of about two hundred thousand dollars (US) in the money needed to complete their respective tasks on the project.

"This shortfall can only increase now as a result of this latest schedule change", said Tynan. Both AMSAT leaders urged everyone to continue doing as much as they possibly can to insure the needed funds will be in place for the completion and launch of Phase 3-D.

[Info via the AMSAT News Service]

* HALE-BOPP NEWS *
==========
Completing an unprecedented year-long study of Comet Hale-Bopp using two NASA observatories, the Hubble Space Telescope and the International Ultraviolet Explorer, astronomers report that they are surprised to find that the differences in the nucleus seem to be isolated from each other. They also report seeing unexpectedly brief and intense bursts of activity from the nucleus during the monitoring period. The Hubble observations suggest that the nucleus is huge, 19 to 25 miles (30 to 40 kilometers) across.

The findings, by a team of scientists, led by Johns Hopkins astrophysicist Harold Weaver, are being published in the March 28 issue of the journal Science.

"Hale-Bopp will probably provide the most revealing portrait of the workings of a cometary nucleus since the spacecraft missions to comet Halley in 1986," said Weaver. "This is a unique opportunity; we have never had the chance to examine a comet in this much detail, over this large a range of distance from the Sun."

The key results:

Violent Eruptions on the Comet's Surface

During the course of long-term observations, which began in August 1995, astronomers unexpectedly caught the comet going through a sudden brief outburst, where, in little more than an hour, the amount of dust being spewed from the nucleus increased at least eight-fold. "The surface of Hale-Bopp's nucleus must be an incredibly dynamic place, with `vents' being turned on and off as new patches of icy material are rotated into sunlight for the first time," Weaver said.

A Complex, Mottled Nucleus

To their surprise, astronomers found that water ice sublimates (turns directly from a frozen solid into a gas) at a different rate than the trace ices, implying that those components are not contained within the water on the comet. This conclusion is further supported by Hubble data showing that the rate at which dust left the nucleus was much different than the sublimation rate of water. This result is contrary to previous models for a comet's nucleus which suggest that the trace components, such as carbon disulfide ice, are contained inside of the most abundant ice on the comet, frozen water. As water sublimates the trace components and dust should be released at similar rates, but this is not what Hubble observed.

A Monstrous Nucleus

By studying Hubble Space Telescope images, the astronomers have estimated that its nucleus may be about 19 to 25 miles (30 to 40 kilometers) in diameter. The average comet is thought to have a nucleus of about 3 miles (5 kilometers) in diameter, or even smaller. The comet or asteroid that struck the Earth 65 million years ago, possibly causing the extinction of the dinosaurs, was probably about 6 to 9 miles (10 to 15 kilometers) across.

Because Hale-Bopp was unusually bright when it was still a great distance away, well outside the orbit of Jupiter, it has given scientists their best view ever of the changes in a comet's nucleus as it gets closer to, and is progressively heated by, the sun. Those changes, in turn, provide information about the composition and structure of comets, which are believed to be remnants from the formation of the solar system, about 4.6 billion years ago. Learning more about comets can provide important information about the materials and processes that formed the solar system.

Image files in GIF and JPEG format and captions may be accessed on Internet via anonymous ftp from ftp.stsci.edu in /pubinfo.

GIF JPEG
PRC97-08 Hale-Bopp gif/hb9596.gif jpeg/hb9596.jpg

Higher resolution digital versions (300 dpi JPEG) of the release photograph are available in /pubinfo/hrtemp: 97-08.jpg (color) and 97-08bw.jpg (black & white).

GIF and JPEG images, captions and press release text are available via the World Wide Web at http://oposite.stsci.edu/pubinfo/PR/97/08.html and via links in http://oposite.stsci.edu/pubinfo/Latest.html or http://oposite.stsci.edu/pubinfo/Pictures.html.

[Info from The Space Telescope Science Institute via Larry Van Horn]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--------------4AF34F194C0FD37E151EFEAF--

1090. RFI, EMI, etc.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: rertman@ix.netcom.com
Message-ID: <333C0E8D.2B4A@ix.netcom.com>
Source record: 19294

Anyone know how I can contact Bill Brown WB8ELK? I read he had an RFI problem with the rockoon. I'm an EMI/EMC engineer retired from Lockheed and will gladly provide FREE EMI/EMC/lightning protection help to Bill or any ham needing it.

73 DE W1NMZ Dick Ertman rertman@ix.netcom.com

1091. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-28 00:00:00 UTC
From: orion**@capital.net
Message-ID: <333c379b.12779536@news.capital.net>
Source record: 19295

>I thought so too. I am begining to think they are continually
>>postponing this launch just to keep the money rolling in.
>
>Yeah, right. They want some more money from you, and thus they convince
>Arianespace to postpone the launch of their prestigious next-generation
>launcher so they can claim $50K/month from you.
>
>You must be pretty narrow-minded to believe that.
>
>Rob

Probably a kickback scheme.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

1092. Autotracker Antenna Control and Radio Tuning

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5hhog5$hp6@library.airnews.net>
Source record: 19296

Anyone using this box with Wintrack Pro? It uses
up a serial port so if the mouse is to be functional
and a modem is configured, where would you get the
extra serial port on a normal PC?
Ken Durham K5MBV

1093. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <333c6a5d.1896817@news.tfs.net>
Source record: 19297

There are lots of ways that a non-launch could run up the bill.
First, at Ariannespace, they undoubtably are not putting the
(sizeable) Arianne-V staff on furlough, so the bills add up
quickly. Assuming a meager $40K average annual salary,
that'd pay for 15 peoples' salaries, for example. In a business
like space launch, the volume isn't high, so fixed costs like
facility and payroll costs become a huge factor as timelines
shift.

Correct me if I'm wrong, but even with an extra $100K for the
delay, we're not paying near the going rate for a heavy lift
launch vehicle. This is still the best deal going...

Bob
chainsaw@tfs.net

The reply-to address in this message has been doctored to
discourage spammers. Use address in signature please.

todd@dogbreath.tj.org (Todd Jonz) wrote:

>w1aw@arrl.org writes:
>
> > The European Space Agency (ESA) announced March 24, that the Ariane
> > 502 which will carry Phase 3D aloft from Kourou, French Guyana, has
> > been rescheduled for a mid-September launch....AMSAT-NA President
> > Bill Tynan, W3XO, said a complete analysis had not yet been done but
> > that he believed the delay would add ''on the order of 100,000
> > dollars'' to Phase 3D's cost.
>
>Perhaps I'm just being particularly thick today, but I can't imagine why
>it would cost $50K/month *not* to launch this bird. Any thoughts?
>
>
>Todd, KB6JXT
>

1094. Re: Auto Tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5hho4d$lfo@library.airnews.net>
Source record: 19298

Well......anyone have *any* information about this?

In article <5h9jk5$krv@dsk92.itg.ti.com>, mbv@ti.com says...

>
> Does the Auto Tracker rotor and radio control
>hardware compare favorably with the KCT and other
>hardware? It looks like it would be very user
>friendly with Wintrak Pro. Anyone have experience
>with this box and other hardware?
>
>Ken K5MBV
>

1095. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5hi620$ac5@library.airnews.net>
Source record: 19299

Bob, are you assuming that AMSAT is subsidising the Ariannespace
operation? If this is correct you are right, but it seems to me
that we had a deal that would launch by a certain date for a fixed
price and would receive a ride on another vehicle if delayed beyond
a date which has now past. The track record for Arianne is getting
worse and we might at least consider the possibility that another
ride might be found even if it has to be a few months later that
this last promise (in which I have no confidence.)
Ken K5MBV

~~~~~~

In article <333c6a5d.1896817@news.tfs.net>, chainsaw@tfs.net says...
>
>There are lots of ways that a non-launch could run up the bill.
>First, at Ariannespace, they undoubtably are not putting the
>(sizeable) Arianne-V staff on furlough, so the bills add up
>quickly. Assuming a meager $40K average annual salary,
>that'd pay for 15 peoples' salaries, for example. In a business
>like space launch, the volume isn't high, so fixed costs like
>facility and payroll costs become a huge factor as timelines
>shift.
>
>Correct me if I'm wrong, but even with an extra $100K for the
>delay, we're not paying near the going rate for a heavy lift
>launch vehicle. This is still the best deal going...
>
>Bob
>
~~~~~~

1096. Re: Autotracker Antenna Control and Radio Tuning

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <333d5001.3953996@news.tfs.net>
Source record: 19300

Well, you could use a PS/2 mouse...my Tyan Tomcat III mobo
has a PS/2 port at IRQ 12, leaving me with two free comm ports.

Or, alternatively, you could add another serial port on your
machine, provided you aren't already using IRQ 5. Most sound
boards use this IRQ, however, and even though most will
allow you to use IRQ 7 or others, many games generally need
sound support at IRQ 5.

I use an old 486 machine to control an AEA sat tracker, and
other dedicated station housekeeping functions as well.

Bob

mbv@flash.net (Ken Durham) wrote:

> Anyone using this box with Wintrack Pro? It uses
>up a serial port so if the mouse is to be functional
>and a modem is configured, where would you get the
>extra serial port on a normal PC?
>Ken Durham K5MBV
>

1097. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E7tK08.11p@pe1chl>
Source record: 19301

In <5hi620$ac5@library.airnews.net> mbv@flash.net (Ken Durham) writes:

> Bob, are you assuming that AMSAT is subsidising the Ariannespace
>operation? If this is correct you are right, but it seems to me
>that we had a deal that would launch by a certain date for a fixed
>price and would receive a ride on another vehicle if delayed beyond
>a date which has now past. The track record for Arianne is getting
>worse and we might at least consider the possibility that another
>ride might be found even if it has to be a few months later that
>this last promise (in which I have no confidence.)

Where do you think you can get a launch for $100K for this satellite
before september? Maybe at NASSA?
Also, did you review the Ariane-4 failure rate and compare it to
that of other companies before making the above statement?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1098. ARLK024 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk024.1997@arrl.org>
Source record: 19302
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK024
ARLK024 Keplerian data

ZCZC SK24
QST de W1AW
Keplerian Bulletin 24 ARLK024
From ARRL Headquarters
Newington, CT March 29, 1997
To all radio amateurs

SB KEP ARL ARLK024
ARLK024 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97087.54690997 -.00000047 00000-0 10000-3 0 4655
2 14129 25.7226 155.7572 6075712 103.9181 327.1541 2.05879814 75713
RS-10/11
1 18129U 87054A 97087.09855948 .00000030 00000-0 16006-4 0 03460
2 18129 82.9250 298.6786 0013154 84.1341 276.1318 13.72376076489113
UO-11
1 14781U 84021B 97086.93910619 .00000129 00000-0 29595-4 0 09709
2 14781 97.8264 71.4574 0010715 266.5851 93.4132 14.69535782699325
RS-12/13
1 21089U 91007A 97087.10066574 .00000025 00000-0 98573-5 0 09698
2 21089 82.9213 338.7893 0028274 159.9371 200.2908 13.74078277308026
UO-14
1 20437U 90005B 97087.14076966 .00000025 00000-0 26504-4 0 02676
2 20437 98.5202 170.5502 0012155 86.3383 273.9190 14.29954158374631
RS-15
1 23439U 94085A 97087.00725805 -.00000039 00000-0 10000-3 0 02131
2 23439 64.8143 284.1151 0151309 147.5183 213.5161 11.27525798092781
RS-16
1 24744U 97010A 97083.14310839 .00002070 00000-0 71636-4 0 00306
2 24744 097.2817 349.7946 0009281 039.6009 320.5910 15.30965101003077
AO-16
1 20439U 90005D 97081.00088468 -.00000043 00000-0 63777-8 0 538
2 20439 98.5370 167.2839 0011731 102.5647 257.6850 14.30000537373779
```

```
DO-17
1 20440U 90005E 97087.78191825 .00000006 00000-0 19079-4 0 566
2 20440 98.5430 174.7444 0012340 83.5231 276.7355 14.30144791374771
WO-18
1 20441U 90005F 97087.14829401 .00000018 00000-0 23707-4 0 00718
2 20441 98.5398 174.0278 0012808 85.9712 274.2934 14.30112544374689
LO-19
1 20442U 90005G 97086.77227159 -.00000004 00000-0 15208-4 0 00666
2 20442 98.5462 174.2883 0013260 86.7241 273.5458 14.30225924374652
FO-20
1 20480U 90013C 97087.02498266 -.00000030 00000-0 73276-5 0 09731
2 20480 99.0344 63.9134 0540694 201.1445 156.6513 12.83236755334296
AO-21
1 21087U 91006A 97087.11177581 .00000094 00000-0 82657-4 0 08091
2 21087 82.9390 111.5927 0036139 132.2256 228.1977 13.74579772309011
UO-22
1 21575U 91050B 97087.13101990 .00000029 00000-0 23807-4 0 07768
2 21575 98.3137 150.5018 0007813 127.9296 232.2596 14.37062594298849
KO-23
1 22077U 92052B 97087.11779763 -.00000037 00000-0 10000-3 0 06620
2 22077 66.0808 314.9780 0012757 233.5720 126.4122 12.86301199217327
KO-25
1 22828U 93061F 97087.14817201 -.00000017 00000-0 10500-4 0 05306
2 22828 98.5431 163.4489 0010654 98.4124 261.8262 14.28172215150649
IO-26
1 22826U 93061D 97087.79520839 .00000000 00000-0 17477-4 0 5449
2 22826 98.5501 164.0084 0009927 114.9849 245.2326 14.27830255182615
AO-27
1 22825U 93061C 97087.18986861 -.00000020 00000-0 94720-5 0 05497
2 22825 98.5513 163.1907 0009338 114.7851 245.4304 14.27720867182512
FO-29
1 24278U 96046B 97087.73655411 -.00000079 00000-0 -45808-4 0 674
2 24278 98.5511 139.9047 0352172 34.7480 327.6102 13.52628974 30240
Mir
1 16609U 86017A 97087.89353573 .00005073 00000-0 65727-4 0 1525
2 16609 51.6515 129.3577 0010741 229.4705 130.5404 15.60802869634491

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 1, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

1099. Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-29 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc3c87$e8c4e2c0$LocalHost@pass>
Source record: 19303

Hello

Can someone tells me witch satellite are activ ?

I like to now the frequenties and status of folowing sat's :

By status I maen is It ENABLE or DISABLE ?

NOAA-9
NOAA-10
NOAA-13
FENG YUNG (normal at 137.795 Mhz I think)
SICH-1
OKEAN

ALL INFORMATION ARE WELKOM !!!!!!!!!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1100. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-30 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5hkd30$kuq@library.airnews.net>
Source record: 19304

In article <E7tK08.11p@pe1chl>, rob@pe1chl says...
>
>In <5hi620$ac5@library.airnews.net> mbv@flash.net (Ken Durham) writes:
>
>> Bob, are you assuming that AMSAT is subsidising the Ariannespace
>>operation? If this is correct you are right, but it seems to me
>>that we had a deal that would launch by a certain date for a fixed
>>price and would receive a ride on another vehicle if delayed beyond
>>a date which has now past. The track record for Arianne is getting
>>worse and we might at least consider the possibility that another
>>ride might be found even if it has to be a few months later that
>>this last promise (in which I have no confidence.)
>
>Where do you think you can get a launch for $100K for this satellite
>before september? Maybe at NASSA?
>Also, did you review the Ariane-4 failure rate and compare it to
>that of other companies before making the above statement?
>
>Rob
>--
>~~~~~~~~~~~~~~~~~~~~~~~~
Never thought we could get a launch for $100K. Since Arianne
hasn't kept any of its promises, we should get our money *back* and
at least look for another ride.
Also, I don't need to compare the Arianne-4 failure rate to know
that the Ariannespace track record for promises kept is getting worse.

Ken K5MBV

1101. Re: Looking for keplerian data of the moon ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-30 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-3003970230520001@mor1.gsfc.nasa.gov>
Source record: 19305

In article <01bc37e7$12dd5740$LocalHost@pass>, "Geert PIRENS"
<pass@glo.be> wrote:

> Hello your all,
>
> I'm looking for keplerian data of the moon, If some of you EME hams must
> use this to I think?
>
> Can someone tells mewhere to find it?
>

Please keep in mind that although the moon does indeed orbit the earth, any possible set of Keplerian elements would only be an approximation. All of the satellite tracking programs assume that the mass of the satellite is negligible compared to the mass of the earth. This is a very good assumption for any man-made satellite but not for the moon. The mass of the moon is about 1/80 the mass of the earth, and therefore the moon exerts a non-trivial force on the earth. The earth does not orbit the sun for example, the center of mass of the earth-moon system orbits the sun.

It is thus not advisible to use your satellite tracking software to find the moon. There are other programs available for tracking the moon, check around the amateur astronomy groups. Instantrack (available from Amsat) does do the lunar orbit calculation correctly, using a different algorthim than it uses for artifical satellites.

Dan Schultz N8FGV
Greenbelt, MD

1102. KAM Plus and sats

Newsgroup: rec.radio.amateur.space
Date: 1997-03-30 00:00:00 UTC
From: n4zo@sccoast.net
Message-ID: <333de368.11106127@news.sccoast.net>
Source record: 19306

Is there any way to install a 9600 baud psk modem in the KamPlus
without having to disable its other functions? Anyone tried that?

Gus N4ZO

1103. Info

Newsgroup: rec.radio.amateur.space
Date: 1997-03-30 00:00:00 UTC
From: Wyzyrd@totally_useless.com
Message-ID: <5hlg0d$o0u@camel1.mindspring.com>
Source record: 19307

The current monthly features page at my URL will be
updated this evening. So if you haven't been there yet,
NOW is the time. For all of you who have been waiting
for Aprils edition, tonight's the night.
73 - Mike/kf4hyb
Visit my "ham" webpage :
http://www.geocities.com/SouthBeach/Sands/1961
LOTS of info and links

1104. ANS-089 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-03-30 00:00:00 UTC
From: BJ Arts <bjarts@uslink.net>
Message-ID: <01bc3d4c$af3ab3c0$37bc92ce@bjarts.uslink.net>
Source record: 19308

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-089.01
ANYONE FOR IPS?

HR AMSAT NEWS SERVICE BULLETIN 089.01 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.01

The Phase 3D satellite under construction, like its predecessors P3A, Oscar-10 and Oscar-13, has as its "brains", a computer system based on the RCA COSMAC 1802 microprocessor. The computer is running an operating system

called "IPS", and loaded into that environment is the flight software that does all the spacecraft command and control, housekeeping chores, battery charge control, navigation, transponder switching, beacon data generation and so on. But how many people know anything about IPS?
Not many nowadays. Well, here's a unique opportunity to discover all about it. IPS (Interpreter for Process Structures) was devised by Karl Meinzer DJ4ZC at a time when 1802, 6502, 6800 and 8080/Z80 processors were state of the art; around 1976-1979. At that time there just wasn't an easy-to-use, robust, engineering-oriented, multitasking and, above all, a portable operating system for cheap computers based on these MPUs and their tiny (boldly described as "massive") 16 Kbyte memories. Computers at that time meant the Atari 800, North Star Horizon etc.

An IPS Manual was written by Karl Meinzer in 1978, but was never published in any substantial form. A hand corrected draft printout was circulated to

a few interested AMSAT engineers who then reproduced it ad hoc, minus several chunks, via ever worsening photocopies. But the paper original was

long lost. Happily, in 1996 the manual was discovered to have survived on an Atari 800XL computer cassette tapes, and moreover in the mid '80s had been transferred to floppy disc by Robin Gape G8DQX, a prominent IPS contributor at that time. Thus, after a gap of nearly two decades, it has become practical to publish the document properly, and that's what James Miller has done. IPS is a threaded language not unlike Forth, a brilliant piece of software engineering, as relevant today as it ever was. From Karl's introduction Miller quotes:
"This book is organized into three chapters of increasing sophistication.

Chapter I presents an introduction to the language; the material
presented there will enable you to accomplish all "regular" programming
tasks. Chapter II introduces the assemblers for the COSMAC 1801/1802, the
8080, the 6800 and the 6502 allowing low-level extensions and interfaces.

Finally, Chapter III describes and documents the inner workings of IPS;
this material will be useful if you wish to extend or change IPS itself."

IPS - High Level Programming of Small Systems, by Karl Meinzer, is a 120
page A5 book in fold-flat ring-binder format, edited, typeset and re-
published at James Miller's own expense to recognize the author's 30 years
unparalleled contributions to the amateur satellite program.
This book is written in English. Net proceeds from the sale of this book
will be donated to the P3D Satellite Project.

Some sample pages (GIFs) are available at:
http://www.jrmiller.demon.co.uk/IPS/

There will be only one print run, and the size of this run will directly
determine the price. In order to tell the printer how many books to make,
Miller needs to know how many people are interested in how many copies.
The book will be published even if this is NIL! On the other hand, if the
print run is several hundred, a substantial donation will be poured into
the AMSAT P3D coffers, at a time when more cash is desperately needed.
If you are interested, please complete the 3-line form below, and e-mail it
back to James Miller, g3ruh@amsat.org
Return of this information places no obligation upon you to purchase
anything. IPS - High Level Programming of Small Systems" by Karl Meinzer
---
Name:
De-bounced e-mail address:
I would be interested in obtaining _____ copies

PLEASE DO NOT BOMB JAMES MILLER WITH QUERIES ABOUT PRICE, DELIVERY OR
ORDERING.
Anything important will be e-mailed directly to you. The delivery
timescale is about 6 weeks from now. The price will be APPROXIMATELY
GBP 19.00 plus postage.

[ANS thanks James Miller, G3RUH, for this information.]

/EX

SB SAT @ AMSAT $ANS-089.02
NEW AO-10 KEPS

HR AMSAT NEWS SERVICE BULLETIN 089.02 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.02

Space Command has published a new set of Keps for AO-10:
AO-10

1 14129U 83058B 97086.09215926 -.00000160 00000-0 10000-3 0 4644
2 14129 25.6368 156.5618 6073912 102.9697 328.9901 2.05881543 75687

These compare favorably with the estimated set (epoch 97054.5) with the exception of about a 0.6 degree shift in orbital plane.

[ANS thanks Ken Ernandes, N2WWD, for his great work in supplying AO-10 keps.]

/EX

SB SAT @ AMSAT $ANS-089.03
ARRL/ TAPR DIGITAL CONFERENCE

HR AMSAT NEWS SERVICE BULLETIN 089.03 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.03

It's that time again! Time to make your calendar and think about what to publish for the upcoming 16th Annual ARRL and TAPR Digital Communications Conference. 1997 marks the second year in which the ARRL Digital Communications Conference and TAPR Annual General Meeting have joined into one conference!

The ARRL and TAPR Digital Communications Conference is an international forum for radio amateurs in digital communications, networking, and related

technologies to meet, publish their work, and present new ideas and techniques for discussion. Presenters and attendees will have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications. The Digital Communications Conference is not just for the digital expert, but for digitally-orientated amateurs of all levels of experience.

The 1997 ARRL and TAPR Digital Communications Conference will be held October 10-12, 1997 in Baltimore, Maryland. This year's conference location is just minutes away from the BWI (Baltimore/Washington International) Airport.

Not only is the Digital Communications Conference technically stimulating, it is a weekend of fun for all who have more than a casual interest in any of the ham digital communications modes. This includes APRS operators, networkers, software writers, modem designers, and digital satellite communications enthusiasts. The ARRL and TAPR Digital Communications Conference is for all levels of digital operators -- a must conference to attend to get active on a national level. Now, more than ever, amateur radio needs this great meeting of the minds, since it is important that we demonstrate a continued need for the frequency allocations we now have by pushing forward and documenting our achievements. The ARRL and TAPR Digital

Communications Conference is one of the few ways to record our accomplishments and challenge each other to do more.

The 1997 ARRL and TAPR Digital Communications Conference will be co-hosted by AMRAD (Amateur Radio Research and Development Corporation). The Amateur Radio Research and Development Corporation (AMRAD) is a worldwide club of amateur radio and computer experimenters whose purpose is to develop skills

and knowledge in radio and electronic technology, advocate design of experimental equipment and techniques, promote basic and applied research, organize technical forums and symposiums, collect and disseminate technical

information, and provide experimental repeaters.
http://www.amrad.org

Full information on the conference and hotel information can be obtained by contacting Tucson Amateur Packet Radio, 8987-309 E. Tanque Verde Road #337,

Tucson, AZ 85749-9399. Phone: (817) 383-0000. Fax: (817) 566-2544.
Internet: tapr@tapr.org Web: www.tapr.org/dcc

[ANS thanks the ARRL, TAPR, and AMRAD for this
news.]

./EX

SB SAT @ AMSAT $ANS-089.04
RS-16 TLM NEEDED

HR AMSAT NEWS SERVICE BULLETIN 089.04 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.04

Stan Cameron, VE6AMB, received a request from Andy, RK3KPK, at command station for RS satellites, requesting copies of RS16 telemetry on passes over NW Canada. Send the TLM reports to the following packet address RK3KPK@RA3KP.MSK.RUS.EU

[ANS thanks Stan Cameron, VE6AMB, for this
news item.]

/EX

SB SAT @ AMSAT $ANS-089.05
OPEN HOUSE AT GOLDSTONE

HR AMSAT NEWS SERVICE BULLETIN 089.05 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.05

On Saturday, April 19, 1997, JPL will partner with AlliedSignal Corporation to host an Open House at the Goldstone Deep Space Communications Complex. No sign up, or registration is required. This event is open to the public. At the Goldstone Complex Guard Gate, visitors will be directed to parking areas, and transportation to antenna sites will be by bus.

First stop will be at the Mars site to see the 70-meter antenna
and view the mission operations room. Safety regulations do not
permit public access to the antenna pedestal or dish.

Next, the bus will drive visitors to the Apollo site. Here there
will be public access to the pedestal of one of the new 34-meter
Beam Wave Guide antennas. JPL planetary missions will also have
exhibits in this area.

The bus then returns guests to the main Echo site for other
displays, exhibits, demonstrations, and a video screening. The
cafeteria will be serving light meals and drinks, and souvenirs
will be available for purchase.

During the Open House a special event will be staged to dedicate
the three new 34-meter antennas at the Apollo site. Representatives
from the contracting companies who erected the antennas will be
joined by members of JPL's management in a short ceremony of
official dedication to be held at 1:00 p.m..

For updates, see the DSN OUTREACH web site at
http://deepspace.jpl.nasa.gov/dsn/dsn_outreach.html

A map giving directions to the Goldstone Deep Space Communications
Complex is available as a link from that site, or directly at
http://deepspace.jpl.nasa.gov/buttons/map_gdscc.GIF

[ANS thanks Eric Archer, N6CV for this update.]

/EX

SB SAT @ AMSAT $ANS-089.06
P3D LATEST

HR AMSAT NEWS SERVICE BULLETIN 089.06 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.06

Dick Jansson, who has been in Europe for the past two weeks reports a
second-in-a-row successful load test of the Phase 3D SBS, the
structure which houses the satellite as it rides the launch vehicle.
This test confirmed the lateral stiffness of the SBS. This means, Dick
commented, that the P3D-SBS has met all of its *original* load carrying
requirements for a passenger payload.

[ANS thanks Dick Jansson WD4FAB for this good news]

/EX

SB SAT @ AMSAT $ANS-089.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 089.07 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT

BID: $ANS-089.07

MIR:
(New frequencies implemented 1 January 1997:
Uplink 145.2 MHz FM Downlink 145.8 MHz FM)
Note, the above split is used for both packet and voice operation.

SAFEX, MIR 70cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
The repeater operational and active..

RS-10:
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 is operational.

RS-12:
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 Mhz CW/SSB)
The sat continues to provide excellent downlink signals in both T-
and K-mode.
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 70 cm, 435.504 Mhz beacon on RS-16 operational.
The 10 meter beacon is not active at this time. Transponder is not
operational.
[ANS thanks WT0N for this report.]
The March 29th 1520Z pass yielded the following results. The 435.504 Mhz
beacon on. S9+20 here in Roanoke, Va. The following data was being send
down via the beacon; RS-16 P167,0218,n45,m0,l0,k7,j5,i7,h49,g0,f164,e8,
d8,c9,b9,a8.
[ANS thanks Bernie Hall, WY4D, for this report.]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operating normally. Strong downlink signal.

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.
.
KO-25:

(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85 MHz FM, Downlink 436.8 MHz FM)
Operating normally and lots of activity heard over
North America and Europe.
As of March 30, 1997

Tepr 4 = 32 counts 16 Minutes
Tepr 5 = 66 counts 18 Minutes

AO-27 Will turn on Every pass 16 Minutes after entering the sun and will stay on for 18 minutes. This corrects the early shut off that has been going on for the passed few weeks.

Northern Stations will see the satellite turn on after AOS for the next week or so. This is due to the TEPR states being calculated for a while from now instead of Today. So the schedule will be drifting into a better state. This gives us a longing time before the schedule gets out of whack.

Thanks goes out to the Alternate Control Station KM4NZ/N1XAU for the use of their station via the Internet for Controlling the satellite. With new software that lets me control the satellite at remote sights, I hope to be able to keep the TEPR Schedule more up to date.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, and Miguel A. Menendez, EA1BCU, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud BPSK)
The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
03/28/97 10:45 utc Digi-Talker
04/01/97 00:30 utc JD 9600 bps FSK

/EX

SB SAT @ AMSAT $ANS-089.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 089.08 FROM AMSAT HQ
SILVER SPRING, MD, MARCH 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-089.08

AO-10:
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
AO-10 is operational.
AO-10
1 14129U 83058B 97086.09215926 -.00000160 00000-0 10000-3 0 4644
2 14129 25.6368 156.5618 6073912 102.9697 328.9901 2.05881543 75687
[ANS thanks Ken Ernandes, N2WWD, for getting these keps..]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Good signals have also been received on 435 MHz., Saturday 15 March,
14:00 pass, when the satellite was being commanded by ground control.
[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, Downlink 437.0513 MHz SSB,
1200 Baud PSK. Beacon 2401.1428 Mhz.)
(PACSAT-AO-16)
Traffic heard this weekend in PACSAT's orbits over Europe include,
EB8AUB\D, G1OCN, DL3SDW, F1JEK\D, EA1BCU\D, EI6EH\D ,
GM4ULS, and IW6MZC.

<Telemetry ON-LINE>
uptime is 923/06:52:53. Time is Sat Mar 29 12:16:13 1997 PACSAT
Bat 1 V=1.343 V Bat 2 V=1.360 V Bat 3 V=1.391 V Bat 4 V=1.333 V
Bat 5 V=1.327 V Bat 6 V=1.423 V Bat 7 V=1.362 V Bat 8 V=1.359 V
RC PSK TX Out 0.650 W
Total Array C= 0.323 Bat Ch Cur=-0.020 Ifb= 0.044 I+10V= 0.330
TX:010C BCR:7D PWRC:5AE BT:3C WC:25 EDAC:F3

Graphic information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/ao16.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

PACSAT (AO-16)
Russ Platt WJ9F, AO-16 Command Team , reports the digipeater on AO-16 has
been on for the last couple of months. In regards to the 2.4 GHz
transmitter, it does continue to work although WJ9F has not been leaving
it on for an entire orbit due to its high current load on the 10 v bus.
The battery charging scheme on the micros is managed during sunlight
by adjusting the RCPSK transmitter power up or down to charge and
not overcharge the batteries since we have no way to turn the solar
cells off. The S-band transmitter does not have the ability to vary
its output so it is a high current draw throughout the orbit. In the
past during Experimenters Days when we have turned on the S-Band
transmitter I had to scale back the output of the RCPSK transmitter
to levels that were difficult to receive and even with these low levels
the onboard software will still turn off the S-band TX if the Battery
voltage drops too low, which it did. I guess that's why we called them
Experimenter's Days! In the future I do plan to continue to turn on the
S-band TX as power allows. I hope this answers your questions.
[ANS thanks Russ Platt WJ9F, AO-16 Command Team for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE is transmitting on 2M and on S-band 2401.220 MHz.
The command team is keeping the S-band transmitter on as a
test signal for those working on getting S receive equipment going.
The S transmitter is running about .8W to a whip that sticks out the top of
the satellite near one edge. In the northern hemisphere the whip is
pointed away from the earth, it's toward the earth in the southern
hemisphere. It is quite loud with a typical satellite S-band receive
setup, but in the northern hemisphere it will fade as much as 20 dB with
rotation of the satellite. Doppler of course is large, approximately
100 KHz during a pass.
[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after last weeks system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.

BCRi316.43mA bplt 1.340C TxPw 0.231W 5 V 5.742V 8.5V10.008V
10V 14.036V
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.1528 MHz SSB, 1
200 Baud PSK AX.25.)
(LUSAT-LO-19)
Note:
To establish position with respect to the time, add 6 minutes to
compensate for the lag of the clock in the satellite.

<Telemetry ON-LINE>
uptime is 647/21:10:12. Time is Sat Mar 29 11:15:22 1997 LUSAT
Bat 1 V=1.383 V Bat 2 V=1.375 V Bat 3 V=1.384 V Bat 4 V=1.377 V
Bat 5 V=1.390 V Bat 6 V=1.398 V Bat 7 V=1.383 V Bat 8 V=1.371 V
RC PSK TX Out 0.986 W
Total Array C= 0.276 Bat Ch Cur= 0.032 Ifb= 0.032 I+10V= 0.207
TX:01A BCR:7F PWRC:36E BT:3C WC: 0

Graphic information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.

[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N, via e-mail, at bjarts@uslink.net or to wt0n@amsat.org]

/EX

B.J. Arts
WT0N in EN-37
bjarts@uslink.net
Hibbing,MN U.S.A.

1105. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <333f11b0.5889798@news.tfs.net>
Source record: 19309

mbv@flash.net (Ken Durham) wrote:

> Never thought we could get a launch for $100K. Since Arianne
>hasn't kept any of its promises, we should get our money *back* and
>at least look for another ride.
> Also, I don't need to compare the Arianne-4 failure rate to know
>that the Ariannespace track record for promises kept is getting worse.
>
>Ken K5MBV
>

The track record is getting worse for the industry as a whole. Look at the last few Russian and Chinese attempts. And the U.S. just toasted its first GPS IIR bird 13 sec into the launch. You're looking for more customer service than anyone in the industry can provide right now, and at cut rate prices. It simply is not realistic. And the technical requirements to work the mating to/deployment from another launch vehicle are most decidedly non-trivial. Even were we able to find a replacement, I don't think we'd be ready to launch before the slipped Arianne-V window in Sept.

Bob

1106. New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5hohha$10ug@sol.caps.maine.edu>
Source record: 19310

For what it is worth, I have put together a few pages on amateur radio
satellite communications.
(Focusing on RS-10 for now)

I designed it for the "newbie" into the ham sats.

I have a few sound clips that I have recorded from RS-10 and RS-12.
The basic shack description, pictures, and info on
the ever popular question:

"can you use a FM HT on the RS-10 satellite?"

I also have links to some of the other good satellite stuff on the web.
Take a look if you like.
If you don't, then please disregard the post.

Jason N1RWY

1107. Re: Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970331162301.LAA09823@ladder01.news.aol.com>
Source record: 19311

currently, only NOAA12 and NOAA14 are operational worldwide.

Meteor 3/5 is off until sometime in April, but that may change as this
bird was having big problems!

Met 2/21 is operational over parts of Europe.

Jim
http://members.aol.com/jkktl/ham.htm (weather satellite home page)

1108. Re: WXSAT and R7100

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970331162600.LAA09981@ladder01.news.aol.com>
Source record: 19312

Hi

WXSAT is available in English from:

http://members.aol.com/jkktl/ham.htm

also other good weather satellite info and links available here.

WXSAT is freeware and is THE BEST there is..it beats any and all
commercial demodulators and software..try it and see..
images using WXSAT are also posted at the above site.

Jim

1109. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <334059DF.1ED1@muenster.de>
Source record: 19313

Jason baack wrote:
>
> For what it is worth, I have put together a few pages on amateur radio
> satellite communications.
> (Focusing on RS-10 for now)
[snip]
> I also have links to some of the other good satellite stuff on the web.
> Take a look if you like.
> If you don't, then please disregard the post.

But if I'd like - how would I find your page...? ;-)

(wanna say: URL missing !!!)

Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

1110. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: w6uv@ccnet.com
Message-ID: <32cb5626.9989153@news.ccnet.com>
Source record: 19314
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

>You'll need a pair of steerable yagis or helixes, for mode U/V. You can
>build these yourself and save a bunch of money. When the sat is near apogee,
>it hangs in virtually the same spot in the sky for long periods, so you can
>aim the antennas by hand, no need for auto-tracking, or even for rotators.
>The antennas don't have to be very high off the ground, since they are
>looking up. You can use a tripod or post mount and turn them directly
>by hand as needed. The antennas can be made from a length of 2x2 and use
>aluminum clothesline wire for elements. There are a number of antenna
>programs available on the net which can optimize the design for you.

I thought the P3D antenna gain and power output was high enough to
allow the use of omni antennas on the ground. Is this not true?

Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of a
(w6uv@ccnet.com) | kamakaze pilot on his 37th mission.

1111. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: baack@monet.umecut.maine.edu
Message-ID: <5hor79$1ara@sol.caps.maine.edu>
Source record: 19315

>I have a few sound clips that I have recorded from RS-10 and RS-12.
>The basic shack description, pictures, and info on
>the ever popular question:
>
>"can you use a FM HT on the RS-10 satellite?"
>
>I also have links to some of the other good satellite stuff on the web.
>Take a look if you like.
>If you don't, then please disregard the post.

The URL is: http://www.umecut.maine.edu/~baack/satellite1.html

The Voice Clips can be found at:
http://www.umecut.maine.edu/~baack/qrpsat.html

PHEW! Sorry for the mix up.

-Jason Baack

1112. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5hoo6c$pvi@sol.caps.maine.edu>
Source record: 19316

Whoops!!
Here is the URL:

http://www.umecut.maine.edu/~baack/satellite1.html

J

In article <5hohha$10ug@sol.caps.maine.edu>, baack@maine.edu (Jason baack)
wrote:
>For what it is worth, I have put together a few pages on amateur radio
>satellite communications.
>(Focusing on RS-10 for now)
>
[snip]

1113. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5hoq2j$i61@dsk92.itg.ti.com>
Source record: 19317

In article <5hohha$10ug@sol.caps.maine.edu>, baack@maine.edu says...
>
>For what it is worth, I have put together a few pages on amateur radio
>satellite communications.
>(Focusing on RS-10 for now)
>
~~~~~~

Found his web page at: http://www.umecut.main.edu/~baak/satellite1.html
Didn't see any reference to sound clips, but did see that he had several
other personal and Ham pages listed.

Ken Durham K5MBV
~~~~~~

1114. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5hoqeg$in1@dsk92.itg.ti.com>
Source record: 19318

>
> at: http://www.umecut.main.edu/~baak/satellite1.html
>
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
OOPS!... Change "baak" to "baack" in the URL.....sorry.

Ken K5MBV

1115. Re: WXSAT and R7100

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <333FF197.30C2@codem.com>
Source record: 19319

Jkktl wrote:

> WXSAT is available in English from:
> http://members.aol.com/jkktl/ham.htm
>

Apologies for the wrong URL. So much for quick cut and paste without double checking. Yes, this is where I got the WXSAT program. I actually record the .WAV file using another program, but I process it using WXSAT. It is AMAZINGLY SIMPLE and produces excellent results. I find WFM mode on the R7100 to be best, and I can post-process the output using a program like PhotoStyler, etc. to tweek contrast. I'll soon have some sample results posted at http://ourworld.compuserve.com/homepages/ledlow.

73 Larry N1TX
--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1116. 8080 WeFax (why not here? :))

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: c002@Lehigh.EDU
Message-ID: <5hpl1c$1b5q@ns1-1.CC.Lehigh.EDU>
Source record: 19320

There still IS a HF weather fax on 8080KHz right?
I cant find it on my SW rx or the Drake twins (then again, i wont comment on
the twins...)
Also, is there another fax freq. somewhere in the HF?

thanks!!

DAvid *still pissed at the fact that getting on p3d is expensive*
|---|
David Roseman	c002@lehigh.edu
	The Flying HAm - BBS
Utopia Telecommunications	Technomage - BBS
610.838.2989	N3SQE/1 - HAm
(Parttime system)	
-----My AWESOME home page :) http://www.lehigh.edu/~c002/c002.html-----

1117. ARLS010 SAREX aboard STS-83; launch set for April 3

Newsgroup: rec.radio.amateur.space
Date: 1997-03-31 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls010.1997@arrl.org>
Source record: 19321
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS010
ARLS010 SAREX aboard STS-83; launch set for April 3

ZCZC AS10
QST de W1AW
Space Bulletin 010 ARLS010
From ARRL Headquarters
Newington, CT March 31, 1997
To all radio amateurs

SB SPACE ARL ARLS010
ARLS010 SAREX aboard STS-83; launch set for April 3

The Space Shuttle Amateur Radio EXperiment--SAREX--will be aboard when NASA*s STS-83 mission accelerates skyward April 3 at 1901 UTC. Eighteen schools, including institutions in the People*s Republic of China and on Okinawa, have been scheduled for SAREX contacts during the mission. Three hams will be aboard the shuttle Columbia. They are James D. Halsell, KC5RNI, mission commander; Janice E. Voss, KC5BTK, payload commander; and Donald A. Thomas, KC5FVF, mission specialist. STS-83 is scheduled to last 16 days. The mission will carry SAREX configuration C: voice and packet. The mission*s primary payload is the microgravity science laboratory.

Schools selected for STS-83 SAREX contacts are: Alvin C. York Agricultural Institute, Jamestown, Tennessee; Artesia Public Schools, Artesia, New Mexico; Beau Chene High School, Arnaudville, Louisiana; Center Street School, El Segundo, California; County College of Morris, Randolph, New Jersey; Crittenden Middle School, Mountain View, California; Edgewater High School, Orlando, Florida; Ione Junior High School, Jackson, California; Lawrence Intermediate School, Lawrenceville, New Jersey; Lester Middle School (Department of Defense Dependents Schools, Pacific), Okinawa, Japan; Lexington Traditional Magnet School, Lexington, Kentucky; Mountain View Elementary School, Prescott Valley, Arizona; Public School No. 9, New York, New York; Robert J. Burch Elementary School, Tyrone, Georgia; S. J. Davis Middle School, San Antonio, Texas; Sonny Carter Elementary School, Macon, Georgia; Troy Intermediate School, Troy, Texas; and Tsinghua University, Beijing, Peoples Republic of China.

The SAREX Working Group has designated the following frequencies during the STS-83 mission:

FM voice downlink (worldwide): 145.55 MHz
FM voice uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz

FM voice uplink (Europe only): 144.70, 144.75, and 144.80 MHz

If packet is available, the FM packet downlink will be 145.55 MHz; the uplink will be 144.49 MHz. The FM packet call sign will be W5RRR-1.

The SAREX hardware will be flown in configuration B, voice-only, battery operation, since no shuttle power could be spared for SAREX on this mission. The SAREX equipment aboard STS-83 includes the Motorola 2-meter FM hand-held transceiver, 15 spare batteries, the window antenna, SAREX headset assembly, personal recorder and the required interconnecting cables.

The SAREX team is also flying the Heathkit packet radio TNC for possible use later in the flight. If power conservation measures are successful, the mission control team will advise SAREX and the astronauts to initiate use of the packet radio system, which also includes one of the Shuttle Laptop computers.

Reports and QSLs go to ARRL-EAD, STS-83 QSL, 225 Main St, Newington, CT 06111-1494. Include the following information: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). You must also include an sase using a large, business-size envelope if you wish to receive a card.
NNNN
/EX

1118. "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5hpp1g$35o_002@blpm02-197.mcn.net>
Source record: 19322
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D satellite. Your donations are tax deductable. See http://www.amsat.org

Amsat-NA
850 Sligo Ave, Suite 600
Silver Spring, MD. 20910-4703
U.S.A.

Telephone: (301) 589-6062

73 de KB7ADL
Vince
Billings, MT.

1119. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5hprfs$m6h@blackbird.afit.af.mil>
Source record: 19323

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1120. NORAD Two-Line Orbital Element Sets (TLE969)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5hpr6e$m62@blackbird.afit.af.mil>
Source record: 19324

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #969 -
Alouette 1
1 00424U 62049A 97086.80162215 .00000027 00000-0 20961-4 0 2776
2 00424 80.4665 3.8993 0024381 25.8986 334.3370 13.67890070721115
ATS 1
1 02608U 66110A 97088.99954969 -.00000110 00000-0 10000-3 0 80
2 02608 14.5395 349.7730 0006913 99.6306 260.4493 1.00287326 27736
ATS 3
1 03029U 67111A 97089.25653678 -.00000116 00000-0 10000-3 0 6377
2 03029 14.9024 356.7101 0012144 276.6016 261.4920 1.00273411107639
Starlette
1 07646U 75010A 97090.22248827 -.00000137 00000-0 63298-5 0 442
2 07646 49.8212 96.0223 0205855 98.4454 263.9828 13.82191989118663
LAGEOS
1 08820U 76039A 97086.34754810 .00000025 00000-0 00000+0 0 2747
2 08820 109.8278 123.0355 0043744 67.1323 293.4022 6.38664495231917
ETS-2
1 09852U 77014A 97086.24639156 -.00000355 00000-0 10000-3 0 1045
2 09852 13.5764 29.7262 0004565 148.1625 211.8738 1.00008325 20479
GOES 2
1 10061U 77048A 97089.52057247 .00000051 00000-0 10000-3 0 8167
2 10061 12.7237 33.8294 0009571 149.9437 15.7775 1.00262750 17317
IUE
1 10637U 78012A 97089.35933142 -.00000052 00000-0 10000-3 0 3747
2 10637 35.9271 78.9877 1352097 65.2611 339.0712 1.00085117 22800
GOES 3
1 10953U 78062A 97089.27987745 -.00000096 00000-0 10000-3 0 7935
2 10953 11.7478 36.8404 0002527 252.3407 252.3065 1.00265755 21920

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SeaSat 1
1 10967U 78064A 97089.87409670 -.00000066 00000-0 22820-4 0 5630
2 10967 107.9919 47.9583 0002792 269.5949 90.4874 14.38159641982666
Nimbus 7
1 11080U 78098A 97086.94902961 -.00000093 00000-0 -47144-4 0 6582
2 11080 98.9080 300.8341 0008372 286.4911 73.5327 13.83684564930418
GOES 5
1 12472U 81049A 97086.96989949 .00000027 00000-0 10000-3 0 9893
2 12472 8.6451 47.3600 0004141 72.9488 287.1183 1.00325744 15945
Cosmos 1383
1 13301U 82066A 97087.09436218 .00000037 00000-0 25943-4 0 5751
2 13301 82.9281 285.6290 0026818 174.6792 185.4651 13.68081788736199
LandSat 4
1 13367U 82072A 97087.58124392 .00000021 00000-0 14387-4 0 568
2 13367 98.0365 135.2247 0007124 345.4090 14.6908 14.57198760781952
DMSP B5D2-1
1 13736U 82118A 97089.19155025 .00000039 00000-0 34732-4 0 2045
2 13736 98.6204 278.9550 0007811 278.1655 81.8639 14.25824420741827
IRAS
1 13777U 83004A 97090.02641567 .00000175 00000-0 15025-3 0 6206
2 13777 98.9692 275.4835 0013803 26.3570 333.8289 13.99277255393485
Cosmos 1447
1 13916U 83021A 97086.78632009 .00000043 00000-0 28673-4 0 6678
2 13916 82.9483 341.2828 0039375 81.3147 279.2466 13.74353317702692
TDRS 1
1 13969U 83026B 97090.14041951 -.00000300 00000-0 00000+0 0 7291
2 13969 9.3852 40.9655 0003614 314.7145 194.1926 1.00263703 24263
GOES 6
1 14050U 83041A 97088.32744561 .00000019 00000-0 10000-3 0 6362
2 14050 7.4988 50.9773 0004668 29.2957 100.6207 1.00230398109054
AO-10
1 14129U 83058B 97089.48890099 .00000127 00000-0 10000-3 0 4664
2 14129 25.7575 155.4845 6074255 104.4249 326.5037 2.05878503 75764
LandSat 5
1 14780U 84021A 97086.76608846 .00000040 00000-0 19200-4 0 6009
2 14780 98.2960 149.9828 0003031 112.6159 247.5357 14.57072314695253
UO-11
1 14781U 84021B 97090.07124011 .00000070 00000-0 19673-4 0 9613
2 14781 97.8269 74.4608 0010691 255.1308 104.8717 14.69536168699780
Cosmos 1574
1 15055U 84062A 97087.91147553 .00000025 00000-0 11276-4 0 8674
2 15055 82.9543 35.9490 0026066 270.7239 89.0924 13.73645824640071
Cosmos 1602
1 15331U 84105A 97087.84417378 .00000246 00000-0 25988-4 0 5493
2 15331 82.5331 206.3099 0021863 85.8751 274.4964 14.84858747675213
ERBS
1 15354U 84108B 97087.11735680 -.00000039 00000-0 18065-4 0 2654
2 15354 56.9967 323.5028 0006832 62.4844 297.6881 14.95027625679309
NOAA 9
1 15427U 84123A 97089.82715077 .00000028 00000-0 38118-4 0 904
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2 15427 98.9094 160.3750 0014149 219.9960 140.0167 14.13846232634137
Mir
1 16609U 86017A 97090.13447736 .00003272 00000-0 44615-4 0 1578
2 16609 51.6540 118.0778 0010466 239.4449 120.5494 15.60812570634844
SPOT 1
1 16613U 86019A 97089.22488510 -.00000044 00000-0 00000+0 0 487
2 16613 98.7980 162.2130 0001889 94.3145 265.8261 14.19990045260906
Cosmos 1766
1 16881U 86055A 97088.51732938 .00000250 00000-0 27073-4 0 4656
2 16881 82.5166 263.2991 0020558 111.5493 248.7935 14.83830123576155
EGP
1 16908U 86061A 97089.24916812 -.00000083 00000-0 10000-3 0 1641
2 16908 50.0089 197.5294 0011476 20.9293 339.2011 12.44416390152022
NOAA 10
1 16969U 86073A 97089.88786838 .00000012 00000-0 23257-4 0 216
2 16969 98.5410 84.9732 0011933 236.6285 123.3754 14.25023817547433
MOS-1
1 17527U 87018A 97087.22391387 -.00000043 00000-0 00000+0 0 5265
2 17527 98.8971 148.4327 0019085 263.5038 96.3954 14.00417643514742
GOES 7
1 17561U 87022A 97089.36041332 -.00000166 00000-0 10000-3 0 3356
2 17561 3.6153 67.6022 0023689 238.2953 276.9932 1.00264081 20173
Kvant-1
1 17845U 87030A 97089.68627995 .00008645 00000-0 10754-3 0 9429
2 17845 51.6494 120.3349 0010347 240.6889 119.2378 15.60811462568880
DMSP B5D2-3
1 18123U 87053A 97089.73501510 -.00000010 00000-0 17076-4 0 8573
2 18123 98.7657 281.2652 0014405 153.2809 206.9110 14.15469926505036
RS-10/11
1 18129U 87054A 97089.57740654 .00000037 00000-0 23574-4 0 3366
2 18129 82.9251 296.8465 0013226 78.1128 282.1514 13.72376225489452
Meteor 2-16
1 18312U 87068A 97088.14501331 .00000066 00000-0 45422-4 0 5533
2 18312 82.5557 126.0730 0012920 134.4522 225.7690 13.84093761485597
Meteor 2-17
1 18820U 88005A 97090.25558868 .00000087 00000-0 64454-4 0 2177
2 18820 82.5430 178.7354 0015857 196.5481 163.5162 13.84771944463250
DMSP B5D2-4
1 18822U 88006A 97089.53350620 .00000021 00000-0 27639-4 0 4944
2 18822 98.3816 273.9170 0005251 249.8869 110.1743 14.23221312475303
Glonass 34
1 19163U 88043A 97089.30602021 .00000050 00000-0 10000-3 0 1687
2 19163 65.3779 76.2031 0010507 149.8170 210.2385 2.13102285 68336
Glonass 36
1 19165U 88043C 97087.01704039 .00000037 00000-0 10000-3 0 5743
2 19165 65.3595 76.2294 0005400 321.4861 38.4942 2.13101877 68904
METEOSAT 3
1 19215U 88051A 97088.24538608 -.00000164 00000-0 00000+0 0 3117
2 19215 3.8406 66.3298 0003975 160.6279 199.5622 0.96948957 19944
OKEAN 1
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1 19274U 88056A 97089.22545071 .00000231 00000-0 25766-4 0 1649
2 19274 82.5142 3.8353 0018005 264.3979 95.5188 14.82597551471750
Meteor 3-2
1 19336U 88064A 97090.18325450 .00000051 00000-0 10000-3 0 5616
2 19336 82.5419 323.3429 0015966 238.7951 121.1606 13.16981403417253
Glonass 39
1 19503U 88085C 97083.76316125 -.00000003 00000-0 10000-3 0 4572
2 19503 65.4862 315.2341 0012022 168.9236 191.1727 2.13101654 66320
NOAA 11
1 19531U 88089A 97089.85165957 .00000000 00000-0 25109-4 0 9082
2 19531 99.1633 121.0900 0011962 151.6797 208.5027 14.13125951438933
TDRS 3
1 19548U 88091B 97074.70493531 -.00000212 00000-0 10000-3 0 2760
2 19548 3.0363 70.5124 0001802 263.1897 178.3079 1.00278202 18253
Glonass 40
1 19749U 89001A 97087.08515966 .00000037 00000-0 10000-3 0 6686
2 19749 65.3325 75.7835 0007719 256.8785 103.0400 2.13101550 63900
Glonass 41
1 19750U 89001B 97086.20136851 .00000033 00000-0 10000-3 0 5789
2 19750 65.3392 75.8814 0008690 232.9908 126.9322 2.13101723 63904
GPS BII-01
1 19802U 89013A 97089.33055277 .00000042 00000-0 00000+0 0 3827
2 19802 55.4672 99.2335 0038823 198.5926 161.3345 2.00567476 59459
Akebono
1 19822U 89016A 97088.64095281 .00004878 00000-0 26879-3 0 8938
2 19822 75.1259 317.4498 3718514 249.8005 67.0607 7.96810113189365
Meteor 2-18
1 19851U 89018A 97089.98745509 .00000015 00000-0 -78233-7 0 5522
2 19851 82.5180 52.3949 0012617 251.4744 108.5046 13.84428013408512
MOP-1
1 19876U 89020B 97078.42636409 -.00000089 00000-0 00000+0 0 2524
2 19876 2.5412 70.7379 0018350 282.4843 77.7048 0.97108892 9295
TDRS 4
1 19883U 89021B 97086.36120394 -.00000272 00000-0 10000-3 0 3199
2 19883 0.4556 85.9620 0002649 271.7427 276.1149 1.00268515201946
GPS BII-02
1 20061U 89044A 97089.67027495 .00000024 00000-0 10000-3 0 3700
2 20061 54.0223 274.5680 0167384 220.5273 138.2347 2.00563017 57205
Nadezhda 1
1 20103U 89050A 97087.89624616 .00000041 00000-0 27285-4 0 1121
2 20103 82.9550 258.6901 0037724 342.8503 17.1375 13.73876017387775
GPS BII-03
1 20185U 89064A 97089.37062047 .00000041 00000-0 00000+0 0 4073
2 20185 55.2597 99.6376 0016326 336.5716 23.4122 2.00556280 55776
GMS 4
1 20217U 89070A 97089.09629630 -.00000374 00000-0 10000-3 0 5483
2 20217 2.3637 73.5052 0001104 114.7008 154.1040 1.00267004 28289
INTERCOSMOS 24
1 20261U 89080A 97088.07285808 .00000077 00000-0 13609-4 0 5764
2 20261 82.5869 88.7588 1242676 113.7984 259.8260 12.47394255341424
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GPS BII-04
1 20302U 89085A 97089.53305567 .00000010 00000-0 10000-3 0 3915
2 20302 53.1766 214.2709 0028737 188.1602 171.7726 2.00571780 54577
Meteor 3-3
1 20305U 89086A 97089.07322118 .00000044 00000-0 10000-3 0 7820
2 20305 82.5465 286.9243 0005982 342.6058 17.4854 13.04419783355471
COBE
1 20322U 89089A 97089.54316438 .00000003 00000-0 29883-4 0 2934
2 20322 98.9292 105.7994 0009072 325.3446 34.7136 14.03459462377098
Kvant-2
1 20335U 89093A 97089.68627995 .00008645 00000-0 10754-3 0 8539
2 20335 51.6494 120.3349 0010347 240.6889 119.2378 15.60811462417892
GPS BII-05
1 20361U 89097A 97090.05451730 -.00000026 00000-0 00000+0 0 1939
2 20361 56.1606 41.9528 0091838 139.3169 221.3655 2.00566866 44065
COSMOS 2054 (Altair-1)
1 20391U 89101A 97085.70450723 -.00000136 00000-0 00000+0 0 5267
2 20391 4.3762 61.6692 0001949 227.9875 132.1799 1.00269745 26837
SPOT 2
1 20436U 90005A 97087.87214532 -.00000044 00000-0 00000+0 0 2049
2 20436 98.7317 163.6711 0000728 112.3101 247.8151 14.20026336372246
UO-14
1 20437U 90005B 97089.72974505 .00000001 00000-0 17025-4 0 2580
2 20437 98.5205 173.0849 0012088 78.2912 281.9613 14.29954247375009
AO-16
1 20439U 90005D 97088.69758929 .00000002 00000-0 17594-4 0 543
2 20439 98.5342 174.8339 0012135 80.8460 279.4659 14.30002261374874
DO-17
1 20440U 90005E 97087.78191825 .00000006 00000-0 19079-4 0 566
2 20440 98.5430 174.7444 0012340 83.5231 276.7355 14.30144791374771
WO-18
1 20441U 90005F 97089.17726513 .00000037 00000-0 31174-4 0 597
2 20441 98.5403 176.0196 0012872 80.3991 279.8646 14.30112982374975
LO-19
1 20442U 90005G 97088.73112358 -.00000009 00000-0 13028-4 0 560
2 20442 98.5459 176.2110 0013303 81.8036 278.4660 14.30226042374931
GPS BII-06
1 20452U 90008A 97088.45931538 .00000017 00000-0 10000-3 0 2939
2 20452 54.0601 155.1390 0066250 102.5040 258.3865 2.00558601 52535
MOS-1B
1 20478U 90013A 97088.22760386 -.00000044 00000-0 00000+0 0 360
2 20478 99.0976 159.7722 0005440 183.3802 176.7324 13.93972421284267
DEBUT
1 20479U 90013B 97085.48302730 -.00000004 00000-0 65977-4 0 535
2 20479 99.0338 62.9158 0539870 203.9930 153.5133 12.83349929334118
FO-20
1 20480U 90013C 97088.89626689 -.00000000 00000-0 72065-4 0 9550
2 20480 99.0354 65.4317 0540752 196.9020 161.3426 12.83237082334539
MOS-1B R/B
1 20491U 90013D 97090.16215952 -.00000964 00000-0 -17455-2 0 3332
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2 20491 99.0499 140.5653 0470549 342.3666 16.1574 13.02995652339237
LACE
1 20496U 90015A 97089.20731063 .00001789 00000-0 57114-4 0 7402
2 20496 43.1018 9.6410 0009518 113.1796 247.0063 15.36547106397819
Nadezhda 2
1 20508U 90017A 97087.88393271 .00000022 00000-0 78074-5 0 1115
2 20508 82.9515 33.1572 0043484 295.2741 64.3907 13.73519521354975
OKEAN 2
1 20510U 90018A 97088.74962119 .00000082 00000-0 80241-5 0 5724
2 20510 82.5238 320.4888 0020288 101.5558 258.7930 14.78675759381876
GPS BII-07
1 20533U 90025A 97061.89524668 .00000040 00000-0 00000+0 0 3010
2 20533 54.4568 276.8773 0310375 89.8836 267.4615 1.90032860 50700
PegSat
1 20546U 90028A 97090.21994989 .00007316 00000-0 11959-3 0 482
2 20546 94.1167 156.4632 0053915 334.8854 24.9782 15.50916041389433
HST
1 20580U 90037B 97087.51039480 .00000298 00000-0 16491-4 0 9438
2 20580 28.4666 192.6287 0014629 76.5752 283.6463 14.86429906181032
MACSAT 2
1 20608U 90043B 97086.27906687 .00000129 00000-0 19212-4 0 2575
2 20608 89.9279 170.9514 0105721 144.7492 216.0778 14.64985977367733
Glonass 44
1 20619U 90045A 97085.57488418 -.00000003 00000-0 10000-3 0 3802
2 20619 65.0538 314.2756 0027298 210.2224 149.7022 2.13102463 53326
Glonass 45
1 20620U 90045B 97089.91692150 .00000004 00000-0 10000-3 0 3569
2 20620 65.0569 314.1105 0008510 52.2640 307.8554 2.13102495 53457
Glonass 46
1 20621U 90045C 97087.63808021 -.00000002 00000-0 10000-3 0 9715
2 20621 65.0812 314.2492 0011148 195.5632 164.4638 2.13102820 53409
Kristall
1 20635U 90048A 97089.68627995 .00008645 00000-0 10754-3 0 6453
2 20635 51.6494 120.3349 0010347 240.6889 119.2378 15.60811462388724
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1 20638U 90049A 97089.44870159 .00000042 00000-0 21501-4 0 6459
2 20638 52.9908 89.7564 0010563 275.5094 84.4692 15.07578727375490
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2 20670 82.5468 119.9461 0015679 163.6611 196.5056 13.84124449341441
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1 20712U 90065A 97088.99602455 .00000287 00000-0 52021-3 0 4090
2 20712 17.7298 133.5867 7181708 233.7528 37.1813 2.35869621 49865
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2 20724 55.1058 97.2025 0136781 190.3001 169.4569 2.00564023 47166
Feng Yun1-2
1 20788U 90081A 97089.54114935 .00000109 00000-0 10000-3 0 2995
2 20788 98.8195 91.2200 0015242 58.5948 301.7033 14.01407165336204
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2 20830 56.0985 39.9092 0065590 93.3994 267.3318 2.00571937 47816
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2 20959 55.2980 99.2639 0113608 245.6111 113.2349 2.00570575 46434
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1 20978U 90105A 97089.78599369 .00000076 00000-0 42300-4 0 155
2 20978 98.5658 164.1049 0080067 44.5609 316.1976 14.32732501330752
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2 21006 65.3089 75.1328 0058522 189.0673 170.8262 2.13102431 49044
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2 21008 65.3128 75.0606 0008643 272.4288 87.4750 2.13098735 49086
AO-21
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2 21140 1.1137 78.3325 0001078 218.4938 297.0631 1.00220522 24460
Nadezhda 3
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2 21152 82.9245 294.9458 0040744 272.0001 87.6476 13.73544793302824
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1 21216U 91025A 97090.02556444 .00000005 00000-0 10000-3 0 5900
2 21216 64.8141 313.5689 0009200 204.0469 155.9607 2.13103329 46635
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2 21218 64.7968 313.6940 0007611 279.0373 80.8837 2.13102503 46537
GRO
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Meteor 3-4
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2 21232 82.5459 169.8808 0014108 158.6400 201.5228 13.16474639285305
NOAA 12
1 21263U 91032A 97089.87594589 .00000056 00000-0 43916-4 0 3292
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2 21552 56.3746 37.8414 0073614 256.4703 102.7019 2.00569955 41986
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TDRS 5
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2 21701 56.9855 55.5789 0005554 99.9347 260.2316 14.96578400302739
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1 21798U 91082A 97089.89671742 .00000028 00000-0 38445-4 0 6832
2 21798 98.9287 113.1260 0013141 132.9125 227.3154 14.14028184275448
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Glonass 55
1 21855U 92005C 97089.83574422 .00000050 00000-0 00000+0 0 3960
2 21855 65.2644 74.6545 0007956 206.9857 152.9777 2.13102067 40201
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2 21890 53.7512 214.8563 0080904 159.2217 201.1039 2.00552672 37388
GPS BIIA-13
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Glonass 57
1 22057U 92047B 97089.09103696 .00000001 00000-0 00000+0 0 3102
2 22057 64.6603 313.6156 0008323 333.0673 26.9410 2.13102567 36254
Glonass 58
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Glonass 59
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2 22513 65.2718 74.5449 0006714 217.1624 142.7964 2.13102343 31981
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UFO F1
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1 22698U 93041A 97089.19762246 .00000075 00000-0 26715-4 0 5649
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1 22700U 93042A 97089.72784940 .00000011 00000-0 00000+0 0 6766
2 22700 54.1543 216.6279 0064793 9.0201 351.0848 2.00564479 27497
NOAA 13
1 22739U 93050A 97089.97020347 -.00000043 00000-0 17419-5 0 2982
2 22739 99.0860 53.7344 0010070 134.8559 225.3429 14.10987211187496
GPS BIIA-22
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2 22782 82.5486 120.5008 0020710 256.7449 103.1399 13.83071843180664
UFO F2
1 22787U 93056A 97 72.23671468 .00000000 00000-0 10000-3 0 7106
2 22787 3.8599 328.4695 0003428 7.5657 352.4443 1.00262471 11534
SPOT 3
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STELLA
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2 22826 98.5501 164.0084 0009927 114.9849 245.2326 14.27830255182615
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Meteor 3-6
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TUBSAT-B
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GOES 8
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MSTI 2
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STRV-1B
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2 23126 7.0668 114.6059 7246857 302.8413 7.2022 2.33381675 22745
Nadezhda 4
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RESURS 1-3
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Glonass 69
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NOAA 14
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2 23533 98.8477 94.7002 0006998 331.5888 28.4903 14.12781000104107
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GFZ-1
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2 23558 51.6496 119.8704 0005039 205.7955 154.2796 15.64183971634390
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2 23560 98.5487 163.5115 0001235 63.1219 297.0093 14.32248274101272
Spektr
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GOES 9
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UPM SAT 1
1 23606U 95033B 97087.88634535 .00000164 00000-0 37635-4 0 2622
2 23606 98.1292 27.8981 0008377 11.5996 348.5384 14.67369127 92463
CERISE
1 23607U 95033C 97086.37841876 .00000045 00000-0 16786-4 0 1647
2 23607 98.1311 26.1603 0007051 16.9934 343.1504 14.67009293 92255
TDRS 7
1 23613U 95035B 97089.50735822 .00000091 00000-0 00000+0 0 3175
2 23613 1.2731 81.6857 0004043 252.3653 225.8011 1.00281808 6253
Glonass 74
1 23620U 95037A 97090.16281158 .00000009 00000-0 00000+0 0 2669
2 23620 64.8147 194.3685 0018765 167.5885 192.4772 2.13103027 13126
Glonass 75
1 23621U 95037B 97087.52539001 .00000027 00000-0 00000+0 0 2748
2 23621 64.8247 194.4616 0018221 178.1840 181.8399 2.13102410 13064
Glonass 76
1 23622U 95037C 97089.92957049 .00000011 00000-0 00000+0 0 2801
2 23622 64.8147 194.3817 0036671 165.4638 194.6632 2.13102731 13113
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Prognoz-M2
1 23632U 95039A 97079.84382510 -.00000627 00000-0 00000+0 0 1217
2 23632 70.6480 248.0880 7527062 328.1230 336.4160 0.26349400 1586
SICH-1
1 23657U 95046A 97090.10566033 .00000088 00000-0 10040-4 0 1577
2 23657 82.5325 296.4588 0026389 195.7155 164.3238 14.73541518 85080
RADARSAT
1 23710U 95059A 97088.54072399 .00000142 00000-0 72025-4 0 2521
2 23710 98.5798 97.1566 0001205 52.6856 307.4436 14.29990831 73020
Glonass 79
1 23734U 95068A 97087.23226255 .00000028 00000-0 00000+0 0 2638
2 23734 64.8207 194.3855 0017715 322.8440 37.0546 2.13101998 10029
Glonass 78
1 23735U 95068B 97089.76047236 .00000012 00000-0 00000+0 0 2519
2 23735 64.8194 194.2919 0006942 210.8879 149.0912 2.13124957 10073
Glonass 77
1 23736U 95068C 97088.87443007 .00000020 00000-0 00000+0 0 2392
2 23736 64.8100 194.3321 0007487 200.4140 159.5786 2.13102122 10053
XTE
1 23757U 95074A 97088.85139837 .00000818 00000-0 39147-4 0 1363
2 23757 22.9848 267.0373 0013290 239.2266 120.6906 14.97799206 68341
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1 23802U 96013A 97089.62187513 .00000147 00000-0 00000+0 0 1230
2 23802 86.3228 22.9666 6568220 272.2441 19.8272 1.36264915 5469
1996010E
1 23824U 96010E 97089.51540880 .00026909 00000-0 99977-2 0 1978
2 23824 47.3987 165.6392 6833304 108.6348 332.4982 2.84457806 9518
GPS BIIA-25
1 23833U 96019A 97087.58654351 -.00000052 00000-0 00000+0 0 1654
2 23833 54.6196 336.4026 0027265 145.9118 214.3442 2.00565836 7380
Priroda
1 23848U 96023A 97089.68627995 .00008645 00000-0 10754-3 0 2952
2 23848 51.6494 120.3349 0010347 240.6889 119.2378 15.60811462 53294
MSX
1 23851U 96024A 97087.54600062 -.00000047 00000-0 00000+0 0 2189
2 23851 99.4093 79.1724 0008520 93.8703 266.3370 13.97391738 47212
SAX
1 23857U 96027A 97089.93687570 .00001622 00000-0 83714-4 0 648
2 23857 3.9523 179.7479 0014531 203.5937 156.5421 14.91773410 50035
MSTI 3
1 23868U 96031A 97089.56351071 .00001764 00000-0 36899-4 0 1277
2 23868 97.1150 281.0504 0008482 201.0825 159.0077 15.46790764 49070
TOMS-EP
1 23940U 96037A 97087.20524075 .00002179 00000-0 97778-4 0 980
2 23940 97.4198 355.1634 0014519 66.0679 294.2101 15.22166950 40829
GPS BIIA-26
1 23953U 96041A 97086.00971843 .00000029 00000-0 00000+0 0 1255
2 23953 55.1461 96.9326 0038409 328.5932 31.1874 2.00555095 5142
ADEOS
1 24277U 96046A 97088.56608276 -.00000044 00000-0 00000+0 0 1562
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2 24277 98.6072 167.3476 0001318 75.2794 284.8539 14.27647373 32005
FO-29
1 24278U 96046B 97087.73655411 -.00000079 00000-0 -45808-4 0 674
2 24278 98.5511 139.9047 0352172 34.7480 327.6102 13.52628974 30240
FAST
1 24285U 96049A 97089.06879481 .00001218 00000-0 11686-3 0 768
2 24285 82.9746 75.8034 2207360 132.7161 248.2237 10.81915934 23865
1996049B
1 24286U 96049B 97090.01279608 .00001800 00000-0 17259-3 0 872
2 24286 82.9947 75.5021 2206465 130.6797 250.8097 10.82337126 23965
Microsat
1 24291U 96050A 97089.91845353 .00049154 65373-5 35350-3 0 1655
2 24291 62.7876 37.4251 0562662 138.3679 226.1711 14.76595378 31359
MO-30
1 24305U 96052B 97089.88642207 .00000204 00000-0 20364-3 0 878
2 24305 82.9308 52.4404 0032036 64.8405 295.6044 13.73090577 28312
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1 24320U 96056A 97085.86671287 .00000006 00000-0 00000+0 0 739
2 24320 54.6186 276.9699 0049761 99.7791 260.8140 2.00573265 3802
SAC-B/HETE
1 24645U 96061A 97087.13480070 .00000603 00000-0 37405-4 0 552
2 24645 37.9762 346.6552 0049039 3.2479 356.8596 15.14923872 21768
Soyuz TM-25
1 24717U 97003A 97089.68627995 .00008645 00000-0 10754-3 0 326
2 24717 51.6494 120.3349 0010347 240.6889 119.2378 15.60811462634778
INTELSAT 801
1 24742U 97009A 97089.01402199 .00000115 00000-0 00000+0 0 473
2 24742 0.0023 248.2480 0005159 104.9324 246.5335 1.00281311 349
1997009B
1 24743U 97009B 97089.57674157 .00101344 -42523-6 49314-2 0 259
2 24743 6.8631 341.3793 7312143 201.3285 96.0624 2.27706038 662
ZEYA
1 24744U 97010A 97089.80980610 .00002663 00000-0 91361-4 0 243
2 24744 97.2806 356.3360 0009033 18.2497 341.9074 15.30999399 4095
1997010B
1 24745U 97010B 97087.58351672 .00001103 00000-0 39071-4 0 166
2 24745 97.2814 354.1752 0007813 29.5934 330.5754 15.31206964 3752
1997010C
1 24746U 97010C 97089.77615978 .00011311 00000-0 27416-3 0 185
2 24746 97.2749 356.7599 0033266 156.3532 203.9257 15.40646906 4117
1997010D
1 24747U 97010D 97089.68449304 .00011411 00000-0 30026-3 0 175
2 24747 97.2756 356.5255 0023607 165.0578 195.1398 15.38431311 4003
TEMPO 2
1 24748U 97011A 97088.45608466 -.00000070 00000-0 00000+0 0 464
2 24748 0.5682 266.0773 0007798 98.6750 236.5165 1.00273239 314
1997011B
1 24749U 97011B 97089.16482891 .00136530 63623-6 10349-2 0 248
2 24749 25.7421 62.9265 6121568 207.0219 100.3907 3.96910728 868
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1121. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: Al Gerheim <gerheim@sonalysts.com>
Message-ID: <33411815.C69@sonalysts.com>
Source record: 19325
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Vince Fiscus, KB7ADL wrote:
>
> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
> satellite. Your donations are tax deductable. See http://www.amsat.org
>

I have never worked an AMSAT satellite because the gear required costs
too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
a bird I can use, I won't be cheap.

Do you have any idea how I can contribute to the Russian Amateur
Satellite Program?

--

_\\V//_
(O-O)
+-------oOO--`o'--OOo-------+
| Albert P Gerheim, K1QN |
| http://www.sonalysts.com |
| 1 (800) 526-8091 X 218 |
+---------oOO---OOo---------+

1122. Re: 8080 WeFax (why not here? :))

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <33410F03.3B95@cyberportal.net>
Source record: 19326

c002@Lehigh.EDU wrote:
>
> There still IS a HF weather fax on 8080KHz right?

Only part-time. I'm not sure of the hours. 3357 and 10865 (if I recall)
have some action, too.

Try:

http://ourworld.compuserve.com/homepages/HFFAX/hffax.htm

for a good listing of frequencies and times.

73

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

1123. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr1.154510.26891@ke4zv.atl.ga.us>
Source record: 19327
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In article <32cb5626.9989153@news.ccnet.com> w6uv@ccnet.com writes:
>On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
>wrote:
>>You'll need a pair of steerable yagis or helixes, for mode U/V. You can
>>build these yourself and save a bunch of money. When the sat is near apogee,
>>it hangs in virtually the same spot in the sky for long periods, so you can
>>aim the antennas by hand, no need for auto-tracking, or even for rotators.
>>The antennas don't have to be very high off the ground, since they are
>>looking up. You can use a tripod or post mount and turn them directly
>>by hand as needed. The antennas can be made from a length of 2x2 and use
>>aluminum clothesline wire for elements. There are a number of antenna
>>programs available on the net which can optimize the design for you.
>
>I thought the P3D antenna gain and power output was high enough to
>allow the use of omni antennas on the ground. Is this not true?

Wow, been digging in the archives. eh? P3D has a 10x larger power
budget than AO10 or AO13, but I think you'd be hard pressed to work
it using omni antennas when it is at apogee. I understand that it
is planned to be active on more than one mode at once, so the larger
power budget will be shared across more than one transponder at a
time. And while greater output power will make it somewhat easier
to hear, extra power supply at the satellite doesn't make it hear
you any better.

It is supposed to be 3-axis stablized, so squint angles shouldn't
be as much of a problem as they are for AO10, and were for AO13,
but I don't think that will be sufficient to allow you to work
it without a steerable gain antenna at your station. (At perigee,
of course, it should be possible to work it with an omni, but it
won't dwell at perigee long, and coverage will be much less than
when it is at apogee and a whole hemisphere will be in its footprint.)

It shouldn't take quite as elaborate an antenna system to work
P3D as it does to work AO10 (or did to work AO13). Fairly compact
beams should suffice. You shouldn't need anything like the 22 el
2m and 40 el 70cm long boom antennas I'm using for AO10. An 8 el 2m
and a 16 el 70cm antenna should do nicely (that's for CP, halve the
number of elements for linear polarization). That's a boom length
on the order of 6 feet. If you're running a good amp and have a
good mast mounted preamp, you might get away with even smaller
antennas, say a nested quad backed by a reflector screen (but
with decent antennas you shouldn't need to run an amp at all).

You shouldn't have any trouble setting up a workable antenna system
on a patio or balcony. You can cheaply build the antennas needed.
And as I noted in my original post, you can hand steer the antennas
as long as you aren't trying to work perigee passes. The molynia orbit
has a very long dwell at apogee so you don't have to reposition very
often.

The real digital action may be up at S band, and the needed antenna
for that can be quite small. A 1 to 1.5 meter dish should be plenty,
and that's easily handled on a tripod. You might even be able to
dual feed it and use it at L band as well. If not, a modest loop
yagi will do for L band. (I'll be using my 12 foot dish, because
I already have it, but I'm going to have to throttle power *way*
back to avoid being too strong at the satellite.)

P3D is going to be much easier to work than our previous molynia
orbit birds, but don't expect to work it at apogee with a microsat
class station. You'll want a receive antenna with a narrow enough
beamwidth to keep the warm Earth from affecting system noise
temperature (otherwise a low noise preamp will do you no good),
and you'll want a transmit antenna with enough gain to avoid having
to run an external amp. With my current setup, I expect to be using
less than 2-10 watts uplink power for mode U/V (the higher power may
be needed to burn through the treeline for near horizon passes). With
lesser antennas, you may need 25-45 watts uplink power.

The receive setup is really the key, however, as it always is with
satellites. You simply *must* have enough directivity to let the
antenna look at the cold sky. Otherwise system noise temperature
will be limited by the warm Earth, and you won't be able to compensate
by adding more preamplification. An antenna with a 3 db beamwidth of
22 degrees, and a good F/B ratio, should suffice for high passes.
A narrower beam will be needed for near horizon passes.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1124. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: Jack
Message-ID: <3341499C.632C@sullivan.vf.mmc.com>
Source record: 19328
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Al Gerheim wrote:
>
> Vince Fiscus, KB7ADL wrote:
> >
> > Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
> > satellite. Your donations are tax deductable. See http://www.amsat.org
> >
>
> I have never worked an AMSAT satellite because the gear required costs
> too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
> a bird I can use, I won't be cheap.

Personally, I can't financially support ANY organization that insists on using inferior product. I am speaking about the Ariane 5 launch vehicle. The first one blew up, and the others that had space on the second launch pulled-out. One would think that Amsat would have learned over the years that the ESA does not have the world's best reliability for launch vehicles (anybody remember the early Oscars? The ones that were lost because the launch vehicle - Ariane - went into submarine mode?). I know where of I speak, having worked in the satellite business (RCA and it's successors) for the last 13+ years. When they see the light and use another launch vehicle, THEN I'll support them (Amsat).
Jack
Modeling the NYC and NYNH&H in HO; D&H and CP Rail in N
ARRL - N2MPU
NRA & NRA-ILA

1125. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E7z42x.G4p@pe1chl>
Source record: 19329
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In <32cb5626.9989153@news.ccnet.com> w6uv@ccnet.com (Jerry Gardner) writes:

>I thought the P3D antenna gain and power output was high enough to
>allow the use of omni antennas on the ground. Is this not true?

Traditionally, there has always been a 10dB discrepancy between
"AMSAT-promised minimum ERP" and realistic minimum ERP. This, of course,
mostly was because of the AGC action caused by alligator stations,
and on P3D the situation might be better because of the countermeasures.

Of course, directional antennas are always better because they help to
reduce noise as well. You can compensate the gain you get from the
antennas by using less output power.

Rob
--
+----------------------------------+--+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--+

1126. Saturday, April 5 Indiana Balloon Launch.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5hrl5p$hc6@news.ysu.edu>
Source record: 19330

INDIANA REPEATER/ATV/GPS PACKET BALLOON LAUNCH
WINDTRAX-11

Region: West Central Indiana

Date/Time: Saturday, April 5 / 7:00-8:00 AM Indiana
Time, 12:00-13:00 UTC

Location: Roachdale, Indiana (about 33 miles west
of Indianapolis) at North Putnam County
Middle School

Other states where Illinois, Michigan, Ohio, Kentucky,
the signals will Missouri
reach easily:

Site Coordinates: for initial antenna heading -
39 degrees 47.46" North Latitude
86 degrees 48.05" West Long.

ATV: 439.25 MHz AM NTSC from one color
and one b/w cam; WB8ELK color graphics
generator (1.5 watts, vertically
polarized)

VHF/UHF Repeater: Input - 144.30 MHz FM
Dual Output - 444.85 MHz FM (100mW, VP)
- 52.525 MHz FM (50 mW, VP)
Voice ID

Telemetry: 446.00 MHz FM AX.25 1200 baud packet
GPS/APRS position data (750 mW, VP)

HF Net: 3.869 - 3.871 Mhz SSB
VHF net: 147.33 Repeater (Putnamville)
(both beginning 11:30 UTC)

launch data courtesy of Chuck Crist, WB9IHS
mai@iquest.net
please contact Chuck for more info

Please email me news of upcoming balloon launches and post-flight
reports for distribution on the Net, and please also check out the
new High Altitude Balloon Launch Information Center (HABLIC) website
for collected launch notices presented in a uniform format.

Hank Riley, N1LTV

h1riley@umassd.edu
http://www.geocities.com/CapeCanaveral/3161/hablic.htm

1127. ARLK025 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk025.1997@arrl.org>
Source record: 19331
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK025
ARLK025 Keplerian data

ZCZC SK25
QST de W1AW
Keplerian Bulletin 25 ARLK025
From ARRL Headquarters
Newington, CT April 1, 1997
To all radio amateurs

SB KEP ARL ARLK025
ARLK025 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97090.46009141 .00000201 00000-0 10000-3 0 4678
2 14129 25.8061 155.3998 6074681 104.6111 326.3882 2.05883514 75782
RS-10/11
1 18129U 87054A 97091.10845853 .00000048 00000-0 35975-4 0 03466
2 18129 82.9249 295.7144 0013255 74.2892 285.9723 13.72376412489662
UO-11
1 14781U 84021B 97090.95640804 .00000072 00000-0 19946-4 0 09674
2 14781 97.8270 75.3094 0010682 251.0248 108.9803 14.69536371699911
RS-12/13
1 21089U 91007A 97091.17842947 .00000061 00000-0 48037-4 0 09774
2 21089 82.9219 335.7656 0028859 148.5039 211.7853 13.74078939308582
UO-14
1 20437U 90005B 97091.19916461 -.00000035 00000-0 31396-5 0 02701
2 20437 98.5206 174.5235 0012103 74.2982 285.9539 14.29953912375218
RS-15
1 23439U 94085A 97090.99848026 -.00000039 00000-0 10000-3 0 02134
2 23439 64.8107 277.6579 0151202 146.7607 214.2958 11.27525952093231
RS-16
1 24744U 97010A 97083.14310839 .00002070 00000-0 71636-4 0 00306
2 24744 097.2817 349.7946 0009281 039.6009 320.5910 15.30965101003077
AO-16
1 20439U 90005D 97091.14652606 .00000006 00000-0 18921-4 0 00675
2 20439 98.5343 177.2351 0012179 74.0913 286.1619 14.30002512375222
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DO-17
1 20440U 90005E 97091.21010269 .00000017 00000-0 23365-4 0 00803
2 20440 98.5425 178.1083 0012440 74.3652 285.8903 14.30145266375261
WO-18
1 20441U 90005F 97091.20623694 .00000016 00000-0 22948-4 0 00709
2 20441 98.5404 178.0110 0012950 74.5776 285.6841 14.30112970375269
LO-19
1 20442U 90005G 97091.17968560 .00000054 00000-0 37469-4 0 00706
2 20442 98.5458 178.6158 0013184 74.5567 285.7071 14.30227001375285
FO-20
1 20480U 90013C 97091.00146621 -.00000027 00000-0 10696-4 0 09708
2 20480 99.0358 67.1393 0540840 192.1298 166.6329 12.83236783334806
AO-21
1 21087U 91006A 97091.11526451 .00000094 00000-0 82657-4 0 08157
2 21087 82.9388 108.6283 0036482 121.4809 238.9920 13.74580117309567
UO-22
1 21575U 91050B 97091.16937117 -.00000004 00000-0 12703-4 0 07794
2 21575 98.3131 154.4017 0008198 117.1158 243.0857 14.37062742299420
KO-23
1 22077U 92052B 97091.08305272 -.00000037 00000-0 10000-3 0 06632
2 22077 66.0802 306.6752 0012681 231.8038 128.1839 12.86301288217836
KO-25
1 22828U 93061F 97091.21162622 -.00000024 00000-0 76653-5 0 05332
2 22828 98.5439 167.4261 0011067 89.8097 270.4352 14.28172138151226
IO-26
1 22826U 93061D 97091.15887140 .00000023 00000-0 26827-4 0 05674
2 22826 98.5502 167.3006 0009957 105.2698 254.9586 14.27830873183098
AO-27
1 22825U 93061C 97091.18452357 -.00000012 00000-0 12555-4 0 05508
2 22825 98.5508 167.0988 0009375 103.8768 256.3461 14.27721259183089
FO-29
1 24278U 96046B 97091.13904059 -.00000057 00000-0 -22122-4 0 00892
2 24278 98.5508 142.8480 0352114 25.9613 335.8729 13.52628892030702
MO-30
1 24305U 96052B 97090.97946360 .00000204 00000-0 20364-3 0 00934
2 24305 82.9318 51.6336 0032058 61.1229 299.3133 13.73090798028467
Mir
1 16609U 86017A 97091.47903129 .00003071 00000-0 42239-4 0 1600
2 16609 51.6519 111.3084 0010459 244.5798 115.4118 15.60820977635052

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
April 5, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
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1128. Amateur CW/Voice Satellite Frequencies FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0104971714140001@cqtlm-ppp060.dowco.com>
Source record: 19332
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space,rec.ham-radio

Amateur CW/Voice Satellite Frequencies as of April 1, 1997.

Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.908 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

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* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. The
ground controlers seem to be experimenting with the various beacons,

therefore it is difficult to predict which will be on.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Digital mode until April 4. Here is the latest schedule:

Apr. 1(Tue) 00:28z JD 9600bps
4(Fri) 01:14z JA
11(Fri) 10:16z JD 1200bps
18(Fri) 00:46z JD 9600bps
25(Fri) 01:24z JA
May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* STS-83 is scheduled to launch on April 3rd, 1997 at approximately 2:01 p.m. EST (1901 UTC). The launch window is 2 hours 30 minutes long. STS-83 will include a SAREX package.

CALL SIGNS:

James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

QSLs: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

This FAQ is constantly being updated and re-released on a weekly basis on or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/satellite1.html
Newsgroup...rec.radio.amateur.space
...rec.ham-radio
...uk.radio.amateur

...aus.radio.amateur.misc
Mail List...amsat-bb@amsat.org Mailist

- errors or omissions to ve7vdx@dowco.com

1129. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-04-01 00:00:00 UTC
From: Detlef Marxsen <dema@astrax.hanse.de>
Message-ID: <Pine.LNX.3.95.970401210436.128A-100000@astrax.hanse.de>
Source record: 19333

On Mon, 31 Mar 1997, Bob wrote:

> mbv@flash.net (Ken Durham) wrote:
>
>
> > Never thought we could get a launch for $100K. Since Arianne
> >hasn't kept any of its promises, we should get our money *back* and
> >at least look for another ride.

Sorry, did not receive the start of this thread ... but this statement is
definitely not realistic.
Lauching a satellite is not like riding a coach. You should read a bit
about the work the Phase 3D team had to invest to produce a launchable
solution. For example the adaption ring which is used to mount the sat to
the launcher was a major headache. Changing the launching vehicle would
mean dropping main sections of the investment.
Additionally you will not get a launch fee near the Ariane price anywhere.
This Ariane launch is a high risk test launch. Take the risk and save
money or pay a fortune for a standard launch elsewhere.

> > Also, I don't need to compare the Arianne-4 failure rate to know
> >that the Ariannespace track record for promises kept is getting worse.

As far as I know, they perform pretty well.

> the technical requirements to work the mating to/deployment from
> another launch vehicle are most decidedly non-trivial. Even were we
> able to find a replacement, I don't think we'd be ready to launch
> before the slipped Arianne-V window in Sept.

Yes, this is the main problem IMHO.

Cheers,
Detlef, DD3XD.

--

+-- //||\\ _______
| Detlef Marxsen Ham: DD3XD Quix: 2930158 | o (_______O [5m*[0m
| 53 27 N 09 57 E E-Mail: dema@astrax.hanse.de | @ ,_\ |
+-- |____) /|\

1130. LogSat for Windows, sat tracking software - new beta version

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: "Roberto f." <roberto@netwide.net>
Message-ID: <01bc3f23$e113aea0$068bd4d0@miseno.netwide.net>
Source record: 19334

Just a quick note to let everyone interested in satellite tracking that a new, fully functional beta version for LogSat Professional for Windows is now available for download at http://www.logsat.com. This release features new, strikingly beautiful, topographical maps.

--
Roberto Franceschetti

roberto@netwide.net

1131. Instatrack software

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: toms@glasscity.net
Message-ID: <3344d62b.1489488@news.glasscity.net>
Source record: 19335

Does anyone know of a newer version of Instatrack software than 1.0?
Is the author still publishing this program? Where can it be found?
Thanks for the help and replies... Tom, KB8PAI.

1132. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5hster$a1o$1@ddi2.digital.net>
Source record: 19336
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Al Gerheim <gerheim@sonalysts.com> said:

>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.
>
>Do you have any idea how I can contribute to the Russian Amateur
>Satellite Program?

Fair enough. But it's interesting to note that under your logic the only satellite project I should support is SAREX/MIREX, and the only ham radio band I should be interested in keeping as a ham radio band is the 2 meter band. Why should I care about 70 cm, 10 meters, or any other band I'm not on right now?

I don't think you're correct with your comments that AMSAT-NA doesn't support Mode K and A satellites. There's an excellent book available from your local Martha on how to get started on the Russian satellites. And it continues to sell well, indicating that there is interest in those birds.

The keplerian elements for the RS birds are distributed each week by AMSAT-NA, not to mention WWW resources, AMSAT-BB, and other online resources.

If you want to contribute to the Russian amateur satellites then I'm certain we can find the appropriate contact for you. Or a much closer source to home, SEDSAT, under construction at the University of Alabama Huntsville, will have a Mode A transponder. I'm certain they'd appreciate your financial support too.

Phase 3-D may not fulfill every ham operator's dream of a perfect satellite, but it will increase the capabilities of future amateur satellites, which - in the long run - will benefit all of us.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

1133. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <33420C10.63AA@rcru.rl.ac.uk>
Source record: 19337

orion@capital.net wrote:

> >
> I thought so too. I am begining to think they are continually
> postponing this launch just to keep the money rolling in.
>
> --

It is more likely to stop the rocket rolling over. Ariane are always late with new launchers. I thought that was common knowledge.

1134. Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Rudy Pycke <regie@interpac.be>
Message-ID: <01bc3f3a$e4b8ca60$42144ec2@stedos05.pop>
Source record: 19338

I would like to start up an amateur radio satellite station.
Digital communications and phone are my favorite modes.
I have already a 2m and 70cm crossed yagi and the rotors 5600B from Yaesu.
Before choosing a number of 'boxes' and software solutions, I am looking
for
some good ideas and tips.
Like:
- what is the preferred transceiver: the Kenwood 790 or the Yaesu 736R ?
- is WISP the best software for the job?
- which are at the moment the most interresting trackers?

Can I find the answers in any FAQ ?

73's de Rudy

E-mail: on6py@amsat.org

1135. Help a satellite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Rudy Pycke <regie@interpac.be>
Message-ID: <01bc3f3a$4d920700$42144ec2@stedos05.pop>
Source record: 19339

I would like to start up an amateur radio satellite station.
Digital communications and phone are my favorite modes.
I have already a 2m and 70cm crossed yagi and the rotors 5600B from Yaesu.
Before choosing a number of 'boxes' and software solutions, I am looking
for
some good ideas and tips.
Like:
- what is the preferred transceiver: the Kenwood 790 or the Yaesu 736R ?
- is WISP the best software for the job?
- which are at the moment the most interresting trackers?

Can I find the answers in any FAQ ?

73's de Rudy

E-mail: on6py@amsat.org

1136. Instatrack Software

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: toms@glasscity.net
Message-ID: <3346da1a.2496383@news.glasscity.net>
Source record: 19340

Does anyone know if the author of Instatrack is still producing it? I used to have version 1.0. If so, where might I find it? Thanks much... Tom, KB8PAI

1137. M2 Dualband Beam

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: fleet@mbl.edu
Message-ID: <fleet-0204970923430001@pom1.mbl.edu>
Source record: 19341

I wonder if anyone has used this beam with any success on Oscar 10 or 13?
Any input would be appreciatted, I'm getting back into Sat. after 10 yrs,
unfortunetly I need to keep the installation small and possibly without
elevation control.

1138. Re: 8080 WeFax (why not here? :))

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Michael Ruther <Ruther@alliedsignal.com>
Message-ID: <3342BB28.EB6@alliedsignal.com>
Source record: 19342

c002@Lehigh.EDU wrote:
>
> There still IS a HF weather fax on 8080KHz right?
> I cant find it on my SW rx or the Drake twins (then again, i wont comment on
> the twins...)
> Also, is there another fax freq. somewhere in the HF?
>
> thanks!!
>
> DAvid *still pissed at the fact that getting on p3d is expensive*
> |---|> | David
Roseman | c002@lehigh.edu |
> | | The Flying HAm - BBS |
> | Utopia Telecommunications | Technomage - BBS |
> | 610.838.2989 | N3SQE/1 - HAm |
> | (Parttime system) | |
> |-----My AWESOME home page :) http://www.lehigh.edu/~c002/c002.html-----|

If you mean wefax(weather fax) they are all over the marine hf bands.
tune up from 8 mhz during the day should find some.
Mike aa7qa @kc7y.az.usa.na(packet address)

1139. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr2.190027.1994@ke4zv.atl.ga.us>
Source record: 19343
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

In article <3341499C.632C@sullivan.vf.mmc.com> @sullivan.vf.mmc.com writes:
>
>Personally, I can't financially support ANY organization that insists
>on using inferior product. I am speaking about the Ariane 5 launch
>vehicle. The first one blew up, and the others that had space on
>the second launch pulled-out. One would think that Amsat would have
>learned over the years that the ESA does not have the world's best
>reliability for launch vehicles (anybody remember the early Oscars?
>The ones that were lost because the launch vehicle - Ariane - went
>into submarine mode?). I know where of I speak, having worked in
>the satellite business (RCA and it's successors) for the last 13+
>years. When they see the light and use another launch vehicle, THEN
>I'll support them (Amsat).
>Jack

Well gee, Jack, if you're willing to pay the difference in launch costs, AMSAT will be happy to use a different launch supplier. But realize that ESA has only had one launch failure with an AMSAT satellite on board, that was P3A, and our ride was *free* on that one because it was a developmental flight. ESA has given amateurs a free (or very reduced cost) ride up until now, as a piggyback payload, and they're only charging $100,000 for the P3D solo launch to GTO. If you know of another launch supplier who'll give us a ride to GTO for $90 a pound, lets hear about it.

The Chinese Long March (which doesn't have a sterling success record) costs 10x as much. Atlas II is even more (and has had failures too). Titan holds the all time record for longest launch delay, 1000 days sitting on the pad before it was ready to go, and Titans have blown up too, and cost even more than an Atlas II launch. And Shuttle is over $20,000 a pound, can't even reach GTO, and has had a spectacular failure of its own. The Russians recently had a blown launch too. Now Proton is about the most reliable launcher in the world, but guess what a GTO flight costs using it? It's quite a bit more than a Long March.

ESA gives amateurs a very cheap ride (way below their cost). The tradeoff for that has been some launch delays, and one launch failure, because we get all the new developmental launches at that price. That's a good tradeoff. We couldn't afford to launch on Atlas, or Titan, or even Proton.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems

Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1140. information

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: wim van 't hoog <vthoog@worldaccess.nl>
Message-ID: <33433E08.7585@worldaccess.nl>
Source record: 19344

Could anyone tell me more about microwave communication, just over land (not via satelite) and how that works , do i need optical visibility
My emailaddress is : wjvthoog@freemail.nl

Thanx!!!

1141. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr2.182555.1723@ke4zv.atl.ga.us>
Source record: 19345
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

In article <33411815.C69@sonalysts.com> Al Gerheim <gerheim@sonalysts.com> writes:
>Vince Fiscus, KB7ADL wrote:
>>
>> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
>> satellite. Your donations are tax deductable. See http://www.amsat.org
>>
>
>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.

Huh? You can work the microsats with a dualbander, even in some cases
a HT dualbander. If you don't have either of those, a $50 80 watt GE
Exec II or 110 watt Mastr II can make a dandy UHF uplink transmitter.
Use the temperature compensation input of the Icom for doppler tracking
and/or VXO. You've already got the 2m gear apparently if you're working
the mode A birds. Or you can certainly use one of the converter circuits
in the various Handbooks to translate receive down to the HF receiver
you've got to have to work mode A. Antennas are merely a matter of a
wooden 2x2 boom and some aluminum clothesline wire for elements.

If you can't get on the microsats or mode B birds for under $100, you
aren't trying.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1142. Re: LogSat for Windows, sat tracking software - new beta version

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5huanm$261@dsk92.itg.ti.com>
Source record: 19346

In article <01bc3f23$e113aea0$068bd4d0@miseno.netwide.net>,
roberto@netwide.net says...
>
>Just a quick note to let everyone interested in satellite tracking that a
>new, fully functional beta version for LogSat Professional for Windows is
>now available for download at http://www.logsat.com. This release features
>new, strikingly beautiful, topographical maps.
>
>--
>Roberto Franceschetti
>
>roberto@netwide.net
>
~~~~~~
I know this is only a Beta, but I never saw so many GPFs and
lock ups in a Beta program. This machine is running NT, so maybe
the program would run OK in Win95, but I'm not going to try
it on another machine....whew. Maybe it hasn't been run it on NT
before. Wish I had been warned!

Ken K5MBV
~~~~~~

1143. FT736R vs. IC821H?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Charlie Hicks <chicks@ix.netcom.com>
Message-ID: <33433298.4A4D@ix.netcom.com>
Source record: 19347

I'm about to invest in a satellite rig. Knowing the FT736R has been one of the primary rigs used, is it still the preferred rig? Can anyone objectively compare it to the updated IC821H?

I would prefer comparison info regarding sensitivity, useable features, etc. I already understand that the FT736 has more band options.

If one had the IC821H, what would be the preferable choice for 1.2 GHz? Thanks....

--
Charlie Hicks o Systems and Network Consulting
HICKS Systems & Associates, Inc. o Project Management
phone: (402) 339-4545 o Software Development
fax: (402) 339-4242 o Hardware and Software Sales
email: chicks@ix.netcom.com
ARS: WB0LJP
"For by grace you are saved by faith - and this not of yourselves, it is the gift of God - not of works, lest any man boast." Eph 2:8,9

1144. Re: information

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33431ABA.6726@ix.netcom.com>
Source record: 19348

wim van 't hoog wrote:
>
> Could anyone tell me more about microwave communication, just over
> land (not via satelite) and how that works , do i need optical
> visibility
> My emailaddress is : wjvthoog@freemail.nl
>
> Thanx!!!
--
Hello Wim Van 't Hoog
Microwave is indeed essentially line of sight depending on antenna
heights, power out, receiver sensitivity, atmospheric conditions etc.
There is a "Frequently Asked Question" (FAQ) and 2 other links on
microwave at URL:
http://pw2.netcom.com/~ac6v/pagew.html#MW
Also the library will have numerous books on microwave technology.

Good Luck
Rod in San Diego
--
AC6V DX Reference Page
With Over 700 Links To DX And HAm Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

I Transceive -- Therefore I Perceive -- AC6V

1145. New Astro Website

Newsgroup: rec.radio.amateur.space
Date: 1997-04-02 00:00:00 UTC
From: Paul Titze <ptitze@astron.physics.usyd.edu.au>
Message-ID: <33419F99.45CF@astron.physics.usyd.edu.au>
Source record: 19349

Hello everyone,

Anyone interested in the various disciplines of Astronomy should
definetly visit my website.

Paul.

==
ptitze@astron.physics.usyd.edu.au
http://www.physics.usyd.edu.au/~ptitze
==

1146. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc3fce$f60a1500$46c56cce@default>
Source record: 19350

Jason,

You forgot to include the URL.

73 de VE7MDL ....Erik.

Jason baack <baack@maine.edu> wrote in article
<5hohha$10ug@sol.caps.maine.edu>...
> For what it is worth, I have put together a few pages on amateur radio
> satellite communications.
> (Focusing on RS-10 for now)
>
> I designed it for the "newbie" into the ham sats.
>
> I have a few sound clips that I have recorded from RS-10 and RS-12.
> The basic shack description, pictures, and info on
> the ever popular question:
>
> "can you use a FM HT on the RS-10 satellite?"
>
> I also have links to some of the other good satellite stuff on the web.
> Take a look if you like.
> If you don't, then please disregard the post.
>
> Jason N1RWY
>

1147. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Charlie Rubenstein <rubenc@iglou.com>
Message-ID: <33430363.44B@iglou.com>
Source record: 19351

Rudy Pycke wrote:
> I am looking> for> some good ideas and tips.
> Like:
> - what is the preferred transceiver: the Kenwood 790 or the Yaesu 736R ?

Yaesu FT736R

> - is WISP the best software for the job?

Definitely

> - which are at the moment the most interresting trackers?

Kansas City Tracker/Tuner or FODTrack (see www.amsat.org and look at software)
>
> Can I find the answers in any FAQ ?

www.amsat.org has what you want.

>Charlie

1148. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5hv35d$170_002@blpm02-210.mcn.net>
Source record: 19352
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

>> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
>> satellite. Your donations are tax deductable. See http://www.amsat.org
>>
>
>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.

Al,
If you look at the Phase 3D transponder matrix, you will see that there is a
15m uplink and a 10m downlink. Think of the possiblities...

73 de KB7ADL
Vince

1149. ATV Multimedia web site

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: forsberg@io-online.com
Message-ID: <860047586.5879@dejanews.com>
Source record: 19353
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

I have a web page that is dedicated to Amateur Radio ATV (Amateur Television). If you would like to learn what goes on in ATV then check out my web page at:

http://web.io-online.com/users/forsberg/atv.htm

73, Bruce WB6IZG

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

1150. Re: 8080 WeFax (why not here? :))

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <33439E7D.2AC8@ix.netcom.com>
Source record: 19354

Michael Ruther wrote:
>
> c002@Lehigh.EDU wrote:
> >
> > There still IS a HF weather fax on 8080KHz right?
> > I cant find it on my SW rx or the Drake twins (then again, i wont comment on
> > the twins...)
> > Also, is there another fax freq. somewhere in the HF?
> >

<SNIP>

Michael,
Try HFFAX list by Marius Rensen @
http://promet12.cineca.it/htdx/swls/faxmain.html

It's a list of all LF-MF-HF FAX stations

Regards,
Rolf

1151. Anyone heard MIR lately?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Mike Cat <JoeQPublic@someaddress.net>
Message-ID: <3343A862.5482@someaddress.net>
Source record: 19355

My attempts as of lately to hear MIR's 145.800 downlink appear to be failing regularly for some strange reason. I have been leaving my receiver and TNC on continuously for over 48 hours now and have not heard a peep from MIR's PMS.

Does anyone have info as to it's status?

Thanks,
Mike Cat, FN42
http://www.codem.com/

1152. Re: ARLS008 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc402f$1638e800$8060b6cd@cbx-nt>
Source record: 19356

<<SNIP>>

> the launcher was a major headache. Changing the launching vehicle would
> mean dropping main sections of the investment.
> Additionally you will not get a launch fee near the Ariane price
anywhere.
> This Ariane launch is a high risk test launch. Take the risk and save
> money or pay a fortune for a standard launch elsewhere.

<<SNIP>>

Faulty logic. With this logic, why not hitch a ride on a Chinese rocket. Business minds would tell you something of nothing is still nothing. The Ariane program is faulty program, you are risking the whole bird and investment, yet I understand the financial implications. I guess what I am trying to say is NEXT time, maybe a different ride would be in order.

Regards

Christopher Cox
KC8FRJ
TRA#4901

1153. Re: Aero Engineering Undergrad wants to hang out with you guys!! :>)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Joshua Powers <jpowers1@nd.edu>
Message-ID: <3343FB58.5A45@nd.edu>
Source record: 19357

ssnow27716@aol.com wrote:
>
> Hi,
>
> I'm an Aerospace Engineering undergrad checking out this newsgroup. New to all this satellite tracking stuff. Just got out of lower

Wow, your message only had something like three carriage returns in it.
Might want to put a few more next time, since otherwise you have lines
that go well off the page.

Anyway, you're not the only Aerospace undergrad here, though I don't
get much time to post to this group.

I'm not sure why everyone tracks satellites. Some people do it in order
to listen to their transmissions, like weather sats. Some people do it
to watch them when they pass over, or to find secret U.S. DoD sats,
whose orbits are kept from us despite the fact that the Russians and
whoever else probably know exactly where they are anyway from doing
the same thing we can.

I track satellites mostly to watch them pass over, to keep up with
manned missions, and just for the heck of it. I'm in the midst
of our orbital mechanics class here right now, so I am beginning to
pick up the math, etc. that allows you to calculate orbits from
observations and such.

So, I guess that's the best I can do to explain it. I've been tracking
sats and such for many years, and will continue to do so. I you
have any more questions, pass them along. CC to email if possible, too.

Joshua Powers
jpowers1@nd.edu

Department of Aerospace and Mechanical Engineering
University of Notre Dame

1154. Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc407b$e5daad40$7ab630ce@pass>
Source record: 19358

Hello

Can someone tells me witch satellite are activ ?

I like to now the frequenties and status of folowing sat's :

By status I maen is It ENABLE or DISABLE ?

NOAA-9
NOAA-10
NOAA-13
FENG YUNG (normal at 137.795 Mhz I think)
SICH-1
OKEAN

ALL INFORMATION ARE WELKOM !!!!!!!!!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1155. FS: Kantronics D4-10 uhf data radio

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <33446F38.5065@vibroplex.com>
Source record: 19359
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.space

hi...

i have for sale a kantronics d4-10 uhf data radio... call or
email if interested..

mitch, w4oa
wa4osr@cris.com

1156. Re: Please help a new sae

Newsgroup: rec.radio.amateur.space
Date: 1997-04-03 00:00:00 UTC
From: bperr@premier1.net
Message-ID: <5i1d5m$u1$1@imagine.premier1.net>
Source record: 19360

Test Message Reply

[TN71] Northwest Soft System 206.513.1437

```
>> SlipStream Jet v1.014 (Unregistered) - (C) 1995 PBE
```

1157. Re: Ham-Space Digest V97 #118

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: doslover@juno.COM
Message-ID: <19970403.181217.10646.0.doslover@juno.com>
Source record: 19361

>Jason baack wrote:
>>
>> For what it is worth, I have put together a few pages on amateur
>radio
>> satellite communications.
>> (Focusing on RS-10 for now)
>[snip]
>> I also have links to some of the other good satellite stuff on the
>web.
>> Take a look if you like.
>> If you don't, then please disregard the post.
>
>But if I'd like - how would I find your page...? ;-)
>(wanna say: URL missing !!)>
>Oliver
>(DL9QJ, N3NSF)

Yep, I have to give a big WHOOPS! to everyone on the net..
The URL for the satellite pages is:

http://www.umecut.maine.edu/~baack/satellite1.html
(links from there go to various other topics and other sites)
(the *wav files of RS-10 and RS-12 are on the satellite QRP page..)

Sorry all,

Jason N1RWY
>

1158. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <3344FFDA.31F9@muenster.de>
Source record: 19362

Hi,

Charlie Rubenstein wrote:
> Rudy Pycke wrote:
> > I am looking> for> some good ideas and tips.
> > Like:
> > - what is the preferred transceiver: the Kenwood 790 or the Yaesu 736R ?
>
> Yaesu FT736R

Maybe you want to think about the Icom IC-821H (or the 820), which has a higher power output and has a display that shows you the 2 m and 70 cm simultaneously. It also is smaller than the Yaesu (maybe nice if you plan
portable / mobile operation) and has a connector for 9k6 data in-/output which (I think) the Yaesu doesn't have.

But you can add plug-in modules for additional bands to the Yaesu (6 m and
23 cm) which cannot be done with the Icom. Both are ready to be controlled by
your PC, but to my impression, there are more programs for the Yaesu. The Yaesu
has a built-in power supply, the Icom is only for 13.8 V. The Yaesu has VOX and
a notch filter, but to my impression, the Icom is a bit easier to operate
(-> less switches, knobs,...).

I'm not sure if I pointed out all the differences, but I hope at least the
important ones... But I think both are great transceivers, and you won't do
anything wrong in buying one of them.

Hope that helps a bit!

Best 73, Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

1159. Re: Autotracker Antenna Control and Radio Tuning

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: WEBCON <webcon@mole.msfc.nasa.gov>
Message-ID: <33446DD6.2EF@mole.msfc.nasa.gov>
Source record: 19363

It would be good to get a BUS MOUSE and free up the serial port.

Paul

1160. Re: Help a satellite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: WEBCON <webcon@mole.msfc.nasa.gov>
Message-ID: <33446E5A.816@mole.msfc.nasa.gov>
Source record: 19364

For sat. tracking try;

http://www.hsv.tis.net/~wintrak

1161. Re: Please help a new sae

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: bperr@premier1.net
Message-ID: <5i26to$8c2$1@imagine.premier1.net>
Source record: 19365

Test Message Reply

[TN71] Northwest Soft System 206.513.1437

```
>> SlipStream Jet v1.014 (Unregistered) - (C) 1995 PBE
```

1162. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970404121301.HAA04703@ladder01.news.aol.com>
Source record: 19366

too bad you didn't also post your URL!

how is anyone supposed to check you page with no address?

1163. Re: Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3345168C.707A@one.net>
Source record: 19367

Geert PIRENS wrote:
>
> Hello
>
> Can someone tells me witch satellite are activ ?
>
> I like to now the frequenties and status of folowing sat's :
>
> By status I maen is It ENABLE or DISABLE ?
>
> NOAA-9
> NOAA-10
> NOAA-13
> FENG YUNG (normal at 137.795 Mhz I think)
> SICH-1
> OKEAN
>
> ALL INFORMATION ARE WELKOM !!!!!!!!!
>
> Pirens G. ONL2057
>
> ONL2057@AMSAT.ORG

Only SICH-1 and OKEAN 1-7 are active of those in your list. They are active only when they are over Europe or Asia, so we don't receive them here, and I tend to forget their frequencies. I think they are both on 137.40.

NOAA 12 and NOAA 14 are active continually. NOAA 12 is on 137.50, and NOAA 14 is on 137.62.

NOAA 12 runs close to the terminator, so you will receive it a little before or a little after sunrise/sunset. NOAA 14 passes around 02:00 and 14:00 local time.

Rich

1164. * SpaceNews 31-Mar-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0331.1997@ampr.org>
Source record: 19368
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0331
* SpaceNews 31-Mar-97 *

BID: $SPC0331

=========
SpaceNews
=========

MONDAY MARCH 31, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for non-commercial use.

* PHASE III-D LAUNCH DELAY *
============================
In a formal announcement from Paris on March 24th, the European Space Agency (ESA) said that the second test flight of their new Ariane 5 booster has now been re-scheduled from July to mid-September, 1997. It is this flight, Ariane 502, on which Phase 3-D is currently manifested.

According to their latest announcement, this action was being taken by ESA and CNES (the French Space Agency which manages the Ariane 5 program for ESA) in order to "improve (the booster's) robustness, increase the operational margins and allow for degraded operating modes".

In a joint statement a day after the ESA announcement, Phase 3-D Project Leader and AMSAT-DL President, Dr. Karl Meinzer, DJ4ZC, along with AMSAT-NA President Bill Tynan, W3XO, expressed continuing confidence that ESA and CNES will succeed in completing all the tasks necessary for a successful flight test of Ariane 502.

"Naturally, we are disappointed that our launch will not be as soon as we had hoped", said Meinzer. "However, I am pleased that ESA and CNES are taking care to improve the operational margins for the Ariane 5 booster. This action helps give us renewed confidence in the overall probability for a successful launch of our satellite," he said.

Both Meinzer and Tynan emphasized, however, that this launch delay, like the earlier ones, means that the total cost of the Phase 3-D Project will increase significantly. Even before the latest ESA announcement, AMSAT-DL and AMSAT-NA were projecting a combined budget shortfall of about two hundred thousand dollars (US) in the money needed to complete their respective tasks on the project.

"This shortfall can only increase now as a result of this latest schedule change", said Tynan. Both AMSAT leaders urged everyone to continue doing as much as they possibly can to insure the needed funds will be in place for the completion and launch of Phase 3-D.

[Info via the AMSAT News Service]

* HALE-BOPP NEWS *
==========
Completing an unprecedented year-long study of Comet Hale-Bopp using two NASA observatories, the Hubble Space Telescope and the International Ultraviolet Explorer, astronomers report that they are surprised to find that the differences in the nucleus seem to be isolated from each other. They also report seeing unexpectedly brief and intense bursts of activity from the nucleus during the monitoring period. The Hubble observations suggest that the nucleus is huge, 19 to 25 miles (30 to 40 kilometers) across.

The findings, by a team of scientists, led by Johns Hopkins astrophysicist Harold Weaver, are being published in the March 28 issue of the journal Science.

"Hale-Bopp will probably provide the most revealing portrait of the workings of a cometary nucleus since the spacecraft missions to comet Halley in 1986," said Weaver. "This is a unique opportunity; we have never had the chance to examine a comet in this much detail, over this large a range of distance from the Sun."

The key results:

Violent Eruptions on the Comet's Surface

During the course of long-term observations, which began in August 1995, astronomers unexpectedly caught the comet going through a sudden brief outburst, where, in little more than an hour, the amount of dust being spewed from the nucleus increased at least eight-fold. "The surface of Hale-Bopp's nucleus must be an incredibly dynamic place, with `vents' being turned on and off as new patches of icy material are rotated into sunlight for the first time," Weaver said.

A Complex, Mottled Nucleus

To their surprise, astronomers found that water ice sublimates (turns directly from a frozen solid into a gas) at a different rate than the trace ices, implying that those components are not contained within the water on the comet. This conclusion is further supported by Hubble data showing that the rate at which dust left the nucleus was much different than the sublimation rate of water. This result is contrary to previous models for a comet's nucleus which suggest that the trace components, such as carbon disulfide ice, are contained inside of the most abundant ice on the comet, frozen water. As water sublimates the trace components and dust should be released at similar rates, but this is not what Hubble observed.

A Monstrous Nucleus

By studying Hubble Space Telescope images, the astronomers have estimated that its nucleus may be about 19 to 25 miles (30 to 40 kilometers) in diameter. The average comet is thought to have a nucleus of about 3 miles (5 kilometers) in diameter, or even smaller. The comet or asteroid that struck the Earth 65 million years ago, possibly causing the extinction of the dinosaurs, was probably about 6 to 9 miles (10 to 15 kilometers) across.

Because Hale-Bopp was unusually bright when it was still a great distance away, well outside the orbit of Jupiter, it has given scientists their best view ever of the changes in a comet's nucleus as it gets closer to, and is progressively heated by, the sun. Those changes, in turn, provide information about the composition and structure of comets, which are believed to be remnants from the formation of the solar system, about 4.6 billion years ago. Learning more about comets can provide important information about the materials and processes that formed the solar system.

Image files in GIF and JPEG format and captions may be accessed on Internet via anonymous ftp from ftp.stsci.edu in /pubinfo.

GIF JPEG
PRC97-08 Hale-Bopp gif/hb9596.gif jpeg/hb9596.jpg

Higher resolution digital versions (300 dpi JPEG) of the release photograph are available in /pubinfo/hrtemp: 97-08.jpg (color) and 97-08bw.jpg (black & white).

GIF and JPEG images, captions and press release text are available via the World Wide Web at http://oposite.stsci.edu/pubinfo/PR/97/08.html and via links in http://oposite.stsci.edu/pubinfo/Latest.html or http://oposite.stsci.edu/pubinfo/Pictures.html.

[Info from The Space Telescope Science Institute via Larry Van Horn]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

1165. Colorizing Weather Satellite Images

Newsgroup: rec.radio.amateur.space
Date: 1997-04-04 00:00:00 UTC
From: mjbrown@aol.com
Message-ID: <19970404232501.SAA12916@ladder01.news.aol.com>
Source record: 19369

I have just posted a tutorial on using Adobe Photoshop to add color to monochrome satellite images. Although I used GOES images in my examples, the same techniques apply to NOAA WEFAX images.

The tutorial is at:

http://members.aol.com/mjbrown

It is in the Satellite and Space Shuttle Image Processing Section.

Enjoy.

1166. Re: Anyone heard MIR lately?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: geoffc@xtra.co.nz
Message-ID: <5i4ubj$nd1$1@wolfman.xtra.co.nz>
Source record: 19222

Mike Cat <JoeQPublic@someaddress.net> wrote:

>My attempts as of lately to hear MIR's 145.800 downlink appear to be
>failing regularly for some strange reason. I have been leaving my
>receiver and TNC on continuously for over 48 hours now and have not
>heard a peep from MIR's PMS.

>Does anyone have info as to it's status?

Ditto here in ZL, nothing heard for the last couple of weeks....
73 de Geoff ZL3TGC

1167. Software query

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: awilki@zetnet.co.uk
Message-ID: <5i40dl$t$1@roch.zetnet.co.uk>
Source record: 19223

Hi, anyone know of some software to obtain images from hrpt data
downloaded from the NOAA web site ?
I have tried Paintshop Pro , Imdisplay, etc, but nothing doing.

Regards.......Allen, G3XJI.

1168. Re: information

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr5.143120.6208@ke4zv.atl.ga.us>
Source record: 19224

In article <33433E08.7585@worldaccess.nl> vthoog@worldaccess.nl writes:
>Could anyone tell me more about microwave communication, just over
>land (not via satelite) and how that works , do i need optical
>visibility

No, you don't need optical line of sight, but you do generally
need RF line of sight. What this means is that a few trees, bushes,
or wooden buildings in the path aren't critical, and the radio
horizon is roughly 4/3 the optical horizon due to atmospheric
looming at microwave. If you have a granite "cloud" in the way,
however, you're hosed unless you run high power and try for forward
scatter.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1169. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr5.142257.6071@ke4zv.atl.ga.us>
Source record: 19225

In article <01bc3f3a$e4b8ca60$42144ec2@stedos05.pop> "Rudy Pycke" <rudy_pycke@hotmail.com> writes:
>I would like to start up an amateur radio satellite station.
>Digital communications and phone are my favorite modes.
>I have already a 2m and 70cm crossed yagi and the rotors 5600B from Yaesu.
>Before choosing a number of 'boxes' and software solutions, I am looking
>for
>some good ideas and tips.
>Like:
>- what is the preferred transceiver: the Kenwood 790 or the Yaesu 736R ?

This should be a no-brainer. The narrow filters in the 790 can only be used in the main band unit, but that's also the only unit which transmits, so you have to receive satellite on the subband unit without the benefit of good filters. Not good. And the thermal design of the PA is poor, it gets very hot very quickly. And the track tuning doesn't work the way you'd want for tuning the birds.

The 736R is more optimized for satellite operation, the filters work in the downlink channel, and track tuning works the way you'd expect. It's an older design, and you'll need a mast mount preamp (a good idea anyway), but it'll get the job done. The downside to the 736R is that it isn't what we'd call a modern dual band design, IE you can't *simultaneously* receive on both bands. That doesn't matter much for satellite operation, but it is an inconvience for terrestrial operation where you might like to keep an ear on one band while operating on the other. (You can also add a 1.2 GHz module for mode L operation.)

The IC821H also looks like a promising radio, but I don't have any satellite operating experience with it so I can't give any feedback about how well it actually works.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1170. STS 83 element sets

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaE867vE.IMs@netcom.com>
Source record: 19226
Cross-posted to: rec.radio.amateur.space,sci.space.shuttle,sci.astro.amateur

Here are the first few TLEs for STS-83 from GSFC.

```
1 24755U 97013 A 97094.83577546 .00002255 00000-0 55220-5 0 14
2 24755 28.4679 313.5644 0003077 326.8486 275.6573 15.90048850 06

1 24755U 97013 A 97094.95902778 .00392216 00000-0 11786-2 0 33
2 24755 28.4666 312.6586 0003427 331.8585 257.6708 15.90165637 16

1 24755U 97013 A 97094.98177813 .00032340 00000-0 10000-3 0 49
2 24755 28.4672 312.4910 0003331 336.4781 23.5547 15.90112023 28

1 24755U 97013 A 97095.25000000 .00002244 00000-0 54616-5 0 57
2 24755 28.4663 310.4823 0003484 333.3356 125.3920 15.90127376 69
```

1171. What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: Mike Catalanotti <catman@codem.com>
Message-ID: <33468203.222F@codem.com>
Source record: 19227

Anyone heard packet on 145.800 from MIR over the past week?

Thanks,

Mike Cat
catman@codem.com

1172. Call for Radio Operators ...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <3346A090.2CF@excite.com>
Source record: 19228

Hello all,
On April 13th, Maximov Publications, the International Academy of Astronautics Sub Committee on the Arts and Literature, the OURS Foundation: Ars Astronautica, and the Leonardo Space Arts Working Group are sponsoring the Space Arts Workshop '97 (http://www.maximov.com/mirspaceart.html). Artists and scientists will be speaking on the social and cultural aspects of space exploration. Between now and then, people on the Internet will be submitting questions to the artists and scientists which they will answer in an online arena. We would like to send some of the questions to the cosmonauts aboard Mir and to the astronauts on the Shuttle (STS-83 is a SAREX mission).

If there are any radio operators that are willing to participate, please contact me at mcurtiss@excite.com

.... this does of course assume anyone can get through to them.

Mike Catalanotti wrote:
> Anyone heard packet on 145.800 from MIR over the past week?
> Thanks,
> Mike Cat
> catman@codem.com

The process will occur in the following order ...

1. Internet Users submit a question via the Web site.
2. The question is forwarded to a radio operator
3. The operator makes contact with the space station and/or Shuttle
4. The answer is forwarded back to me and then posted on the Web Pages

I hope this is even possible and I look forward to your comments, questions and participation. I thank you all for your assistance and for the time.

Smiles

Mark W. Curtiss

--
Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

1173. Re: Call for Radio Operators ...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <3346AC45.45A5@excite.com>
Source record: 19229

Oops ....

The Space Arts Workshop '97 is at ...
(http://www.maximov.com/Mir/mirspaceart.html)

Smiles

Mark

--
Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

1174. ARLK026 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk026.1997@arrl.org>
Source record: 19230
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK026
ARLK026 Keplerian data

ZCZC SK26
QST de W1AW
Keplerian Bulletin 26 ARLK026
From ARRL Headquarters
Newington, CT April 5, 1997
To all radio amateurs

SB KEP ARL ARLK026
ARLK026 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-83
1 24755U 97013A 97094.98177813 .00032340 00000-0 10000-3 0 49
2 24755 28.4672 312.4910 0003331 336.4781 23.5547 15.90112023 28
AO-10
1 14129U 83058B 97093.37359418 .00000271 00000-0 10000-3 0 4695
2 14129 25.8008 154.8960 6070423 105.4827 325.6918 2.05876463 75843
RS-10/11
1 18129U 87054A 97094.09765527 .00000069 00000-0 59429-4 0 03414
2 18129 82.9246 293.5041 0013397 67.7529 292.5048 13.72376707490070
UO-11
1 14781U 84021B 97094.49707851 .00000127 00000-0 29203-4 0 9626
2 14781 97.8276 78.7059 0010556 238.4237 121.5938 14.69537802700432
RS-12/13
1 21089U 91007A 97094.60083775 .00000059 00000-0 46484-4 0 9682
2 21089 82.9221 333.2277 0029181 139.0135 221.3222 13.74079167309052
UO-14
1 20437U 90005B 97094.13800104 -.00000029 00000-0 54756-5 0 02612
2 20437 98.5217 177.4019 0012144 66.1983 294.0472 14.29953954375637
RS-15
1 23439U 94085A 97093.92537585 -.00000039 00000-0 10000-3 0 02304
2 23439 64.8124 272.9244 0151088 146.2054 214.8611 11.27525991093561
AO-16
1 20439U 90005D 97094.15523231 -.00000024 00000-0 73525-5 0 00628
2 20439 98.5350 180.1863 0012190 66.0021 294.2438 14.30002475375659
```

```
RS-16
1 24744U 97010A 97093.99273878 .00003210 00000-0 10952-3 0 00514
2 24744 97.2808 0.4418 0008477 7.9030 352.2387 15.31028660004735
DO-17
1 20440U 90005E 97094.14854614 -.00000014 00000-0 11421-4 0 00660
2 20440 98.5426 180.9920 0012512 66.5833 293.6664 14.30145217375680
WO-18
1 20441U 90005F 97094.14474537 .00000020 00000-0 24576-4 0 00631
2 20441 98.5429 180.8998 0013001 66.3167 293.9378 14.30113166375683
LO-19
1 20442U 90005G 97093.76816661 .00000021 00000-0 24611-4 0 00627
2 20442 98.5456 181.1569 0013209 68.2547 292.0039 14.30226986375651
FO-20
1 20480U 90013C 97093.96434205 -.00000029 00000-0 66787-5 0 09652
2 20480 99.0362 69.5424 0540925 185.4266 174.0817 12.83236757335184
AO-21
1 21087U 91006A 97094.09968311 .00000094 00000-0 82657-4 0 08130
2 21087 82.9379 106.4177 0036433 113.2158 247.2841 13.74580186309973
UO-22
1 21575U 91050B 97094.16332049 -.00000004 00000-0 12762-4 0 07683
2 21575 98.3129 157.2935 0008354 109.1288 251.0808 14.37062950299859
KO-23
1 22077U 92052B 97094.03755541 -.00000037 00000-0 10000-3 0 6526
2 22077 66.0805 300.4884 0012476 232.4782 127.5103 12.86301574218210
KO-25
1 22828U 93061F 97094.22418476 .00000003 00000-0 18656-4 0 5241
2 22828 98.5432 170.3733 0011065 81.1371 279.1059 14.28172691151655
IO-26
1 22826U 93061D 97094.17215181 .00000007 00000-0 20038-4 0 05589
2 22826 98.5502 170.2499 0009994 96.7088 263.5234 14.27831008183520
AO-27
1 22825U 93061C 97094.12795269 -.00000015 00000-0 11242-4 0 05704
2 22825 98.5506 169.9784 0009586 95.5855 264.6423 14.27721481183504
FO-29
1 24278U 96046B 97094.17168533 -.00000075 00000-0 -40514-4 0 00815
2 24278 98.5502 145.4698 0352029 18.1168 343.2151 13.52628594031117
Mir
1 16609U 86017A 97094.80837391 .00010299 00000-0 12667-3 0 1686
2 16609 51.6494 94.5514 0010290 256.9996 103.0116 15.60859395635578

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 8, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1175. Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc4206$c396acc0$6bb630ce@pass>
Source record: 19231

Hello

Can someone tells me witch satellite are activ ?

I like to now the frequenties and status of folowing sat's :

By status I maen is It ENABLE or DISABLE ?

NOAA-9
NOAA-10
NOAA-13
FENG YUNG (normal at 137.795 Mhz I think)
SICH-1
OKEAN

ALL INFORMATION ARE WELKOM !!!!!!!!!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1176. Help needed !!!!! (for Satellite Communication)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: masa@writeme.com
Message-ID: <3346ceef.275630@news.bctel.ca>
Source record: 19232
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.space

Hello.

I was trying to use a satellite to get the signal out and back, but it
did not work well. I tried many satellites, but none of them seemed
to work at all (I used the software to track down the satellite).

I have a 45W base station + 30cm antenna (it's in inside).

do you have any ideas ? are you usually able to talk to someone
easily over the satellite ?

Thanks in advance.

Masataka Noda
Masa@WriteMe.com
http://www.geocities.com/Yosemite/1325/

1177. Linux and Kansas City Tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: James Cutler <jwc@stanford.edu>
Message-ID: <3346D98D.30D2@stanford.edu>
Source record: 19233

Earlier I saw a message about someone trying to run a
KCT through a linux box. I too am attempting something
similar.

To the person who posted that message, were you successful?
Let me know and maybe we could compare notes.

Thanks...

--Jamie Cutler
jwc@stanford.edu

1178. Re: What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.128.007F7E65@phoenix.net>
Source record: 19234

In article <33468203.222F@codem.com> Mike Catalanotti <catman@codem.com> writes:
>From: Mike Catalanotti <catman@codem.com>
>Subject: What's with MIR packet??????
>Date: Sat, 05 Apr 1997 11:47:00 -0500

>Anyone heard packet on 145.800 from MIR over the past week?

>Thanks,

>Mike Cat
>catman@codem.com
I would think the 'noughts don't have time or power to spare with hobby stuff.
Their "world" is comming apart at the seams.

1179. Re: Colorizing Weather Satellite Images

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5i49gg$h8l@newnews.onramp.net>
Source record: 19370

Thanks for info that is located at:
http://members.aol.com/mjbrown/MOREHTML/colorize.html

a more direct path :-)

1180. April 12 Saturday Colorado Balloon Launch

Newsgroup: rec.radio.amateur.space
Date: 1997-04-05 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5i4lkq$5ej@news.ysu.edu>
Source record: 19371

COLORADO ATV/GPS PACKET BALLOON LAUNCH
EOSS-29

Region: Central Colorado

Date/Time: Saturday, April 12 / 8:00 AM Mountain Time,
12:00 UTC

Location: Pike's Peak RC Club airport located east
of Falcon, CO (Falcon itself located
about 15 miles northeast of Colorado Springs;
please see EOSS website for detailed map
graphic)

Other states where Kansas, Nebraska, Wyoming, Utah, Arizona,
the signals will New Mexico, northern Texas, and western
reach easily: Oklahoma.

Site Coordinates: for initial antenna heading -
38 degrees 57' 17.65" North Latitude
104 degrees 30' 4.43" West Long.

ATV: EOSS Shuttle Video - 426.25 MHz AM NTSC
video (1 watt)

Beacon: 144.34 MHz Morse ID audio on FM
(periodic; frequency shared with packet
telemetry)

Telemetry: 144.34 MHz FM (1 Watt output) - AX.25, 1200
baud mostly plain english text; includes APRS
position data string

HF Net: 7.235 MHz

VHF nets: Preflight Foxhunter Net 8:00 PM the
preceding night, 147.225 MHz, Colorado
Repeater Association

Launch Site at about launch time
146.55 MHz simplex

Foxhunters: 448.45 MHz Pikes Peak FM Association Repeater
146.58 MHz simplex field frequency

Launch data courtesy EOSS via Rick von Glahn
rickvg@usa.net

For additional launch data and general Edge of Space Sciences (EOSS) information, please see the EOSS website:

http://www.usa.net/~rickvg/eoss.htm

Please email me news of upcoming balloon launches and post-flight reports for distribution on the Net, and please check out the High Altitude Balloon Launch Information Center (HABLIC) website for collected launch information presented in a uniform format.

Hank Riley, N1LTV
h1riley@umassd.edu

http://www.geocities.com/CapeCanaveral/3161/hablic.htm

1181. Re: Help needed !!!!! (for Satellite Communication)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5i77sj$7tf@library.airnews.net>
Source record: 19235
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3346ceef.275630@news.bctel.ca>, masa@writeme.com says...
>
>Hello.
>
>I was trying to use a satellite to get the signal out and back, but it
>did not work well. I tried many satellites, but none of them seemed
>to work at all (I used the software to track down the satellite).
>
>I have a 45W base station + 30cm antenna (it's in inside).
>
>do you have any ideas ? are you usually able to talk to someone
>easily over the satellite ?
>
>Thanks in advance.
>
>Masataka Noda
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
No wonder you had difficulty. You missed the window of opportunity. April 1
was four days ago.

Ken K5MBV
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1182. MIR qso info

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: kf4hyb@totally_useless.com
Message-ID: <5i7a3h$84c@camel0.mindspring.com>
Source record: 19236

The April edition of the Amateur Radio Webpages Monthly update is out,
and included on my site. If you missed last months, you missed out on
SAREX. If you ever wanted to know *everything* you needed to know
about sattelite comunications with the MIR space station, catch the
April edition. See you ther
73 - Mike/kf4hyb
Visit my "ham" webpage :
http://www.geocities.com/SouthBeach/Sands/1961
LOTS of info and links

1183. CRETE HOLIDAYS

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc4264$f9de75c0$e8915cc1@dummy.forthnet.gr>
Source record: 19237

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO 31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

1184. new and improved hamradio web page

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: Andrew Kim <hamman@themall.net>
Message-ID: <01bc433e$2e723040$067a50cc@204.80.99.25.198.147.96.73>
Source record: 19238

Come to my web page and check out whats new and sign the guest book
--
~~~~~~~~~~~~~~~~~~~~
Mail me at: mailto:hamman@themall.net
or
mailto:andrewkim.themall@usa.net
Come and visit my Web Page
http://www.themall.net/~spotteam

Andrew Kim (KF6CKJ)
Federal Communications Commission
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1185. Re: information

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <334a78d7.506835370@news.sci.fi>
Source record: 19239

wim van 't hoog <vthoog@worldaccess.nl> wrote:

>Could anyone tell me more about microwave communication, just over
>land (not via satelite) and how that works , do i need optical
>visibility
>My emailaddress is : wjvthoog@freemail.nl
>
>Thanx!!!

If you have a line of sight (LOS) path, you can communicate with very low power (typically milliwatts). However, if you have 20 .. 30 dB more power than required for LOS communication, you can also use quite a few non-LOS paths.

Microwaves will reflect quite effectively from buildings, sneak trough windows and small openings etc. You can communicate quite effectively over non-LOS paths in cities, since the signal will propagate trough multiple reflections from buildings. However, since the signal usually arrive through multiple paths, you have a severe multipath situation, when different paths sometimes cancel each other, sometimes they are summed. For communication between stationary stations you need some kind of wide band modulation (e.g. some kind of spread spectrum) to avoid multipath nulls. Mobile communication can be done with ordinary narrow band FM, since the path lengths are constantly changing, so you get a very rapid mobile flutter (Reyleigh fading), but it does not affect readability very badly. For some strange reason, there is always a null in front of the traffic light and you usually stop at that position :-).

While microwaves are effectively reflected from buildings and other hard structures, it is quickly absorbed by large vegetation and a hilly terrain.

If you have plenty of power and high gain antennas, you can beam the signal just over the horizon and it will be scattered in the troposphere, just like the sunlight is scattered just before dawn.

Paul OH3LWR

1186. Re: What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5i87oj$7pm$1@news.mhv.net>
Source record: 19240

In article <33468203.222F@codem.com>, Mike Catalanotti <catman@codem.com> wrote:
>Anyone heard packet on 145.800 from MIR over the past week?
>
>Thanks,
>
>Mike Cat
>catman@codem.com

Well, they are having some trouble up there so maybe they've taken it off
the air for now until (hopefully) they can resolve the problems.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

1187. Problem compiling SatTrack 3.1.6

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: xcitor@radix.net
Message-ID: <5i8guu$49m@news1.radix.net>
Source record: 19241

I am trying to compile SatTrack on a RedHat Linux 4.1 system and am getting errors. I could post my Makefile and the compile errors I'm getting, but first I thought I'd check if there are known problems with the X libraries.

Better yet, is there an RPM somewhere for SatTrack?

1188. *** 3 NEW Email Reflectors: Books, Software, Mobile/Portable ***

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3347CB4A.5475@primenet.com>
Source record: 19242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

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Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: mojordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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1189. Radio Meteor Obs. Bull. March 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.112.3347F6A2@vvs.innet.be>
Source record: 19243

Radio Meteor Observation Bulletin No. 44 April 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

March 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Mar	UT										
1997	20h	21	22	23	00	01	02	03	04	05	06	07
8- 9	5	7	19	15	10	20	23	9	19	18	25	11
9-10	7	7	17	10	19	15	9	&	&	&	&	&
10-11	-	45	21	11	16	19	15	26	18	60	22	26
11-12	-	157?	61?	15	29	17	20	23	16	51	123?	83?
12-13	12	11	18	11	&	&	29	19	18	22	21	19
13-14	10	21	23	17	22	16	17	23	23	18	26	13
14-15	11	14	19	27	22	13	18	15	24	21	17	24
15-16	7	11	5	17	14	17	10	14	20	16	28	27
16-17	18	32	27	37	25	&	&	&	&	&	&	&

```
=================================================================
17-18 | 31 40 78 66 55 54 81 58 70 72 85 120
18-19 | 12 40 46 45 57 41 56 55 56 80 68 78
19-20 | 8 17 23 31 33 23 38 55 56 57 88 88
20-21 | - 16 26 35 40 37 49 44 65 93 67 93
21-22 | - 20 35 33 58 42 76 67 62 68 97 99
22-23 | - 57 53 47 46 61 53 74 84 98? 115? 70
23-24 | - 37 40 37 59 58 62 63 90 76 92 63
24-25 | - 23 46 40 59 44 43 60 65 72 82 101
25-26 | - 30 56 49 57 60 64 65 82 93 97 70
26-27 | - 17 39 47 48 69 46 66 80 76 164? 95
27-28 | - 29 35 43 45 54 51 50 62 58 72 65
28-29 | - 14 43 41 36 42 47 59 61 49 44 78
29-30 | - 22 31 49 30 48 43 62 67 78 71 -
------+----------------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06 07
Mar | UT
```

Notes:
. & hardware trouble. March 17: switch to other computer, problems solved.
. ? high counts to be checked for interference and Es.
. local time = UT + 1 hour.

Maurice De Meyere

```
-----------------------------------------------------------------------
Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic E.

-------------------------------------------------------------
| Feb 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
```

```
---+-----------------------------------------------------------
0 | 17 10 9 20 14 39 14 12 22 32 30 19 34 20 24
1 | 10 14 9 7 36 15 15 21 18 15 34 28 23 26 28
2 | 9 11 16 10 16 19 16 23 38 31 27 18 28 19 21
3 | 6 14 25 8 21 14 19 23 33 31 31 25 29 28 37
4 | 11 18 27 10 26 39 20 33 24 29 32 59 33 37 39
5 | 7 17 19 17 27 25 20 34 40 39 31 33 24 30 38
6 | 17 12 13 22 20 14 23 21 27 36 39 51 25 21 38
7 | 11 13 30 17 22 15 17 35 25 25 37 72 36 31 47
8 | 9 8 17 12 27 24 24 51 33 29 26 26 47 31 32
9 | 14 25 15 7 13 16 34 25 23 40 38 33 23 15 28
10 | 13 9 12 8 26 8 21 36 27 23 35 18 22 13 47
11 | 9 24 13 12 12 10 11 23 40 18 20 23 22 12 69
12 | 5 22 7 11 8 11 7 16 30 27 16 14 12 13 27
13 | 4 12 7 12 3 7 2 22 41 8 11 14 8 8 16
14 | 8 5 11 3 2 4 9 21 28 9 10 7 6 5 14
15 | 4 6 2 4 10 10 20 21 8 6 7 5 5 12
16 | 5 7 2 1 2 3 8 8 8 4 9 4 3 11 10
17 | 6 4 5 6 4 5 20 9 11 11 7 6 10 9 11
18 | 4 4 3 16 3 6 4 7 8 13 14 18 12 11 10
19 | 2 5 5 9 6 9 12 7 9 12 18 16 15 16 25
20 | 11 17 5 11 6 7 9 21 15 20 21 23 16 17 25
21 | 11 7 11 18 18 11 25 18 21 30 24 27 25 35 32
22 | 10 11 8 16 12 21 17 24 30 17 25 27 25 22 19
23 | 24 13 9 15 15 16 13 20 31 16 30 34 25 25 26
---+-----------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

------------------------------------------------------------
| Feb 1997 | 10x % reflec. time | horiz: day | vert: time |
------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28
---+--------------------------------------------------
0 | 24 15 18 23 18 22 25 39 24 15 17 29 13
1 | 27 10 20 14 16 19 19 19 16 10 31 29 11
2 | 22 15 24 24 17 23 19 26 19 15 27 20 26
3 | 22 14 28 26 39 24 33 16 20 17 33 27 14
4 | 30 31 31 34 27 19 24 34 13 25 28 46 24
5 | 29 46 32 46 27 32 29 18 21 36 17 55 21
6 | 29 42 30 40 28 31 26 27 41 32 29 30 14
7 | 51 32 26 29 49 25 34 22 27 24 27 39 21
8 | 26 10 14 26 33 24 34 23 22 31 21 25 13
9 | 44 11 14 41 24 18 26 12 25 19 17 19 14
10 | 41 15 8 19 15 29 33 18 11 15 44 15 22
11 | 27 9 22 23 12 25 21 19 12 18 31 14 16
12 | 27 11 36 18 12 21 22 23 13 27 20 41 7
13 | 11 18 14 14 10 19 18 30 6 14 6 12 28
14 | 25 7 5 12 9 7 10 4 4 7 9 4 2
15 | 10 6 3 6 2 5 10 9 5 5 3 5 7
16 | 14 3 6 5 7 4 11 6 7 9 7 6 2
```

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17 | 9 6 7 5 5 10 7 7 4 6 9 6 7
18 | 8 11 7 14 10 11 11 10 8 10 8 10 6
19 | 12 15 13 14 13 14 14 13 7 11 12 9 11
20 | 19 20 22 24 23 19 13 13 13 20 17 11 19
21 | 17 22 37 23 26 22 17 21 31 25 22 21 23
22 | 16 15 18 22 30 27 19 19 20 25 47 11 28
23 | 21 16 18 16 33 24 20 20 15 18 27 12 23
---+-------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28

-----------------------------------------------------------
| Mar 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---------------------------------------------------------
0 | 20 31 26 12 28 26 12 21 18 22 2 6 11 9 10
1 | 19 21 19 11 17 16 15 22 18 21 1 7 16 16 11
2 | 18 21 25 20 25 17 11 19 25 18 4 8 18 24 14
3 | 28 23 24 17 29 22 13 28 22 21 13 24 13 40 31
4 | 46 31 34 38 33 32 21 30 28 28 2 11 16 35 25
5 | 26 31 43 53 31 38 28 23 21 36 9 9 16 32 17
6 | 16 44 36 46 22 35 21 22 16 36 10 5 38 35 23
7 | 32 99 33 45 25 29 34 27 24 32 9 7 21 42 31
8 | 26 34 14 18 22 36 18 33 19 23 5 6 19 56 27
9 | 13 30 20 20 31 23 17 28 8 20 17 7 14 24 38
10 | 28 29 15 12 25 19 18 30 17 15 9 10 14 20 39
11 | 35 24 11 15 17 12 26 21 18 15 3 12 22 12 21
12 | 23 30 8 15 15 14 35 19 25 14 7 7 15 21 12
13 | 15 12 15 6 6 12 9 25 14 7 5 6 7 7 15
14 | 14 12 4 6 4 7 6 12 12 5 3 11 5 14 7
15 | 6 8 2 3 11 5 11 6 5 3 1 2 3 4 5
16 | 3 10 6 8 4 4 7 4 3 2 3 3 3 3 4
17 | 12 11 5 3 11 7 7 6 7 4 1 2 1 2 3
18 | 25 3 11 7 7 7 10 4 10 2 3 7 5 6 7
19 | 13 11 15 10 10 6 7 7 9 6 2 10 4 6 14
20 | 15 12 13 9 16 8 14 13 11 4 2 18 8 16 11
21 | 15 17 21 17 22 13 11 13 12 6 9 11 9 17 20
22 | 30 17 19 19 17 14 18 16 25 2 11 13 8 10 16
23 | 33 23 12 20 17 9 15 25 18 6 6 14 10 12 14
---+---------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

-----------------------------------------------------------
| Mar 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
-------------------------------------------------------------------------
0 | 10 14 20 15 19 19 19 24 34 16 17 17 13 25 23 23
1 | 14 12 19 20 19 28 18 29 33 15 22 22 17 22 27 23
2 | 13 24 21 20 25 31 22 27 25 20 29 19 22 23 31 31
3 | 13 19 32 23 31 26 29 35 43 29 32 39 22 28 36 34
```

```
4 | 36 31 46 32 50 50 56 44 47 37 47 50 32 42 39 58
5 | 42 19 39 53 44 60 41 45 45 64 46 27 30 45 36 49
6 | 30 29 36 36 58 47 32 54 78 45 43 24 25 46 58 52
7 | 43 33 74 43 40 43 44 61 45 47 48 21 48 72 41 54
8 | 37 18 22 43 40 43 30 50 33 35 25 15 36 62 46 47
9 | 46 16 27 37 26 59 27 55 28 33 42 13 26 32 48 41
10 | 43 24 15 27 32 40 40 50 18 22 32 24 18 55 57 42
11 | 49 18 23 38 15 40 30 33 19 21 22 7 15 49 40 48
12 | 18 12 17 50 23 30 34 32 14 27 28 5 12 36 38 25
13 | 8 7 12 8 26 13 25 33 10 18 8 3 9 24 19 25
14 | 7 3 11 12 6 14 25 14 12 4 9 2 8 17 18 24
15 | 3 5 3 8 8 7 12 4 3 23 4 2 9 6 14 8
16 | 3 5 5 8 5 7 10 7 14 4 4 3 9 13 9 10
17 | 3 7 6 4 5 11 7 8 6 7 9 8 12 4 13 16
18 | 6 10 9 15 9 8 8 11 13 7 8 3 16 6 14 9
19 | 7 12 7 20 10 12 15 14 12 13 10 7 8 14 5 9
20 | 9 19 12 16 16 16 12 17 12 10 19 12 11 18 11 16
21 | 14 12 16 23 24 22 16 25 30 15 23 16 23 21 15 16
22 | 17 16 25 24 17 22 17 21 23 16 18 18 29 14 20 12
23 | 19 12 19 20 20 17 17 22 19 21 18 12 21 20 20 15
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

Pierre De Groote

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were recorded on a pen-recorder chart.

```
Mar | UT
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
------+-----------------------------------------------+-----------
1 | 11 19 15 12 18 10 15 10 15 20 17 12 | 14.2 14.8
2 | 5 12 14 5 10 11 13 16 15 14 | 9.5 14.5
3 | 16 11 17 9 9 19 10 16 | 13.5 13.3
4 | 8 8 22 12 17 13 15 16 16 8 19 10 | 13.3 14.0
5 | 16 16 15 22 13 12 16 | 15.7 16.0
6 | 10 10 11 17 19 19 13 19 20 6 14 12 | 14.3 14.0
7 | 15 9 12 15 20 18 15 17 13 12 9 14 | 14.8 13.3
8 | 7 13 20 13 19 14 13 14 17 11 15 8 | 14.3 13.0
9 | 7 12 15 16 29 15 14 18 17 | 15.7 16.3
10 | 11 10 10 13 15 18 8 14 15 20 16 18 | 12.8 15.2
11 | 8 15 16 18 18 10 17 10 19 6 11 14 | 14.2 12.8
12 | 9 12 13 9 20 16 18 10 11 9 16 15 | 13.2 13.2
13 | 20 19 15 | 18.0
```

```
14 | 6 15 24 20 14 19 13 11 15 15 18 17 | 16.3 14.8
15 | 10 8 16 16 11 12 9 13 12 11 14 14 | 12.2 12.2
16 | 5 8 19 17 17 12 10 17 12 14 | 13.0 13.3
17 | 6 8 13 18 17 17 20 13 18 11 17 9 | 13.2 14.7
18 | 9 16 11 13 12 22 17 12 12 11 18 17 | 13.8 14.5
19 | 8 13 19 16 13 14 12 17 11 17 14 14 | 13.8 14.2
20 | 10 10 15 19 14 6 11 15 12 12 10 14 | 12.3 12.3
21 | 10 12 17 15 17 11 11 13 18 12 12 18 | 13.7 14.0
22 | 16 15 11 18 15 12 10 18 | 15.5 14.0
23 | 10 12 12 17 19 20 14 14 23 17 | 15.0 17.0
24 | 13 11 12 10 12 15 15 12 14 7 16 16 | 12.2 13.3
25 | 6 14 9 14 8 16 18 11 9 10 16 13 | 11.2 12.8
26 | 8 16 9 12 14 12 8 8 | 11.8 8.0
27 | 13 16 14 12 10 12 11 12 13 16 19 | 13.0 13.8
28 | 7 15 12 17 11 19 13 10 12 16 13 16 | 13.5 13.3
29 | 13 22 13 26 14 15 9 11 12 10 13 22 | 17.2 12.8
30 | 12 14 12 16 6 15 8 11 10 14 | 12.5 10.8
31 | 7 8 19 16 8 13 8 15 9 10 14 17 | 11.8 12.2
------+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Mar | UT
```

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

- local time = JST = UT + 9 hours

Chikara Shimoda

2. ANNOUNCEMENT

Pierre De Groote informs us that the currently used frequencies by the Polish FM stations can be found at:

http://student.uci.agh.edu.pl/~wojcikgr/radio.html

This should be helpful for finding remaining suitable frequencies in the 66-73 MHz FM band (which is abandoned gradually).

3. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio

and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

4. CONTRIBUTORS / USEFUL ADDRESSES

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: ON4NU@ON4AWP
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@pcvan.or.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
homepage: http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

--
Christian Steyaert (RMOB9703) 6 April 1997
--

1190. Space Shuttle Frequencies??

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: dstuart@clover.cleaf.com
Message-ID: <5i91hr$9es@animal.intex.net>
Source record: 19244

Anyone have the shuttles voice downlink frequencies?

Thanks,
David

1191. Re: Space Shuttle Frequencies??

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: "Charles M. Clark" <charlie@smarty.smart.net>
Message-ID: <33476136.5B9B@smarty.smart.net>
Source record: 19245

D. Stuart wrote:
>
> Anyone have the shuttles voice downlink frequencies?
>
> Thanks,
> David
145.55 minus 600 for uplinks
KZ3D

1192. FS: Mutek front end for ft-736R

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <3347F487.400712BF@vibroplex.com>
Source record: 19246
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space

i have the mutek front end kit for the yaesu ft-736r for sale...
$250 + shipping...

mitch, w4oa

1193. FS: Trakbox

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <3347F426.482A0A9E@vibroplex.com>
Source record: 19247
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space

hi... mitch here...

i have a tapr trakbox kit professionally assembled and in a very
nice box... $250 + shipping...

mitch, w4oa

1194. FS: Kantronics KPC-4

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <3347F4DF.5BB5420A@vibroplex.com>
Source record: 19248
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space

add 2 1200 baud ports to your node stack the easy way...
in good condx, $150 + shipping...

mitch, w4oa

1195. Amateur CW/Voice Satellite Frequencies FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-04-06 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0604972129250001@cqtlm-ppp053.dowco.com>
Source record: 19249
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

Amateur CW/Voice Satellite Frequencies as of April 7, 1997.

Name Mode(s) Frequencies Beacon(s)

AO-10 B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

---
* Radio Sport-15 has battery chargeing problems therefore the transponder
and beacon are silent when the satellite is in darkness.

* Radio Sport-16 currently has it's Mode A transponder turned off. Some
activity over Europe was reported but uplinking via Mode A was not

possible. The speculation is that the activity may have been the ground controllers conducting tests. I would appreciate any reports for future updates.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until April 11. Here is the latest schedule:

Apr. 4(Fri) 01:14z JA
11(Fri) 10:16z JD 1200bps
18(Fri) 00:46z JD 9600bps
25(Fri) 01:24z JA
May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex and SAFEX have been reported to have been curtailed until certain undisclosed repairs to the Mir complex can be completed. No activity has been reported over Europe or North America for several days. I would appreciate any activity reports for future updates.

* STS-83 mission is being cut short due too problems with a faulty fuel cell on board Columbia. Columbia will return to Earth Tuesday April 8th.

CALL SIGNS:

James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

QSLs: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

This FAQ is being updated and re-released on a weekly basis on or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

1196. Dish wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: Joshua Coale <lobyte@nh.ultranet.com>
Message-ID: <01bc42ef$fdf2dc60$569229cf@default>
Source record: 19250

Hi, I am looking for a dish I could buy for satellite communications. The bigger the better.
Thank you,
Joshua Coale

1197. Re: What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: NOSPAMrb@cyberhighway.net
Message-ID: <334a550d.49570465@news.cyberhighway.net>
Source record: 19251

On Sat, 5 Apr 1997 11:29:11 CST, jedent@phoenix.net (Joel E. Davis)
wrote:

>In article <33468203.222F@codem.com> Mike Catalanotti <catman@codem.com> writes:
>>From: Mike Catalanotti <catman@codem.com>
>>Subject: What's with MIR packet??????
>>Date: Sat, 05 Apr 1997 11:47:00 -0500
>
>>Anyone heard packet on 145.800 from MIR over the past week?
>
>>Thanks,
>
>>Mike Cat
>>catman@codem.com
>I would think the 'noughts don't have time or power to spare with hobby stuff.
>Their "world" is comming apart at the seams.

Can you elaborate on that?

John KB7VZL

1198. Prophecies of ages

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: ben@light.co.za
Message-ID: <5ianrt$svg@news1.saix.net>
Source record: 19252

You are sincerely invited to visit our non-commercial web site
entitled "Prophecies of the Ages", Based on quotes from major world
religions and famous seers.

This brief but unsolicited invitation is being sent to you, once only,
with the hope of increased harmony among people.

http://www.light.co.za/

(You are also welcome to delete this message even before browsing the web sight.)

Thank you.

1199. Re: Space Shuttle Frequencies??

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5ianl9teu2@news.mhv.net>
Source record: 19253

In article <5i91hr$9es@animal.intex.net>, superdave@star-trek.com wrote:
>Anyone have the shuttles voice downlink frequencies?
>
>Thanks,
>David

For Sarex the downlink is 145.550 and there are 5 uplinks picked at random
by the crew:

144.910
144.930
144.950
144.970
144.990

For the packet robot:

Uplink: 144.490
Downlink: 145.550

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

1200. * SpaceNews -07-Apr-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0407.1997@ampr.org>
Source record: 19254
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0407
* SpaceNews 04-Apr-97 *

BID: $SPC0407

=========
SpaceNews
=========

MONDAY APRIL 7, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* THE STORY BEHIND MEXICO-OSCAR-30 *
====================================
Dr. Tom Clark, W3IWI has cleared much confusion regarding the status of the
MEXICO-OSCAR-30 satellite launched last year. The satellite with the 40 MHz
meteor RADAR was built at UNAM (The Autonomous University of Mexico) in Mexico
City by XE1TU and his students. The basic spacecraft was of the same design
as the other AMSAT Microsats, including LUSAT, DOVE, WEBERSAT, ITAMSAT and
EYESAT.

Many will recall that the first UNAMSAT was destroyed (along with the
Israeli TECHSAT satellite) when the Russian START launch vehicle exploded
shortly after the launch from Plesetsk.

A new UNAMSAT satellite, which later became known as MEXICO-OSCAR-30, was
built from spare parts and launched late last summer on a different launch
vehicle also from Plesetsk. The satellite successfully reached orbit and
transmitted telemetry for about one day.

The weather at the launch pad the day MO-30 reached orbit was very cold.
The satellite separated from the launcher at a temperature of about -30 C.
It is believed that the frigid temperatures prevented the first local
oscillator of the satellite's uplink receiver from oscillating, rendering
the satellite totally deaf. With no functioning uplink receiver, battery
charging parameters suitable for the unanticipated cold temperature could
not be loaded, and the satellite ran out of power.

Later attempts to revive MEXICO-OSCAR-30 have been unsuccessful.

[Info via Dr. Tom Clark, W3IWI]

* AO-27 NEWS *
==============
As of March 30, 1997:

TEPR 4 = 32 counts 16 Minutes
TEPR 5 = 66 counts 18 Minutes

AO-27 will turn on every pass 16 minutes after entering the sun and will stay on for 18 minutes. This corrects the early shut off that has been going on for the past few weeks.

Northern stations will see the satellite turn on after AOS for the next week or so. The schedule will be drifting into a better state over time.

Thanks goes out to the Alternate Control Station KM4NZ/N1XAU for the use of their station via the Internet for controlling the satellite. With new software that allows control of the satellite from remote sights, Michale, N4USI hopes to be able to keep the TEPR schedule more up to date.

[Info via Michael Wyrick, N4USI, AO-27 Control Operator]

* AO-10 ORBITAL DATA *
======================
Ken Ernandes, N2WWD, has reported that the Space Command has published a new Kepleriann data set for AO-10. They are as follows:

AO-10
1 14129U 83058B 97086.09215926 -.00000160 00000-0 10000-3 0 4644
2 14129 25.6368 156.5618 6073912 102.9697 328.9901 2.05881543 75687

Ken reports that this element set compares favorably with the estimated set (epoch 97054.5) with the exception of about a 0.6 degree shift in orbital plane.

* FO-29 DIGITALKER ACTIVE *
===========================
The JARL FO-29 command station has announced that FO-29 will be placed in Digitalker mode between April 4th and 7th.

[Info via Kazu Sakamoto, JJ1WTK]

* RS-16 NEWS *
==============
RS-16 was launched as part of a compound satellite package called "Zeya" named after the launch site at the Svobodny Cosmodrome by the banks of the Zeya river in the Far East by the Chinese border. Being that this was the first launch from this launch site, no expensive satellites were launched. RS-16, however, was an ideal candidate for the maiden launch.

In addition to the RS-16 package, the Zeya spacecraft consists of an experimental navigation system of the GLONAS/GPS "Terminator" series, a number of experimental reflectors, solar panels and batteries.

RS-16 has high speed telemetry as well as Morse CW, but it is proving difficult to copy due to the tumbling and toppling QSB of the satellite. In fact, amateur radio operators are doing somewhat better than officials who need the telemetry for their own readings, but who have receivers rather less sensitive than the amateurs.

There are just two of the RS group working at the Ground Control Center near Moscow (the same as the GCC for RS-14/AO-21), these being Alex Papkov RA3XBU and Victor Samkov. There is no amateur command station as such, but Alex and Victor are working with the military and factory staff in checking the facilities, antenna, equipment etc., and planning for various scientific programs.

Leo, UA3CR, suspects spurious signals +/- 30 kHz either side of the beacon, but thinks it may be due to overload from strong local QRM at his QTH. He asks that amateurs look for them.

Leo reported that RS-16 is undergoing testing now, the duration of which may take two or more months. It is believed the Mode A transponder will be switched on after testing is complete.

[Info from Leo, UA3CR via Pat, G3IOR]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX
--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-
Linux: Turns your PC into a workstation. NT: Turns your workstation into a PC.

1201. Re: * SpaceNews -07-Apr-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: paul@wit387304.student.utwente.nl
Message-ID: <slrn5kivt6.9n9.paul@wit387304.student.utwente.nl>
Source record: 19255

On 7 Apr 1997 21:19:25 GMT, John Magliacane <magliaco@email.njin.net> wrote:
>SB NEWS @ AMSAT $SPC0407
>* SpaceNews 04-Apr-97 *

>AO-27 will turn on every pass 16 minutes after entering the sun and will
>stay on for 18 minutes. This corrects the early shut off that has been
>going on for the past few weeks.

Wow... entering the sun, and still staying on for 18 minutes? I thought
they could only do that in Startrek. Doing that on every pass is even
neater. ;)

I'd also like to take this opportunity to express my gratitude to you,
John, for this great bulletin of yours.

Regards, Paul Boven.
--

Paul Boven, <e.p.boven@student.utwente.nl> PE1NUT QRV 145.575 JO32KF
Lynx users have a "Right to follow a link", too!

1202. Shuttle Ends Early

Newsgroup: rec.radio.amateur.space
Date: 1997-04-07 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3349931A.4F1F@ix.netcom.com>
Source record: 19256

Most probably know by now, but in case you don't, the STS-83 shuttle mission will be ending early, tentatively scheduled to return to earth on Tuesday, April 8. Reports are that one of the 3 on-board generators has failed, and has been shut down. NASA rules require that unless all 3 are functioning, that the mission be aborted.

The crew have cut a number of lights to conserve power while they rush to complete the experiments that they can in the shortened time.

I'd take a guess that with their busy schedule and shortened mission, that no SAREX contacts will be made (if they hadn't already made some.)

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1203. TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: gascomark@aol.com
Message-ID: <33499807.6091623@news.4dcomm.com>
Source record: 19257

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http://6com.com

1204. Re: information

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: Brandon and Kristin <illusions@enterprise.net>
Message-ID: <3349F7DE.6D11@enterprise.net>
Source record: 19258

The equipment you will need greatly depends on what sort of a
shot you will be setting up. You will most likely be doing a LOS
connection
as the only other alternative is what's called a TROPO shot. That's a
link
that's actually bounced off of the Troposphere and back down to the
earth.
Generally, these shots can run anywhere from 100 to 300 miles depending
on
your equipment and how much output power you are giving it (typically
1000
to 10,000 watts!) The only place I have heard of TROPO shots being used
is
in the military.

On the dish, yes, you will generally only need one - with a circulator -
to
allow you to tx and rx with the same dish. Some systems use two dishes
at
each site for what's called "diversity". There are two types of
diversity;
space diversity and frequency diversity. I could go on all day
explaining
these, but I think it would be better for you to look them up as there
is a
lot of information to digest. The gist of diversity is the information
is
transmitted on more than one different frequency or polarization to
ensure
the best signal is received at the other end.

On getting 10Ghz components, try any RF equipment supplier. Be warned
that
high frequency RF equipment is VERY expensive. You may be able to buy
good
used equipment if you ask around.

I would like to know what sort of project you are doing. If you have any
more questions, I will be happy to help.

Please send them to my home address : illusions@enterprise.net

Have a good one.

Brandon

--
Brandon Wheaton
Bicester, United Kingdom

My PGP public key is available upon request.

1205. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: "k.d. tentarelli" <tentarelli@lucent.com>
Message-ID: <334A28EB.929@lucent.com>
Source record: 19259

Gary Coffman wrote:

> The 736R is more optimized for satellite operation, the filters work
> in the downlink channel, and track tuning works the way you'd expect.
> It's an older design, and you'll need a mast mount preamp (a good idea
> anyway), but it'll get the job done. The downside to the 736R is that
> it isn't what we'd call a modern dual band design, IE you can't
> *simultaneously* receive on both bands. That doesn't matter much
> for satellite operation, but it is an inconvience for terrestrial
> operation where you might like to keep an ear on one band while
> operating on the other. (You can also add a 1.2 GHz module for
> mode L operation.)

Gary,
Thanx for the info. The Yaesu brochure doesn't give a detailed
explanation of how 736R tuning works. Is it possible to track
the transmitter and receiver (one on 2 the other on 432) with one
tuning knob, and then decouple the two to correct for doppler
shift by tuning only one -- either the tx or rx. If so, can
it do this even when working through an inverting transponder ?

Tnx, Ken AC1H

1206. RE: Mutek front end for ft-736R

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: Jim.Hansen@stpete.honeywell.COM
Message-ID: <c=US%a=mci%p=honeywell%l=FL51M02-970408125521Z-9550@fl51m03.space.honeywell.com>
Source record: 19260

>hat is a Mutek front end?
>
> Jim
> WD0DIA
> jim.hansen@stpete.honeywell.com
>
>
>
>Date: Sun, 06 Apr 1997 14:07:51 -0500
>From: "Mitch, W4OA" <w4oa@vibroplex.com>
>Subject: FS: Mutek front end for ft-736R
>
>i have the mutek front end kit for the yaesu ft-736r for sale...
>$250 + shipping...
>
>mitch, w4oa
>
>
>
>
>
>

1207. April 12 Saturday Indiana Balloon Launch.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5idjfa$g0k@news.ysu.edu>
Source record: 19261

The following is a reschedule from the April 5 launch that had
to be scrubbed due to wind and rain. No changes except that
the HF net frequency now has a wider tolerance of 10kHz. Please
also note that real-time pictures should be available at the
Windtrax website on April 12.

INDIANA REPEATER/ATV/GPS PACKET BALLOON LAUNCH
WINDTRAX-11

Region: West Central Indiana

Date/Time: Saturday, April 12 / 7:00-8:00 AM Indiana
Time, 12:00-13:00 UTC

Location: Roachdale, Indiana (about 33 miles west
of Indianapolis) at North Putnam County
Middle School

Other states where Illinois, Michigan, Ohio, Kentucky,
the signals will Missouri
reach easily:

Site Coordinates: for initial antenna heading -
39 degrees 47.46" North Latitude
86 degrees 48.05" West Long.

ATV: 439.25 MHz AM NTSC from one color
and one b/w camera; WB8ELK color graphics
generator (1.5 watts, vertically
polarized)

VHF/UHF Repeater: Input - 144.30 MHz FM
Dual Output - 444.85 MHz FM (100mW, VP)
- 52.525 MHz FM (50 mW, VP)
Voice ID

Telemetry: 446.00 MHz FM AX.25 1200 baud packet
GPS/APRS position data (750 mW, VP)

HF Net: 3.860 - 3.870 Mhz
VHF net: 147.33 Repeater (Putnamville)
(both beginning 11:30 UTC)

launch data courtesy of Chuck Crist, WB9IHS
mai@iquest.net
please contact Chuck for more info

Windtrax website
http://www.windtrax.org

Please email me news of upcoming balloon launches and post-flight
reports for distribution on the Net, and please also check out the
new High Altitude Balloon Launch Information Center (HABLIC) website
for collected launch notices presented in a uniform format.

http://www.geocities.com/CapeCanaveral/3161/hablic.htm

Hank Riley, N1LTV
h1riley@umassd.edu

1208. Re: Shuttle Ends Early

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.135.002A6A8A@phoenix.net>
Source record: 19262

In article <3349931A.4F1F@ix.netcom.com> KD1YV <jimkd1yv@ix.netcom.com> writes:
>From: KD1YV <jimkd1yv@ix.netcom.com>
>Subject: Shuttle Ends Early
>Date: Mon, 07 Apr 1997 21:36:42 -0300

>Most probably know by now, but in case you don't, the STS-83 shuttle mission will be
>ending early, tentatively scheduled to return to earth on Tuesday, April 8. Reports are
>that one of the 3 on-board generators has failed, and has been shut down. NASA rules
>require that unless all 3 are functioning, that the mission be aborted.

>The crew have cut a number of lights to conserve power while they rush to complete the
>experiments that they can in the shortened time.

>I'd take a guess that with their busy schedule and shortened mission, that no SAREX
>contacts will be made (if they hadn't already made some.)

>--
>73 de Jim, KD1YV
>http://pw1.netcom.com/~jimkd1yv/hamily.html
And the thing is that this $500000000+ could have been avoided. These fools
had indications that the crap would hit the fan (if there was enough power to
run the fan) before lift off. Mine and your tax dollars up in egosmoke.
I enjoy the space effort and science more that anyone BUT nasa is getting out
of hand 'again'. What next? BAD O rings?

1209. Re: What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: timnich@aol.com
Message-ID: <19970408160700.MAA16562@ladder01.news.aol.com>
Source record: 19263

Excellent question. You read my mind. Even though I've got ungodly APRS QRM near at my QTH, I can usually hear MIR if it's active and it hasn't been for a while. Maybe they're conserving power, given the fire and oxygen difficulties. Anybody know the scoop?

1210. Space Arts '97

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <334A6F14.45C0@excite.com>
Source record: 19264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Maximov Publications and Leonardo

announce

Space Arts Workshop '97

On April 13, 1997, a select group of artists and scientists from around the world will be gathering in Paris, France to discuss the social and cultural aspects of exploring space.

Seventeen individuals will be presenting their works of art, speaking as artist as space explorers. Among these people, is artist Arthur Woods whose work, "Cosmic Dancer" flew aboard the Mir Space Station. Also speaking will be Richard Kriesche, artist of the first art project in the history of the Russian space flight, to fly aboard the space station Mir (1991).

The event will be broadcast over the Internet via Maximov Publications Special section on the Mir Space Station (http://www.maximov.com/Mir/). You can view the preliminary pages at

http://www.maximov.com/Mir/mirspaceart.html

The space arts meeting is being organized by ars astronautica, Leonardo - the Journal of the International Society of the Arts, Sciences and Technology, Maximov Publications, and the OURS Foundation.

Workshop members will go online to answer questions from users (April 13, 1997 at 4PM to 9PM GMT).

During the event, Amateur Radio Operators around the world will be relaying questions to cosmonauts aboard the Mir Space Station. In order to get the questions to amateur radio operators we are asking for submissions before April 13th.

*** CALL FOR QUESTIONS ***

We are requesting questions for both workshop members and cosmonauts. Please submit your questions to Mark W. Curtiss via email (mcurtiss@excite.com) or via the online form (http://www.maximov.com/Mir/mirspaceartstalk.html). Results for these pages will remain posted at this site for future reference.

Thank you

Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

Space Arts '97 -- http://www.maximov.com/Mir/mirspaceart.html

ars astronautica -- http://www.spaceart.net/
Leonardo (French) -- http://www.cyberworkers.com/Leonardo/
(English) -- http://www-mitpress.mit.edu/Leonardo/home.html
Maximov Publications -- http://www.maximov.com/
OURS Foundation -- http://www.ours.ch/

1211. Re: New RS-10 satellite web page.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5ie000$1emo@sol.caps.maine.edu>
Source record: 19265

In article <01bc3fce$f60a1500$46c56cce@default>, "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> wrote:
>Jason,
>
>You forgot to include the URL.
>
>73 de VE7MDL ....Erik.
>

http://www.umecut.maine.edu/~baack/satellite1.html

1212. Re: What's with MIR packet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <334A90CF.54E6@excite.com>
Source record: 19266

Mike Catalanotti wrote:
>
> Anyone heard packet on 145.800 from MIR over the past week?
>
> Thanks,
>
> Mike Cat
> catman@codem.com

Later today (Tuesday/ 4/8) an unmanned spacecraft carrying supplies and equipment will dock with the Russian space station Mir. In addition to food and other necessities, the progress spacecraft is carrying equipment for making repairs to two failed systems on board the station.

The Station was reorientated after a cooling loop failed last week. This along with the other problems should be fixed during this week, allowing for contact with Mir.

Smiles

Mark W. Curtiss

--
Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

1213. ARLK027 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk027.1997@arrl.org>
Source record: 19267
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK027
ARLK027 Keplerian data

ZCZC SK27
QST de W1AW
Keplerian Bulletin 27 ARLK027
From ARRL Headquarters
Newington, CT April 8, 1997
To all radio amateurs

SB KEP ARL ARLK027
ARLK027 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-83
1 24755U 97013A 97098.25000000 .00002255 00000-0 52945-5 0 156
2 24755 28.4689 288.0562 0002859 2.9881 29.4731 15.90809053 540
AO-10
1 14129U 83058B 97095.31596890 .00000174 00000-0 10000-3 0 4702
2 14129 25.8078 154.5522 6071644 106.0259 325.3198 2.05878825 75888
RS-10/11
1 18129U 87054A 97098.03464509 .00000054 00000-0 42258-4 0 03425
2 18129 82.9237 290.5916 0013337 58.3204 301.9250 13.72376765490612
UO-11
1 14781U 84021B 97097.96965768 .00000125 00000-0 29004-4 0 09902
2 14781 97.8281 82.0369 0010625 225.9889 134.0440 14.69538851700949
RS-12/13
1 21089U 91007A 97098.09606231 .00000028 00000-0 12941-4 0 09976
2 21089 82.9224 330.6359 0029682 129.7504 230.6281 13.74079012309539
UO-14
1 20437U 90005B 97098.19639195 .00000015 00000-0 22568-4 0 2600
2 20437 98.5213 181.3735 0012197 54.7019 305.5309 14.29954715376211
RS-15
1 23439U 94085A 97097.91659702 -.00000039 00000-0 10000-3 0 02314
2 23439 64.8093 266.4669 0151231 145.5219 215.5628 11.27525940094011
AO-16
1 20439U 90005D 97098.14351472 .00000022 00000-0 25212-4 0 00612
2 20439 98.5352 184.0970 0012237 56.2225 304.0122 14.30003200376223
```

```
RS-16
1 24744U 97010A 97098.11023981 .00003508 00000-0 11936-3 0 00570
2 24744 97.2810 4.4842 0007829 355.9511 4.1675 15.31057402005362
DO-17
1 20440U 90005E 97097.71665378 -.00000010 00000-0 12964-4 0 00673
2 20440 98.5426 184.4941 0012424 57.1565 303.0812 14.30145516376192
WO-18
1 20441U 90005F 97098.13272078 .00000030 00000-0 28270-4 0 00658
2 20441 98.5423 184.8128 0013004 55.5416 304.7003 14.30113622376253
LO-19
1 20442U 90005G 97098.10561764 .00000021 00000-0 24973-4 0 00655
2 20442 98.5454 185.4157 0013152 55.5447 304.6938 14.30227520376276
FO-20
1 20480U 90013C 97097.94083385 .00000002 00000-0 74530-4 0 09646
2 20480 99.0363 72.7686 0540950 176.4281 184.0930 12.83237383335695
AO-21
1 21087U 91006A 97098.03037718 .00000094 00000-0 82657-4 0 08204
2 21087 82.9370 103.5060 0036663 102.4711 258.0550 13.74580342310516
UO-22
1 21575U 91050B 97098.13204176 .00000028 00000-0 23472-4 0 07688
2 21575 98.3125 161.1266 0008514 99.1940 261.0218 14.37063558300424
KO-23
1 22077U 92052B 97098.54706020 -.00000037 00000-0 10000-3 0 6535
2 22077 66.0803 291.0478 0012154 232.2665 127.7253 12.86301759218799
KO-25
1 22828U 93061F 97098.14751560 .00000015 00000-0 23495-4 0 05510
2 22828 98.5443 174.2139 0011222 71.0831 289.1568 14.28173153152217
IO-26
1 22826U 93061D 97098.09642205 -.00000021 00000-0 88081-5 0 05541
2 22826 98.5503 174.0906 0010146 86.1014 274.1284 14.27831029184087
AO-27
1 22825U 93061C 97098.12260531 -.00000028 00000-0 59134-5 0 05669
2 22825 98.5501 173.8859 0009605 84.8053 275.4225 14.27721620184077
FO-29
1 24278U 96046B 97098.09192760 -.00000058 00000-0 -22274-4 0 00789
2 24278 98.5495 148.8582 0351996 7.9626 352.6913 13.52628567031642
MO-30
1 24305U 96052B 97097.39196672 .00000204 00000-0 20364-3 0 895
2 24305 82.9295 46.8888 0031936 44.1091 316.2579 13.73091763 29345
Mir
1 16609U 86017A 97098.45767534 .00009143 00000-0 11283-3 0 1759
2 16609 51.6543 76.1749 0010390 273.0510 86.9354 15.60935808636143

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
April 12, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1214. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Brandon and Kristin <illusions@enterprise.net>
Message-ID: <334B78F4.5953@enterprise.net>
Source record: 19173

Where'd you get the hair-brained idea that NAY of the frequencies are anything BUT public knowledge. Granted, you have to do some digging to find a couple of them, but they are NOT CLASSIFIED! Rest assured that if they were, every PHED wothin a 200 mile radius would be at your house right now.
--
Brandon Wheaton
Bicester, United Kingdom

My PGP public key is available upon request.

1215. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Brandon and Kristin <illusions@enterprise.net>
Message-ID: <334B790C.3574@enterprise.net>
Source record: 19174

Where'd you get the hair-brained idea that ANY of the frequencies are anything BUT public knowledge. Granted, you have to do some digging to find a couple of them, but they are NOT CLASSIFIED! Rest assured that if they were, every PHED within a 200 mile radius would be at your house right now.
--
Brandon Wheaton
Bicester, United Kingdom

My PGP public key is available upon request.

1216. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Kees Leune <s722413@kub.nl>
Message-ID: <5ig1jm$g9p$2@mailnews.kub.nl>
Source record: 19175

gascomark@aol.com wrote:
> Contains 100's of SECRETGoverment RADIO FREQUENCY

doh. Nothing which travels through the air at the speed of light is a secret.
A simple scanner will pick the signal up in a matter of microseconds. If these
communications are really that secret, dont you think they would be scrambled
and that the frequencies would change on a daily basis?!

-Kees, PE1RHP
--
Kees Leune Tilburg University
Student of Information Management and Technology The Netherlands

EMail: C.J.Leune@KUB.NL HAM Callsign: PE1RHP
WWW: http://stuwww.kub.nl/people/kees/

1217. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc450b$8dc3afa0$54c1e1ce@carl.ais.net>
Source record: 19176

-----BEGIN PGP SIGNED MESSAGE-----

Kees Leune <s722413@kub.nl> wrote in article
<5ig1jm$g9p$2@mailnews.kub.nl>...
> gascomark@aol.com wrote:
> > Contains 100's of SECRETGoverment RADIO FREQUENCY
>
> doh. Nothing which travels through the air at the speed of light is a
secret.
> A simple scanner will pick the signal up in a matter of microseconds. If
these
> communications are really that secret, dont you think they would be
scrambled
> and that the frequencies would change on a daily basis?!

If the signals are truly "scrambled" (using adequate encryption methods)
there
would be NO need to change frequencies on a daily basis ... except perhaps
to make it harder for an adversary to jam the transmission by having to
find it
first ...

With proper encryption techniques, one could send the same message every
day for a hundred years and you'd be unable to decrypt it (without the
right
key)
in a dozen lifetimes using all the supercomputers in the world ...

Even PGP, which is a public key system available on the web, is virtually
unbreakable with proper choice of key length ...

Carl - wa6vse
carl@ais.net

-----BEGIN PGP SIGNATURE-----
Version: 4.5

iQCVAwUBM0vR3uIP1XFmaCFVAQE9MQQAgg02TOIT+aZ0GrFY9FvwozwY5Ez6hH/I
bmhgk9B00dwjwLAclHajqQ4RlijyV2Oe5gIv4ME4ZEJOlaWC/J+ekXbeh2Lgot1q
1EkAPxUHBUxyqYeJpgrc+PVaRpwViR4UsrAKcKHYCatD7YcIurxOtv1EN9xZkYRd
R+c8/pPRE+Q=
=4fGZ
-----END PGP SIGNATURE-----

1218. Solar flare heading toward Earth (4/9/97, in afternoon EDT)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Mark Ellis <mellis@ramcad.pica.army.mil>
Message-ID: <E8DnCF.7yG@pica.army.mil>
Source record: 19177
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.space

From www.cnn.com:

Solar flare heading toward Earth
Web posted at: 11:09 p.m. EDT (0309 GMT)
(CNN) -- The sun has produced a storm the likes of which scientists have not seen before, according to a NASA researcher.
The large flare of magnetic energy is expected to hit Earth's upper atmosphere Wednesday afternoon, according to Art Poland, senior scientist with the Solar and Heliosphere Observatory (SOHO) at the Goddard Space Center in Maryland.
SOHO is a relatively new NASA satellite that is pointed at the sun.
The solar flare was formed Monday when the sun generated a giant shock wave of electrified gases called a coronal mass ejection. SOHO photographs show "a flare going off; you see a shock wave leaving (the sun). Basically, it's a tsunami going across the surface of the sun," Poland said in an interview with CNN.
Solar events like this occur every day. Approximately one in 10 heads toward Earth. But this solar flare is about as large as one that destroyed a broadcast satellite in January.
There have been 43 cases of satellite damage as a result of solar flares, according to astrophysicist George Lake, a NASA project scientist. The flares inflict damage by sending a powerful current through the satellites, creating "miniature power plants," according to Lake.
Scientists say they don't know exactly what kind of problems this solar event could cause and what is in its path. Solar-monitoring satellites will provide only one hour's notice of the wave's arrival. Similar events have triggered power outages and interfered with spacecraft operations.
"If the magnetic orientation is opposite to the Earth's magnetic field and all the conditions are right -- what that means I don't know, that's what we're really trying to learn -- it could really interfere with the Earth's magnetic field and then have an impact on us," Poland said.
The solar flare will pose no threat to life on Earth, he said.
But "it is the kind of thing that might create some spectacular viewing in the heavens," said Lake. The aurora borealis, or Northern Lights, might appear brighter.
This event apparently is a sign of things to come. Scientists say solar activity will increase and peak in the next four to five years.

1219. SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc451e$dbce5840$0101a8c0@gcauchi.keyworld.net>
Source record: 19178
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Hello fellow WEFAX FAX SSTV RTTY enthusiasts.

I've just updated by FTV program - current release is 0.98f
Download it from http://www.geocities.com/SiliconValley/2504

For the first time, I have released the software as full-featured
shareware.

FTV brings innovative digital signal processing and analysis techniques to
your multi-media PC. It can be used to receive images from Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from
radio telex services, as well as Amateur Radio FAX, SSTV and RTTY signals.
It can also transmit Amateur Radio FAX and SSTV (Slow Scan Television). No
external hardware, other than a radio, is required, as all the necessary
signal processing is implemented in software.

FTV uses a SoundCard to decode:-
WEFAX weather photos from weather satellites
FAX wirephotos and meteorological maps (Supports FAX transmission)
SSTV pictures in monochrome and colour (Supports SSTV and SSTV COLOUR
transmission)
Baudot text (RTTY)

Here is a run down of soem of its hot features:

(1) It keeps the demodulated signal in memory, so that the signal can be
analysed again at a different keying rate or polarity! Garbage can be
resampled on the fly, which means that minutes of received signals decoded
at the wrong baud rate or keying polarity are recovered, on the fly, while
still receiving.

(2) Keying rate and polarity are analysed automatically - standard baud
rates are automatically set following analysis (assuming you have
calibrated your system as described in the documentation file
'readme.txt').

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

Take a look at my web site for futher details, at:
http://www.geocities.com/SiliconValley/2504

What can I say ? Try it, it's free, and may you have as much fun as I am
having...
And, keep me posted... If you have suggestions, you have got to let me

know!

73's from Brian.

1220. Re: Shuttle Ends Early

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: lmbarker@ican.net
Message-ID: <04-09-1997.1583@ican.net>
Source record: 19179

That's the Official Reason. The Real Reason is that they ran out of Colombian coffee.

W2SU@ican.net

1221. New Station

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Scott Voegtlin <jcox@worldpath.net>
Message-ID: <01bc4530$5f96db00$acb598ce@gerrycox>
Source record: 19180

Dear reader,

I am looking for someone to help me build/contrcut/fund my radio station. I think its gonna be a priate as soon as I get info about it. I am new at this and would need some help/gudience. Whats alllowed and not allowed? Where could I find a 10 watt transmitter possilbey used? I am emailing a radio station thats big chere in New England because its brodcasted off MT. Washington to see if they have any old equiment to help me out. If any of you can help or give some advice then please feel fre to Email me at: jcox@worldpath.net Pleae donate if possible or of you have some helpful hints I am open!

Thanks!

1222. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5ih8ht$e7e@library.airnews.net>
Source record: 19181
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

DOS programs are OK, but since there are Win95 programs
available to perform the same functions (and auto-install too)
I'll stick with them.

Ken K5MBV

1223. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-0904971810230001@host58.cyberg8t.com>
Source record: 19182

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

1224. Re: Problem compiling SatTrack 3.1.6

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: kharker@cs.utexas.edu
Message-ID: <kharker-0904971614500001@slip-118-10.ots.utexas.edu>
Source record: 19183

In article <5i8guu$49m@news1.radix.net>, xcitor@radix.net wrote:

> I am trying to compile SatTrack on a RedHat Linux 4.1 system and am getting
> errors. I could post my Makefile and the compile errors I'm getting, but
> first I thought I'd check if there are known problems with the X libraries.
>
> Better yet, is there an RPM somewhere for SatTrack?

I wrote an article detailing how to compile SatTrack 3.1 on a RedHat 3.0.1
system that was published in the January 1997 issue of the Linux Journal.
If you still haven't figure it all out, or can't find a copy of the
January LJ (it had the "brain" cover art), I might be able to scrounge up
a rough draft on my hard disk somewhere.

--

Kenneth E. Harker "Vox Clamantis in Deserto" kharker@cs.utexas.edu
University of Texas at Austin Amateur Radio Callsign: KM5FA
Department of the Computer Sciences UT Amateur Radio Club Vice-President
Taylor Hall TAY 2.124 Maintainer of the Linux Laptop Home Page
Austin, TX 78712-1188 USA http://www.cs.utexas.edu/users/kharker/

1225. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Roy Keeley <rkeeley@dibbs.net>
Message-ID: <334C694D.69D1@dibbs.net>
Source record: 19184
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Brian E. Cauchi wrote:
>
> Hello fellow WEFAX FAX SSTV RTTY enthusiasts.
>
> I've just updated by FTV program - current release is 0.98f
> Download it from http://www.geocities.com/SiliconValley/2504
>
> For the first time, I have released the software as full-featured
> shareware.
>
> FTV brings innovative digital signal processing and analysis techniques to
> your multi-media PC. It can be used to receive images from Weather
> Satellites and Terrestrial Facsimile Stations, text transmissions from
> radio telex services, as well as Amateur Radio FAX, SSTV and RTTY signals.
> It can also transmit Amateur Radio FAX and SSTV (Slow Scan Television). No
> external hardware, other than a radio, is required, as all the necessary
> signal processing is implemented in software.
>
> FTV uses a SoundCard to decode:-
> WEFAX weather photos from weather satellites
> FAX wirephotos and meteorological maps (Supports FAX transmission)
> SSTV pictures in monochrome and colour (Supports SSTV and SSTV COLOUR
> transmission)
> Baudot text (RTTY)
>
> Here is a run down of soem of its hot features:
>
> (1) It keeps the demodulated signal in memory, so that the signal can be
> analysed again at a different keying rate or polarity! Garbage can be
> resampled on the fly, which means that minutes of received signals decoded
> at the wrong baud rate or keying polarity are recovered, on the fly, while
> still receiving.
>
> (2) Keying rate and polarity are analysed automatically - standard baud
> rates are automatically set following analysis (assuming you have
> calibrated your system as described in the documentation file
> 'readme.txt').
>
> (3) Tuning oscilloscope available at all times, without loss of copy.
>
> (4) Program works in real time.
>

> Take a look at my web site for futher details, at:
> http://www.geocities.com/SiliconValley/2504
>
I went there and got a msg saying file not there. Sighhhhh....

--
73's

Roy KC4IMC

rkeeley@dibbs.net
kc4imc@maf.wa4wbi.ampr.org
Snail Mail = 10675 Salt Aire Rd, E., Theodore, AL 36582, USA

1226. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Ed Lang <elang@cstone.net>
Message-ID: <334C4F72.4593@cstone.net>
Source record: 19185
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Ken Durham wrote:
>
> DOS programs are OK, but since there are Win95 programs
> available to perform the same functions (and auto-install too)
> I'll stick with them.
>
> Ken K5MBV

Ken or someone

Please post a few of the Win95 software packages locations so I can look
at them. I am just getting back into radio after a perion of QRT.

Thanks

--

Ed Lang - KC4YLX
elang@cstone.net

1227. Re: Anyone heard MIR lately?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Ken S <ks01@ids.net>
Message-ID: <01bc447d$5910b840$17d3d49b@ken-s-cray>
Source record: 19268

MIr has had a fire where they had to abandon the space station and hide in
the soyuz spacecraft
they have docked. , loss of carbon dioxide scrubbers, and a power failure.
The thing is falling apart and they are launching a mission with parts just
to
keep it together.
I'm sure Ham radio is the least of there worries, and it will be some time
before
they have time to play with the radio.

Mike Cat <JoeQPublic@someaddress.net> wrote in article
<3343A862.5482@someaddress.net>...
> My attempts as of lately to hear MIR's 145.800 downlink appear to be
> failing regularly for some strange reason. I have been leaving my
> receiver and TNC on continuously for over 48 hours now and have not
> heard a peep from MIR's PMS.
>
> Does anyone have info as to it's status?
>
> Thanks,
> Mike Cat, FN42
> http://www.codem.com/
>

1228. Re: Weather orbting sat frequenties witch are enable or disable ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: jmorawie@RZ.uni-osnabrueck.de
Message-ID: <5iemd7$cku@deimos.rz.Uni-Osnabrueck.DE>
Source record: 19269

Hi Geert!

pass wrote :

> Can someone tells me witch satellite are activ ?
>
> I like to now the frequenties and status of folowing sat's :

this may be helpful, I think:

STATUS 177
METSAT APT STATUS REPORT 01 April 1997
As monitored in the UK

NOAA 12 ON 137.50MHz
NOAA 14 ON 137.62
METEOR 2-21 OFF
METEOR 3-5 OFF Off until 21 April
OKEAN 4 (1-7) ON 137.40
SICH 1 OFF? Heard 12 and 26 March, 137.40MHz

Peter Wakelin, Remote Imaging Group. Europe's leading group for
weather satellite enthusiasts with 2000 members in 41 countries.
E-mail: peter@ascotrig.demon.co.uk Fax: +44 1344 26028 Tel: +44 1344
23200
http://www.rig.org.uk/index.html

bye
- Juergen -

1229. Club Home Page

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: todd@crenshaw.reno.nv.us
Message-ID: <334b1b82.3536797@news.greatbasin.net>
Source record: 19270

You're invited to check out our clubs recently revised web page
at http://wadg.greatbasin.net

You're also welcome to connect to our packet internet server
via any internet packet gateway at wadg.ampr.org

73'
KB7UYR
Todd Crenshaw, Secretary
The Wide Area Data Group, Inc. Amateur Radio Club
Reno, Nevada

1230. Re: Instatrack Software

Newsgroup: rec.radio.amateur.space
Date: 1997-04-09 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5if4og$8lk$1@ddi2.digital.net>
Source record: 19271

In article <3346da1a.2496383@news.glasscity.net> toms, toms@glasscity.net writes:
>>Does anyone know if the author of Instatrack is still producing it? I >used to have version 1.0. If so, where might I find it? Thanks >much... Tom, KB8PAI

Instantrak is a commercial program. It is _NOT_ freeware or shareware. You can purchase it from AMSAT for $70 ($50 for members). Call AMSAT at 301-589-6062.

Franklin Antonio is the author of the program and has been quite cooperative about providing support and advice on how to get around the few bugs (primarily bugs related to other pieces of operating system or hardware interelating with Instantrack as opposed to any bugs within the program.)

A set of optional utilities are also available.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

1231. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5ihofv$aq4@library.airnews.net>
Source record: 19186
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

>Please post a few of the Win95 software packages locations so I can look
>at them. I am just getting back into radio after a perion of QRT.
~~~~~~
Ed,

The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
program WxSat which uses your soundcard to decode the Polar Orbiters
and Meteosats then displays the WAV file as a BMP. An excellent
compilation of SSTV programs is found at http://www.qsl.net/n9ngf/
Some of the programs are DOS and some are Win95. There are
descriptions and shareware to be downloaded directly from the site.
I'd have to do a search to find some other sources and my
ISP server is running s..l..ooo..ww.. tonight. Just search using
Webcrawler or Yahoo to find SSTV software, RTTY software, and
Wxsat links.

73 Ken K5MBV
~~~~~~

1232. BALOON LAUNCH (NASA HAMS) HOW DID IT GO???

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: Bill Frovik <n0mnb@minn.net>
Message-ID: <01bc44ab$1f4d7e80$56c99dcc@n0mnb.ppp>
Source record: 19187

LOOKING OUT FOR HOW THINGS WENT WITH THE LAUNCH LAST MONTH,
WERE THE BALLON HAD A ROCKET TO PUT INTO SPACE FOR A TIME.

INTERESTED

N0MNB@MINN.NET

1233. "The Station Program + KCT

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: robinf@sinesurf.co.nz
Message-ID: <334caea4.378837@news.sinesurf.co.nz>
Source record: 19188

1. Anyone using KCT with The station Program? I am having difficulty in getting rig control via the KCT on a IC 821. Has anyone written a macro for the KCTDRV.ini for the 820 or 821?

2. when using the Station program direct to rig with the CT-17 I am unable to run link at more than 1200 despite setting both the rig and the configure to 9600. the rig seems to get the instructions but the program does not acknowledge the response and hard locks up the computer. Anyone has this problem plealse?
Robin ZL1RNF
robinf@sinesurf.co,nz

1234. WFAX

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: jcarpen215@aol.com
Message-ID: <19970410092601.FAA18779@ladder01.news.aol.com>
Source record: 19189

I am interested in getting to know more about WFAX, and what type of equipment is required to get started, and also know of any hams that are familiar with WFAX that may assist me obtain this information to get started,

thanks

jcarpen215@aol.com

1235. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: kodis@kodis.jagunet.com
Message-ID: <slrn5kpjq9.s4f.kodis@kodis.jagunet.com>
Source record: 19190
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Previously, regarding some soundcard demodulator, tkrempa wrote:

>it sucks, brian....its been done ...and better...

Thanks for the product review. This would be more helpful if you
could specify were it's been done, which products you find are better,
and why. Care to try a follow-up?

-- John Kodis.

1236. Re: BALOON LAUNCH (NASA HAMS) HOW DID IT GO???

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: Mike Cat <anti@spam.address>
Message-ID: <334CE905.7C0C@spam.address>
Source record: 19191

Bill Frovik wrote:

> LOOKING OUT FOR HOW THINGS WENT WITH THE LAUNCH LAST MONTH,
> WERE THE BALLON HAD A ROCKET TO PUT INTO SPACE FOR A TIME.

The launch was scrubbed due to a malfunction. It has not yet been rescheduled.

Ckeck out the HALO Rocket Ballon web page at:

http://fly.hiwaay.net/~bbrown/

73 de Mike Cat
catman@codem.com
http://www.codem.com/

1237. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <334CFB3B.3230@cyberramp.net>
Source record: 19192

http://www.cyberramp.net/~johnf

1238. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: Cedric Roberts <crob@hoclim.demon.co.uk>
Message-ID: <vtgwPBAmIRTzEw6b@hoclim.demon.co.uk>
Source record: 19193
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

In article <5ihofv$aq4@library.airnews.net>, Ken Durham <mbv@flash.net>
writes
>
>>Please post a few of the Win95 software packages locations so I can look
>>at them. I am just getting back into radio after a perion of QRT.
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
> Ed,
>
> The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
>program WxSat which uses your soundcard to decode the Polar Orbiters
>and Meteosats then displays the WAV file as a BMP. An excellent
>compilation of SSTV programs is found at http://www.qsl.net/n9ngf/
>Some of the programs are DOS and some are Win95. There are
>descriptions and shareware to be downloaded directly from the site.
> I'd have to do a search to find some other sources and my
>ISP server is running s..l..ooo..ww.. tonight. Just search using
>Webcrawler or Yahoo to find SSTV software, RTTY software, and
>Wxsat links.
>
>73 Ken K5MBV
To all of you radio amateurs out there ! A plea for help from
someone bogged down at the moment.
I have obtained the wxsat software which works perfectly with
prepared .wav or .bmp files. I have also obtained a sound card (Idema
sound card series Schubert which is a 16bit ES1868 card) This has been
set up with port 220H, interrupt 10 [to avoid clashes with network card
set to 5] and DMA 1. It is set for wave file processing at 11.025kHz,
mono, 8 bit
No matter how I try I cannot produce a .wav file from the system
even though the input (into the audio plug on the card) produces sound
from the monitor speakers. I can also play CD's via the CD player,
but....NO .wav file at all. I have tried live signals, and recorded
signals all to no avail. I have even tried to contact ESS technologies
in the States by e-mail but have had the message returned with this
address unknown. So at the moment I am having to suck my thumb, mainly
since I am neither a radio amateur or a computer "literate". The
setting up of the system was done for me as I am essentially an amateur
climatologist (retired).
So, can any of you boffins out there throw any light on my
problems and even suggest what I can do to get a .wav signal. Have I
got a duff sound card ??
Thanks for any help or guidance,

--
Cedric Roberts

1239. Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: Roland Brade <roland@venusww.demon.co.uk>
Message-ID: <MVq$XFAbdSTzIw1M@venusww.demon.co.uk>
Source record: 19194
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

I am just putting the final touches to a simple polar weather sat
decoder but I need a couple of audio tape recordings of good passes so
that I can tweek the circuit.
Does anyone have any recordings that they have made and can let me have.
I will pay all the costs involved.

many thanks

Roland - G3VIR
--
Roland Brade
g3vir@venusww.demon.co.uk
g3vir@gb7ves.#42.gbr.eu
http://www.venusww.demon.co.uk

1240. Re: Anyone heard MIR lately?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <334D1D86.1B20@excite.com>
Source record: 19195

Good Day all,
I just got some semi-official confirmation that the space station shut down its amateur radios for energy reasons and that they will probably not come back online for a couple of weeks while repairs are being made. (Keep trying though)
As to the recent launch, this was a scheduled event, regardless of the repair items. It turned out to be good timing for the crew and the station.

Smiles and All

Mark W. Curtiss
http://www.maximov.com/Mir/mir2.html

Ken S wrote:
>
> MIr has had a fire where they had to abandon the space station and hide in
> the soyuz spacecraft
> they have docked. , loss of carbon dioxide scrubbers, and a power failure.
> The thing is falling apart and they are launching a mission with parts just
> to
> keep it together.
> I'm sure Ham radio is the least of there worries, and it will be some time
> before
> they have time to play with the radio.
>
> Mike Cat <JoeQPublic@someaddress.net> wrote in article
> <3343A862.5482@someaddress.net>...
> > My attempts as of lately to hear MIR's 145.800 downlink appear to be
> > failing regularly for some strange reason. I have been leaving my
> > receiver and TNC on continuously for over 48 hours now and have not
> > heard a peep from MIR's PMS.
> >
> > Does anyone have info as to it's status?
> >
> > Thanks,
> > Mike Cat, FN42
> > http://www.codem.com/
> >

--
Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

1241. Updated Web Page

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <334D4955.735F@primenet.com>
Source record: 19196

Just completed major updates to my web page:
http://www.qsl.net/k7on

Please set a bookmark!

73, Brian K7ON xKE7GH

1242. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: jf30@dial.pipex.com
Message-ID: <334d42af.36375323@news.dial.pipex.com>
Source record: 19197
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

mbv@flash.net (Ken Durham) wrote:

> The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
>program WxSat which uses your soundcard to decode the Polar Orbiters
>and Meteosats then displays the WAV file as a BMP.

An Excellent program.
Now if only Christian Bock could add RTTY to WxSat that would be
perfect!

Phil L.

1243. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-10 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <334DADA1.7B16@rollanet.org>
Source record: 19198
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

John Kodis wrote:
>
> Previously, regarding some soundcard demodulator, tkrempa wrote:
>
> >it sucks, brian....its been done ...and better...
>
> Thanks for the product review. This would be more helpful if you
> could specify were it's been done, which products you find are better,
> and why. Care to try a follow-up?
>
> -- John Kodis.

i must have missed this program. i've got a fairly decent morse decoder
for my sbAWE32 but would like that other stuff up there in the subject
line
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

1244. Let's Make Some Demands!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5ik5m5$as_002@blpm01-241.mcn.net>
Source record: 19199
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Let's demand that the ESA give Amsat a building in Kourou, French Guiana to store the Phase 3D satellite while we wait for launch. Rent Free!

p.s. Donations are still much needed!

1245. LogSat Pro + AEA ST1 & SASI Tracker support

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: Roberto Franceschetti <roberto@netwide.net>
Message-ID: <01bc463b$0fe1c3c0$068bd4d0@miseno.netwide.net>
Source record: 19200

We're the developers of LogSat Professional, a satellite tracking program for Windows. Right now this software is able to control the antenna rotors only using the KCT (Kansas City Tracker) interface card. We are currently adding support for doppler compensation and TrakBox compatibility. We would also like to support the AEA ST1 controller and the SASI tracker.

Is there anyone who has some technical specs on these latter two interfaces and on any drivers/software used to control them? We'd really appreciate any input regarding this matter.

Thank you
--
Roberto Franceschetti
LogSat Software Corp.

(please, if posting a reply to this newsgroup, also send an email carbon copy to support@logsat.com as sometimes messages are lost on the newsgroup servers)

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

1246. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5ili6f$76d@dsk92.itg.ti.com>
Source record: 19201
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

,
>but....NO .wav file at all. I have tried live signals, and recorded
>signals all to no avail. I have even tried to contact ESS technologies
>in the States by e-mail but have had the message returned with this
>address unknown. So at the moment I am having to suck my thumb, mainly
> Thanks for any help or guidance,
>--
>Cedric Roberts
~~~~~~~~~~~~~~~~~~~~~~~~~
Cedrick, When you say that you have the WxSat software, I
assume that you are talking about the Windows program. Are
you running Win95? If so you should be able to enable the
soundcard control panel from the tray. See if the WAV block
is disabled or if the WAV volume is turned all the way down.
Ken K5MBV
~~~~~~~~~~~~~~~~~~~~~~~~~

1247. ARLS012 SAREX/ARISS attempt to reschedule missed QSOs

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls012.1997@arrl.org>
Source record: 19202
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS012
ARLS012 SAREX/ARISS attempt to reschedule missed QSOs

ZCZC AS12
QST de W1AW
Space Bulletin 012 ARLS012
From ARRL Headquarters
Newington, CT April 11, 1997
To all radio amateurs

SB SPACE ARL ARLS012
ARLS012 SAREX/ARISS attempt to reschedule missed QSOs

When the space shuttle Columbia prematurely came back to Earth April 8, so did the soaring hopes of students and teachers at 18 schools that had been scheduled to talk via Amateur Radio with the astronauts aboard the shuttle as part of the Shuttle Amateur Radio EXperiment, or SAREX. Three hams were aboard STS-83: Jim Halsell, KC5RNI, the mission commander, Janice Voss, KC5BTJ, and Donald Thomas, KC5FVF. The SAREX schedule had included contacts with schools in the People's Republic of China and Japan (Okinawa).

It's not yet known if or when any of the SAREX contacts might be rescheduled on other missions, although NASA has indicated it would like to ''refly'' the entire STS-83 mission--with the same crew--possibly as early as July. The SAREX/ARISS Working Group (SAWG) has requested that SAREX be included if the mission is reflown. In the meantime, the SAWG will be in contact with NASA to find ways to give each school every possible chance to be assigned to future flights.

NASA Payload Specialist Ron Parise, WA4SIR, took time out from his work schedule April 7 at Goddard Space Flight Center to speak with some 300 thrilled students at the County College of Morris in New Jersey, one of the schools on the STS-83 SAREX schedule. Other schools might get a chance at special QSOs with the STS-83 crew members once the crew is back at Johnson Space Center.

At least one of the hams aboard STS-83 managed a few spare moments to turn on the ham gear aboard the shuttle. Al Lark, KD4SFF, of Greenville, South Carolina, was able to chat with Don Thomas, KC5FVF, aboard Columbia on April 5. Rusty Hack, NM1K, in Enfield, Connecticut, also reported hearing KC5FVF aboard the shuttle on the same day, apparently a few minutes after the QSO with KD4SFF. April 5 QSOs also were reported by KA3HPQ and N1JEZ.

In the meantime, four out of a scheduled round of ten MIREX school contacts have taken place so far with ham-astronaut Jerry Linenger, KC5HBR, aboard the Russian Mir space station. At least three more contacts remain on the schedule, with Alaiedon Elementary School in Mason, Michigan, Holy Angels School in Dayton, Ohio, and Jerling Junior High School in Orland Park Illinois. The remaining QSO schedule may be pared back in deference to Linenger's heavy research workload, but efforts are under way to carry out as many of the previously schedule school contacts as possible.
NNNN
/EX

1248. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: "Jim Shaffer, Jr." <jshaffer@mail.csrlink.net>
Message-ID: <01bc45fd$97ef0e00$LocalHost@default>
Source record: 19203
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Roy Keeley <rkeeley@dibbs.net> wrote in article
<334C694D.69D1@dibbs.net>...
> > Take a look at my web site for futher details, at:
> > http://www.geocities.com/SiliconValley/2504
> >
> I went there and got a msg saying file not there. Sighhhhh....

Keep trying! GeoCities has evidently been having some serious problems lately. Last night I couldn't even get to my own page the first time I tried. The problem seemed to come and go every few minutes, or less.

--
"I don't want the world -- I just want your half."
--T.M.B.G.

1249. FS: kantronics d4-10 radio

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <334E87F3.63CF15DE@vibroplex.com>
Source record: 19204
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

```
i have a d4-10 for sale, on 446.100 and 435.550... tuned up for
446.100, price is $250 + shipping...

mitch, w4oa
```

1250. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: Garry <garry@goldhill.demon.co.uk>
Message-ID: <a0193f7947@goldhill.demon.co.uk>
Source record: 19205
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

In article <MVq$XFAbdSTzIw1M@venusww.demon.co.uk>
Roland Brade <roland@venusww.demon.co.uk> wrote:

> I am just putting the final touches to a simple polar weather sat
> decoder but I need a couple of audio tape recordings of good passes so
> that I can tweek the circuit.
> Does anyone have any recordings that they have made and can let me have.
> I will pay all the costs involved.

Rumour has it that audio tape recordings wobble the speed (tones)
excessively and prevent decoding. Anyone confirm otherwise ?

--
Garry

1251. Need Help setting up sat station

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: "R.E. Dodson WB5APD/4" <rdodson@worldnet.att.net>
Message-ID: <334ECCC2.728C@worldnet.att.net>
Source record: 19206

I need some advice and help setting up my 1st satellite station.
I have a Yaesu FT-736R with FIF-232c interface. Plan to get a Yaesu
alt/el rotor. Have a win95 pentium PC. Would like to run WinTrak Pro
software. I want to control both the radio and rotor via pc software.
WinTrak pro says it works with "Auto Tracker".
What is auto tracker and where do i get it. I guess I am trying to
figure out what hardware I still need to get to run the radio and ant
rotor system. Keep hearing about KC tracker and have no idea what that
is either. Bought the arrl satellite anthology book but it is no help
setting up a station to control radio and rotor. Thank you for reading
this and any help is very much appreciated.

Bob
WB5APD/4

1252. sky hacking

Newsgroup: rec.radio.amateur.space
Date: 1997-04-11 00:00:00 UTC
From: "Firth, Reginald J." <cm1961@mail.wlv.ac.uk>
Message-ID: <5ilh2g$r1r@ccuh.wlv.ac.uk>
Source record: 19207

I have hacked Sky..

All channels are no decrypted..

it works similar to the PIC chip hacks...

if your interested then email me..

i will not divulge such information on the newsgroup..

I have pcb diagrams and such in postscript format and it works 100%

i also have info on d2-mac

email me if your interested...

1253. help with antenna theroy...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: iceextreme@aol.com
Message-ID: <19970412075901.DAA02684@ladder01.news.aol.com>
Source record: 19208

I am new amateur radio, and i was looking to see if i could build an antenna, but
i seem to have no information, i was wondering if someone out here could explain,
how everything works, or for that matter send me some electronic expliantions or how to's... thanks for your time.
Ice

Everything sent will be apperecited!

1254. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: Roland Brade <roland@venusww.demon.co.uk>
Message-ID: <ShA46DAyC2TzIwUj@venusww.demon.co.uk>
Source record: 19209
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

In article <a0193f7947@goldhill.demon.co.uk>, Garry
<garry@goldhill.demon.co.uk> writes
>In article <MVq$XFAbdSTzIw1M@venusww.demon.co.uk>
> Roland Brade <roland@venusww.demon.co.uk> wrote:
>
>> I am just putting the final touches to a simple polar weather sat
>> decoder but I need a couple of audio tape recordings of good passes so
>> that I can tweek the circuit.
>> Does anyone have any recordings that they have made and can let me have.
>> I will pay all the costs involved.
>
>Rumour has it that audio tape recordings wobble the speed (tones)
>excessively and prevent decoding. Anyone confirm otherwise ?
>
The wow and flutter can have some effect on the picture but if the tape
recorder is of reasonable quality then it should be OK.
I use an old datacorder which came with the C-64 computer and have found
it to be pretty good with SSTV and or FAX pitures when I have used it to
give demonstrations at our local club.
--
Roland Brade
roland@venusww.demon.co.uk
http://www.venusww.demon.co.uk

1255. Help with KCT/T, WISP and RR driver

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: Art Jeyes <chrishil@erols.com>
Message-ID: <334F9A2E.510C@erols.com>
Source record: 19210

I am just getting my sat station back on line after a long
period with a failed rotor...

I got the latest version of WISP, and the recently posted new
modules... installed everything and am having a problem with
tuning...

I am running an ICOM 970, KCT/T, & G-5400B rotor...

I installed the RR Driver and calibrated the rotor/set up the tuner as
instructed...

Everything works using the satdemo program... I can set transceiver
modes, and TX/RX frequencies....

when I run WISP and a pass comes up, everything appears normal, except
that only the uplink frequency gets set on the ICOM, the DL freq does
not get initialized or updated...

I have checked the downlink frequncies in the sat setup dialog of WISP
and they are OK... I also have beacon frequncy set in the satellite data
base to the down link frequncy and doppler looks correct in the GSC
track window...

any ideas on what I am doing wrong would be greatly appreciated...

Thanks & 73
Art -- AA3GU

1256. Re: Let's Make Some Demands!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: newsline@ix.netcom.com
Message-ID: <5io7nv$ab2@dfw-ixnews10.ix.netcom.com>
Source record: 19211
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In <5ik5m5$as_002@blpm01-241.mcn.net> fiscus@mcn.net (Vince Fiscus, KB7ADL) writes:
>
>Let's demand that the ESA give Amsat a building in Kourou, French Guiana to
>store the Phase 3D satellite while we wait for launch. Rent Free!
>
>
>p.s. Donations are still much needed!
>

Vincent,

Before you rallye people to make "demands" of ESA, I would think that you would first be wise to "ASK" the AMSAT leadership if they want a "free building" from ESA?

Simply said, it is not for you or any AMSAT-NA member to make any demands on the European Space Agency. Nor is it proper for you to organize what amounts to a protest action against ESA.

Rather this is a policy decision that has to be made at the highest level of AMSAT leadership starting with AMSAT-DL. As you must know, AMSAT-DL is the organization that is the leader of the Phase IIID project.

You might consider sending your idea as a "formal presentation" to them through the proper chain of command via AMSAT-NA President Bill Tynan, W3XO (w3xo@amsat.org) to see if AMSAT-NA feels that such an idea should be pursued on an international level by AMSAT-DL.

de Bill Pasternak, WA6ITF

1257. Re: Let's Make Some Demands!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5iocgm$7q4@sjx-ixn10.ix.netcom.com>
Source record: 19212
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In <5io7nv$ab2@dfw-ixnews10.ix.netcom.com>
newsline@ix.netcom.com(William M. Pasternak) writes:
>
>In <5ik5m5$as_002@blpm01-241.mcn.net> fiscus@mcn.net (Vince Fiscus,
>KB7ADL) writes:
>>
>>Let's demand that the ESA give Amsat a building in Kourou, French
>Guiana to
>>store the Phase 3D satellite while we wait for launch. Rent Free!
>>
>>
>>p.s. Donations are still much needed!
>>
>
>Vincent,
>
>Before you rallye people to make "demands" of ESA, I would think that
>you would first be wise to "ASK" the AMSAT leadership if they want a
>"free building" from ESA?
>
>Simply said, it is not for you or any AMSAT-NA member to make any
>demands on the European Space Agency. Nor is it proper for you to
>organize what amounts to a protest action against ESA.
>
>Rather this is a policy decision that has to be made at the highest
>level of AMSAT leadership starting with AMSAT-DL. As you must know,
>AMSAT-DL is the organization that is the leader of the Phase IIID
>project.
>
>You might consider sending your idea as a "formal presentation" to
them
>through the proper chain of command via AMSAT-NA President Bill Tynan,
>W3XO (w3xo@amsat.org) to see if AMSAT-NA feels that such an idea
should
>be pursued on an international level by AMSAT-DL.
>
>de Bill Pasternak, WA6ITF

Yesterday I visited the integration facility in Orlando and chatted
with Lou McFadin. During this delay the opportunity is being used to
improve the spacecraft. Things are being check and rechecked and
improvements made. Sure keeping that facility open costs money but we
are going to get a better satellite out of it.

We are going to a GTO for very small percentage of what that would normally cost and people then want ESA to give us more. I wish the original poster would give a little thought before launching out on his suggested course of action.

I heard one of the regular satellite ops comment the he, "wasn't going to pay to support a delay" I was stunned into silence (hard to believe) by that comment. The delay was not AMSATs choice. The same people who busted their tails to build P3D are doing the same during the delay to make it better while a bunch dweebs who did nothing want to sit around and bitch.

I know the interet is a great medium for shooting off your mouth but try thinking guys.

Jerry

1258. crete holidays

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc476f$f7734580$f8915cc1@dummy.forthnet.gr>
Source record: 19213

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO 31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

1259. !!!!$$EASY MONEY FAST$$!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: J10040 <j10040@hotmail.com>
Message-ID: <334FE914.2FFA@hotmail.com>
Source record: 19214

A little while back I was looking at a newsgroup and saw a message similar to this. I thought it was a scam, but it wosen't. It said that you send $1.00 to the five names and address bellow then you place your own name at the bottom of the list at #5, and post it to at least 200 newsgroups. (There are thousands) No catach, that was it.

So after I talked to some people I did it. What do I have to lose exept 5 stamps and $5.

Like most of us I was a little skepical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is ineed legal.

My friend has made after 2 weeks 1,000.00 and now on his 4th he has made a total of 42,000.00 and it is still comming in.....

The process is very simple and consists of 3 steps:

step 1:: Get 5 separate pices of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Then get the dollar bills and put it inside the papers and put the papers inside the envelopes. Know you should have five sealed envolops with a paper in each that has the phrase above on it and a dollar bill inside of the paper. Why you are puting the dollar bill in the paper is so it well not be seen.

Mail the 5 envelpoes to the following addresses:

#1 Michael Henry
518 west College Ave.
Salisbury, Md 21801

#2 Kent
27 Vicar Road
Anfield
Liverpool
L6 OBW
England
U.K.

#3 David West
6020 Danube Way
Orlando, Fl 32807

#4 Keith Queen
Room 114
Miami University

Oxford, OH 45056

#5 Brett Robinson
Po Bx 521
Parowan, Ut 84761

Step 2: Now take the number one off the list that you see above, move the other names up (5 becomes 4, 4 bcomes 3, etc...) And add your name on number 5 on the list.

Step 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. All you need is to post is 200, but remember the more you post the money you make!

When you type this up to send it to the newsgroups save it so that you don't have to keep typeing it over and over.

When your name is nolonger on the list then you just take the latest posting in the newsgroups and start posting again.

1260. ARLK028 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk028.1997@arrl.org>
Source record: 19215
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK028
ARLK028 Keplerian data

ZCZC SK28
QST de W1AW
Keplerian Bulletin 28 ARLK028
From ARRL Headquarters
Newington, CT April 12, 1997
To all radio amateurs

SB KEP ARL ARLK028
ARLK028 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97098.22948610 -.00000078 00000-0 10000-3 0 4711
2 14129 25.8122 154.0385 6072130 106.8498 324.7491 2.05881733 75942
RS-10/11
1 18129U 87054A 97101.02383874 .00000076 00000-0 66203-4 0 03604
2 18129 82.9231 288.3806 0013205 50.6734 309.5587 13.72377266491026
UO-11
1 14781U 84021B 97100.96560543 .00000157 00000-0 34325-4 0 09760
2 14781 97.8283 84.9100 0010651 215.4255 144.6233 14.69540319701383
RS-12/13
1 21089U 91007A 97101.08156433 .00000063 00000-0 50649-4 0 09903
2 21089 82.9223 328.4216 0030091 121.8172 238.5930 13.74079451309945
UO-14
1 20437U 90005B 97100.78536413 .00000013 00000-0 21674-4 0 02771
2 20437 98.5210 183.9067 0012096 47.6080 312.6124 14.29955021376586
RS-15
1 23439U 94085A 97100.93218555 -.00000039 00000-0 10000-3 0 02217
2 23439 64.8138 261.5926 0151444 144.9362 216.1642 11.27526257094353
AO-16
1 20439U 90005D 97101.29215759 -.00000002 00000-0 15806-4 0 572
2 20439 98.5358 187.1860 0012165 48.1592 312.0625 14.30003328376675
RS-16
1 24744U 97010A 97101.05125994 .00003770 00000-0 12801-3 0 00455
2 24744 97.2806 7.3708 0007745 345.5640 14.5380 15.31081106005811
```

```
DO-17
1 20440U 90005E 97100.72505687 .00000007 00000-0 19291-4 0 00614
2 20440 98.5422 187.4458 0012410 48.4040 311.8202 14.30146008376625
WO-18
1 20441U 90005F 97101.77087129 .00000023 00000-0 25577-4 0 620
2 20441 98.5414 188.3818 0012953 44.8675 315.3553 14.30114029376775
LO-19
1 20442U 90005G 97101.25376748 .00000008 00000-0 19752-4 0 599
2 20442 98.5452 188.5061 0013075 46.5570 313.6686 14.30227684376724
FO-20
1 20480U 90013C 97101.44950307 -.00000040 00000-0 -20365-4 0 9588
2 20480 99.0372 75.6146 0541089 168.4852 192.9220 12.83237001336145
AO-21
1 21087U 91006A 97101.01479033 .00000094 00000-0 82657-4 0 08128
2 21087 82.9368 101.2966 0036878 94.4961 266.0408 13.74580482310929
UO-22
1 21575U 91050B 97101.12598742 .00000037 00000-0 26561-4 0 07870
2 21575 98.3120 164.0180 0008536 91.5134 268.7035 14.37064133300859
KO-23
1 22077U 92052B 97100.95731149 -.00000037 00000-0 10000-3 0 06679
2 22077 66.0803 286.0017 0012140 230.6937 129.3008 12.86301887219105
KO-25
1 22828U 93061F 97101.16007205 .00000027 00000-0 28173-4 0 05417
2 22828 98.5444 177.1622 0011237 63.0848 297.1491 14.28173531152643
IO-26
1 22826U 93061D 97101.24985263 .00000014 00000-0 23058-4 0 5472
2 22826 98.5502 177.1765 0010128 77.3215 282.9097 14.27831624184538
AO-27
1 22825U 93061C 97101.13611291 .00000009 00000-0 21241-4 0 05573
2 22825 98.5498 176.8342 0009540 76.1534 284.0709 14.27722260184500
FO-29
1 24278U 96046B 97101.12456427 -.00000033 00000-0 34749-5 0 00739
2 24278 98.5493 151.4805 0351927 0.1135 0.0035 13.52628852032054
Mir
1 16609U 86017A 97101.91482074 .00004894 00000-0 63253-4 0 1908
2 16609 51.6542 58.7742 0011340 292.1456 67.8333 15.60957849636681

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 15, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1261. Helical Antennas's: Do they out-perform beams?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: rkling@umich.edu
Message-ID: <5ip4se$lvm@lastactionhero.rs.itd.umich.edu>
Source record: 19216

I am planning my satellite station and I have read a lot about helical antenna's.
From what I have read they appear to be better than beams and easier to build
Helical Pros:
greater bandwidth
easy and inexpensive to build
somewhat lightweight (UHF)
Helical Cons:
Single polarity
Heavy for VHF
More difficult to match than a beam.

I am looking for someone who has used or is using helical antennas to tell me how they perform. Becuase right now, my plan is to make a 440 helical antenna and purchase a 144 antenna. Before I spend the money I would like to have more information.

Any help will be greatly appreciated.

Rob Kling

1262. Re: Ham-Space Digest V97 #130

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19970412.141811.11926.0.harrymue@juno.com>
Source record: 19217

Greetings,

I'm confused! In the HAM-SPACE DIGEST dated April 10 the majority of the orbital elements were for the 098 day of the year. In the HAM-SPACE DIGEST dated April 12 the majority of the orbital elements were for the 087 day of the year. Why did they regress?

Thanks...Harry Mueller (KC5TRB, Tulsa)

1263. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-12 00:00:00 UTC
From: john orrells <john@g6dqy.demon.co.uk>
Message-ID: <19970412.213537.38@g6dqy.demon.co.uk>
Source record: 19218
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

In message <a0193f7947@goldhill.demon.co.uk> Garry wrote:

> In article <MVq$XFAbdSTzIw1M@venusww.demon.co.uk>
> Roland Brade <roland@venusww.demon.co.uk> wrote:
>
> > I am just putting the final touches to a simple polar weather sat
> > decoder but I need a couple of audio tape recordings of good passes so
> > that I can tweek the circuit.
> > Does anyone have any recordings that they have made and can let me have.
> > I will pay all the costs involved.
>
> Rumour has it that audio tape recordings wobble the speed (tones)
> excessively and prevent decoding. Anyone confirm otherwise ?
>

All depends, this is mainly a problem with automatic record
level machines resulting in brightness level altering, showing as
bands. This can be overcome to some extent by fitting a pot in the
line between the rx and recorder so that the agc in the recorder
is not so active.
The best result I obtained is using the audio track on Sony EV3-C3E
video 8 recorder, with this I was able to record HF fax which I
found impossible using an audio recorder.
Hope this is some help.
73 John

--
john orrells
... WindowError:009 Horrible bug encountered. God knows what happened.

1264. Haw to do a flipover with KANSAS CITY TRACKER and INSTANT TRACK ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc47f7$ebe0be40$6fb630ce@pass>
Source record: 19123

Hello

Can someone tells me haw to confugirate my Kansas City Tracket to use with Instant Track to do a flip over of 180 degrees ?

My 0 degree and 360 degree are in the south, I use a yeasu G-5400 rotor antenna tracket system

At te moment I load my drivers, DRV.COM, OSC.COM, ORBITDRV.EXE, IT.EXE

Can you tell me In more dedails haw to load this drivers at the best way ?

ALL INFORMATION ARE WELKOM

73!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1265. Haw to do a flipover with KANSAS CITY TRACKER and INSTANT TRACK ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc47f8$051ed720$6fb630ce@pass>
Source record: 19124

Hello

Can someone tells me haw to confugirate my Kansas City Tracket to use with Instant Track to do a flip over of 180 degrees ?

My 0 degree and 360 degree are in the south, I use a yeasu G-5400 rotor antenna tracket system

At te moment I load my drivers, DRV.COM, OSC.COM, ORBITDRV.EXE, IT.EXE

Can you tell me In more dedails haw to load this drivers at the best way ?

ALL INFORMATION ARE WELKOM

73!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1266. Haw to do a flipover with KANSAS CITY TRACKER and INSTANT TRACK ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc47f8$30770820$6fb630ce@pass>
Source record: 19125

Hello

Can someone tells me haw to confugirate my Kansas City Tracket to use with Instant Track to do a flip over of 180 degrees ?

My 0 degree and 360 degree are in the south, I use a yeasu G-5400 rotor antenna tracket system

At te moment I load my drivers, DRV.COM, OSC.COM, ORBITDRV.EXE, IT.EXE

Can you tell me In more dedails haw to load this drivers at the best way ?

ALL INFORMATION ARE WELKOM

73!

Pirens G. ONL2057

ONL2057@AMSAT.ORG

1267. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970413113701.HAA07886@ladder01.news.aol.com>
Source record: 19126

tape recordings will not work with most wxsat demodulators..
there is a trick though!

use a VCR with a video signal already on the tape..the video provides the
sync for the demodulator..
or..
just use the WxSAT software which has no problem with tape recorded audio,
as long as your recorder is of good quality and you can disable the AGC or
auto level control..

more good info is available at:

http://members.aol.com/jkktl/ham.htm

1268. Re: WFAX

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970413113900.HAA07976@ladder01.news.aol.com>
Source record: 19127

Hi

Lots of info is available at:

http://members.aol.com/jkktl/ham.htm

plenty of info and links..if you can't find it here, its probably not worth it!

1269. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3350E4D3.753A@one.net>
Source record: 19128
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

Garry wrote:
>
> In article <MVq$XFAbdSTzIw1M@venusww.demon.co.uk>
> Roland Brade <roland@venusww.demon.co.uk> wrote:
>
> > I am just putting the final touches to a simple polar weather sat
> > decoder but I need a couple of audio tape recordings of good passes so
> > that I can tweek the circuit.
> > Does anyone have any recordings that they have made and can let me have.
> > I will pay all the costs involved.
>
> Rumour has it that audio tape recordings wobble the speed (tones)
> excessively and prevent decoding. Anyone confirm otherwise ?
>
> --
> Garry

It seems to work for some but not for others. Depends on the equipment.
I'd guess that you're more likely to see problems when recording on one
machine and playing back on another.

A completely reliable method is to record on videotape. By using prerecorded
tape or by feeding the VCR a video signal while you're recording the
satellite audio, you get sync signals on the tape and get a high-quality
playback. I've used this method myself.

Rich W2RG

1270. Re: MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E8KMLC.I6E@pe1chl>
Source record: 19129
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

In <33504031.8724759@news.bctel.ca> masa@writeme.com (Masa) writes:

> Hello. I was testing moon bounse and see if I could get
>someone out there, but it failed. I have 2M 45W output with a small
>antenna. do you think it is good enough ? I was sending out on
>144.000~144.200, but I never got the responses.

I think you will need to read a bit about the topic, calculate the link
margin, and find the times and frequencies for best results.

Your station might be good enough for an experienced operator to work
a "big gun" under just the right circumstances, but you won't have a
chance by trying randomly and without experience.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1271. SPACE ARTS FORUM is happening now !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <3350FC38.543C@excite.com>
Source record: 19130
Cross-posted to: sci.space.shuttle,sci.astro.amateur,sci.astro,sci.space.policy,sci.edu,sci.space.edu,rec.radio.amateur.space

Today (Right Now)

3 PM to 12 AM GMT
or
6 AM to 3 PM PST

Space Arts Forum

Get online and talk with Artists and Scientists about the social and
cultural aspects of space. Go to either of the following arenas:

http://www.segola.com/Leonardo/space/chat/chat.cgi
Space Arts Workshop Chat

http://www.spaceart.net/wwwboard/wwwboard.htm
Space Arts Forum

Discover the magic of space!

Mark W. Curtiss

--
Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
Mir Space Station -- http://www.maximov.com/Mir/

1272. Wanted FT-726

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: RMM <bmyers@primenet.com>
Message-ID: <3351010D.3F40@primenet.com>
Source record: 19131

Interested in a very clean Yaesu FT-726. Extra modules a plus.

Thanks.

Please respond to bmyers@primenet.com

1273. Re: Let's Make Some Demands!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <E8L8Dn.Bxp@cix.compulink.co.uk>
Source record: 19132

I know the interet is a great medium for shooting off your mouth but
try thinking guys.

Jerry
Steve

G7VFY

1274. Re: MOON "BOUNSE" (sic)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <3351279A.904@icss.net>
Source record: 19133

yodoc@aol.com wrote:
>
> In article <33504031.8724759@news.bctel.ca>, masa@writeme.com (Masa) writes:
>
> >
> > Hello. I was testing moon bounse and see if I could get
> >someone out there, but it failed. I have 2M 45W output with a small
> >antenna. do you think it is good enough ? I was sending out on
> >144.000~144.200, but I never got the responses.
>
> Masa:
>
> I strongly recommend that you obtain, and read, some books on the
> subject of Moon Bounce. Starting with the correct way to spell the
> word "bounce."
>
> Moon bounce is usually done with maximum power output signals being
> fed to very high-gain antenna arrays -- preferably to a very large parabolic
> dish. The mode used is always very slow CW.
>
> Your 45w. never made it to the Moon, IMHO.
>
> 73 de Larry, K3LT
>
> Lawrence J. Roll, WR2F | wr2f@n3omq.#cde.de.usa.noam
> wr2f@ka3bdr.#cde.de.usa.noam | yodoc@aol.com
> wr2f@juno.com | (302) 678-4841
The spelling doen't bother me. Your station description (45 watts and
small antenna) is probably FM mode only. If so, you may be interfering
with legitimate operations in the 144.000 ~ 144.200 frequency range. I
agree, with WR2F - read up on the subject. Good Luck, Brian/N0iMD

1275. Do you need $$?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Erik <lurch@shadow.net>
Message-ID: <3351326D.6CB@shadow.net>
Source record: 19134

Hi, Would you be interested in making thousands of dollars quickly and legally?

If your answer is YES, then take 5 minutes to read this article. It will change your life.

You can make up to or more than $50,000 dollars in 4-6 weeks, maybe sooner!

I'M NOT JOKING AND THIS IS ABSOLUTELY NOT A SCAM

The internet has grown tremendously and it continues to double in size every 4 months. Think about it: You see all those "make.money.fast" posts more and more often. That's just simply because it works!!

I was browsing around my newsgroups one morning and I stumbled across this article. Since I have this burning desire to make a lot of money and this headline caught my attention, I read it.

It said that you send $1.00 to each of the five(5) names on the list. You then place your own name and address stated in the article at the bottom of the list at the #5 position and post the article in at least 200 newsgroups {there are literally thousands of them, and this doesn't take as much work as you think}.

At first I thought, nobody's going to do this. And then I thought, what if they DO! Besides, what's five bucks anyway? I spend that on snacks a few times a week. Well, it's still hard to believe...but two weeks later I began receiving bucks in the mail! I mean a lot of money!!! It not only works for me, but it works extremely well for others as well. Mike Ochoa says he made #35,382 dollars in one month! Chanter made $42,000 in four weeks!!! Dave Manning made an incredible $53,664 dollars in four short weeks!!! And

Lars myers says he only made $21,000 dollars (ONLY!!?}

That's the article. Now do I know all these people? No. But when I read how they did it, it started to make a lot of sense to me. As a matter of fact, it made enough sense that I'm now taking a similar chance with $5 measley dollars of my own. Not a huge investment that I can't afford to lose, but one with incredible potential to deliver money to my mailbox!!! Can you imagine making $20,000 dollars or more for less than an hour,s work? What are you making now? All you ever have to spend is five bucks and postage for the envelopes. That's all Mike, Dave, Chanter and Lars did and look what happened to them: they made tens of thousands of dollars in a safe, legal and completely legitimate way.

Let me show you how and why this works now. Also, make sure you print a copy of this article so you get the information from it and START MAKING MONEY NOW!!! here goes:

Get 5 separate pieces of paper and write the following on each sheet of the paper...."PLEASE PUT ME ON YOUR MAILING LIST". Fold a US $1 bill inside each paper {wrap the bill with the paper so the bill will not be seen through the envelope. Otherwise nosy people, who like to steal envelopes with money in them will see the bill and swipe your profits! Put one paper inside an enveolope and seal it. Do the same for all five. You should now have 5 sealed

envelopes, each with a piece of paper and a US $1 bill stuffed inside of the paper. You're not just sending a dollar to someone;

you're actually paying for a legitimate service which is PERFECTLY LEGAL! Now, mail all 5 envelopes to the following 5 addresses:

1. J.H.
2430 Meadow Lane
Lakeland, FL
33801

2. E2AA
2862 Donnylane Blvd.
Columbus, OH

43234

3. B.K.
12 Chasemont Ct.
Baltimore, MD
21209

4. P.G.
PO Box 340286
Columbus, OH
43235

5. E.S.
11966 sw 91 Terr.
Miami, FL
33186

Step 2

Now remove the top name from the list that you see above and move the other names up (#5 becoming #4, #4 becoming #3, and so on) and put your name and address as the fifth on the list.

Step 3

Post/send the amended article (with your name at #5 in the list) to at least 200 newsgroups. This is the REALLY IMPORTANT part, so don't try to shortcut it. I'll explain more about this under the WHY it works part. (you can also send by irc or e-mail). Post/send as many newsgroups as possible. REMEMBER THIS!!!!! THE MORE GROUPS YOU SEND/POST to, the more people will see your article and send you cash. That's the real power of this business.

You are now in business for yourself, and you should start seeing returns within 7 to 14 days!!!

HOW TO POST THIS ARTICLE:

If you have Netscape 3.0 do EXACTLY the following:

1. Click on any newsgroups like normal, then click on 'TO NEWS' which is on the far left when you're in the newsgroups page.

This will bring up a box to type a message in.

2. Leave the newsgroup box like it is, just CHANGE the subject to

something flashy, such as "NEED CASH $$$ READ HERE $$$" OR "FAST CASH"!!

3. Tab once and you should be ready to post. Cut and paste this article exactly as it appears,except to insert your name at #5, and to remove #1 off the list, plus any other small changes that you might think you need to make. Keep most of it the same though. You don't want to change it too much--it's proven to work just as it is written!

4. When you're done typing the WHOLE article,click on FILE IN THIS BOX, RIGHT ABOVE SEND, NOW WHERE IT SAYS NETSCAPE NEWS ON THE FIRST BOX. Click and SAVE AS when you're under FILE. Save your article as a text file to your C: or A; drive. DO NOT SEND YOUR ARTICLE UNTIL YOU DO THIS. Once saved move on to number 5 below.

5. If you still have all of your text, send or post to this newsgroup now by clicking send, which is right below FILE, and right above Cc:

6. Here's where you're going to post all 200. OK, click on any news group then click on "TO NEWS", again in the top left corner. Leave the NEWSGROUPS BOX alone again, put a flashy subject title in the SUBJECT BOX, hit TAB once you're in the body of the message, and then click on ATTACHEMENTS. You will get another box to come up. Click on ATTACHED FILE, and then find your file that you have saved earlier; click once on the file, and then click OPEN. NOW CLICK ON OK; if you did this right, you should be able to see your name in the attachements box and it will be shaded green.

7. That's it. Each time you do this, all you have to do is type in a different newsgroup, so that way, it posts to 200 DIFFERENT newsgroups, you see? Now you only have 199 more to go!!! (don't worry, each one takes about 30 seconds once you get used to it}

REMEMBER 200 IS THE MINIMUM.

You are now in the mail order business and will start receiving your #1 envelopes from various people all over the world within days.HINT: THE MORE NEWSGROUPS YOU POST TO, THE MORE MONEY YOU WILL MAKE! Incredibly simple, isn't it?

LET ME TELL YOU WHY THIS SYSTEM WORKS!!!!!

Out of every 200 postings, let's say I only receive 5 replies, which is VERY LOW. So I made $5 with my name at #5. I've already made my money back!

Now then, each person who just sent me $1 makes 200 postings, now with your name at #4,

WHICH IS A TOTAL OF 1000 postings, not including your own. Say 50 people send you $1 now, which again, is a very low response rate; that's $50 you made!

Now then, your 50 new agents post 200 listings each with YOUR NAME AT NUMBER #3,

or 10,000 postings (25 x 200). That's just how the system works at its worst case. However, the average return is 500 responses at $1 each. That's $500 in your pocket!! Each of your new agents makes 200 postings, which is 5,000 returns at $1 each, which is

$5,000 dollars!! And finally, 5,000 people make 200 postings with YOUR NAME AT NUMBER 1, YOU NOW GET A RETURN OF $50,000 BEFORE YOUR NAME DROPS OFF THE LIST, AND THAT.S IF EVERYONE MAKES 200 POSTINGS ONLY, AND WITH ONLY A 5 PERSON RESPOND!!!!!

When your name is no longer in the list, you just take the latest posting that is appearing in the newsgroups, and SEND OUT ANOTHER $1 TO 5 people in the list, putting your name at #5 again. And start posting again. The thing to realize is that thousands of people

all over the world are joining the internet and reading these articles everyday, just like you are right now!!! So, can you afford $5 dollars and see if it really works? Estimates are at 20,000 to 50,000 new users everyday.

REMEMBER: WORK THIS FAIRLY AND HONESTLY AND IT WILL WORK! THE BASIC IDEA IS FOR EVERYONE TO MAKE MONEY. GOOD

LUCK TO ALL WHO

PARTICIPATE, AND PLEASE, PLAY FAIRLY AND YOU WILL BE REWARDED!

DON'T put this off!! It's SOOOO EASY and SIMPLE, so do it RIGHT NOW

You won't be sorry!

*You may also want to get some bulk e-mail software to help the process along even faster.

P.S. If you try to deceive people by posting the messages with your name in the list and not sending the $5 to the people already included, you will not get much. I know someone who did this and only got about $150 (and that's after two months.) Then he sent the 5 bills and was added to their lists. In 4 - 5 weeks, he had in excess of $10,000.

1276. Re: Let's Make Some Demands!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5irco0$obt@library.airnews.net>
Source record: 19135

In article <E8L8Dn.Bxp@cix.compulink.co.uk>, oddjob@cix.compulink.co.uk
says...
>
>
>I know the interet is a great medium for shooting off your mouth but
>try thinking guys.
>
> Jerry
>Steve
>
>G7VFY
_____-
Steve and Jerry, some of these people with alternative ideas
about how to deal with the launch problems may be major
financial contributers to the program. We need to be careful
how we tell them what to say or think.

Ken K5MBV

1277. Items for sale to finance G&VFY station upgrade.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <E8LC08.9tM@cix.compulink.co.uk>
Source record: 19136

1.Icom U16T, 70cm handheld, (professionally converted by Icom.) 99 channel, pre-programmed, 5 watt, ctcss encode with THREE battery+Speaker/Mike+Wall charger. Two of the batteries are made by Periphex, Icom compatible BP8S 9.6v @1400mA and only had light use (RRP 55ukp EACH) and the Icom desktop fast charger, together, 215 ukp. (ovno)

2. Leak Throughline 3 88-108Mhz Valve mono tuner, Lovely sound 45ukp ovno. Goes with Leak Stereo 30 solid state amp, 35ukp. Or 70ukp the pair.

3. National instruments ieee-488/gpib card (only) for sale. 80ukp

4. Yaesu FT736R Multi mode, 2mtrs & 70cms & 6m Module, triplexer & CTCSS MODULE. Boxed with all manuals (and tech ref manual) Etc. perfect condition, hardly used ?1,050.

Buyer collects from London, NW6.

Enquiries to Steve G7VFY Tel 0956-544202.

Will consider swap or part-ex for HF RX or TX HF150,225, FT101z, FT790R2, TS520 OR icom equivalent (Or anything interesting).

Steve Walters: G7VFY: 0956-544202

1278. Re: help with antenna theroy...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <660023939wnr@brimar.demon.co.uk>
Source record: 19137

In article: <19970412075901.DAA02684@ladder01.news.aol.com>
iceextreme@aol.com (IceExtreme) writes:
>
> I am new amateur radio, and i was looking to see if i could build an
> antenna, but
> i seem to have no information, i was wondering if someone out here could
> explain,
> how everything works, or for that matter send me some electronic
> expliantions or how to's... thanks for your time.
> ````````````
> Ice
>
> Everything sent will be apperecited!
> ````````````
>

Hey Ice, you picked a very broad subject here!
You will need to be much more specific with your requests, or
folk will be posting you whole books on the subject.

What type of antenna do you want to build? What bands is it to
be used on etc etc.

Oh, and I'd send your spell-checker back to the makers!

Cheers.......Brian

--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

1279. MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: masa@writeme.com
Message-ID: <33504031.8724759@news.bctel.ca>
Source record: 19219
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

Hello. I was testing moon bounse and see if I could get
someone out there, but it failed. I have 2M 45W output with a small
antenna. do you think it is good enough ? I was sending out on
144.000~144.200, but I never got the responses.

Masataka Noda
Masa@WriteMe.com
http://www.geocities.com/Yosemite/1325/

1280. Yaesu FT-2200 Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: KaLiMaN <kaliman@multipro.com>
Message-ID: <01bc47c5$e17b12c0$7ab178cf@multipro.com.kaliman>
Source record: 19220
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.swap

Yaesu FT-2200 2M Mobile For Sale
50 Memory Channels
DTMF Mic
Extended Receive, Aircraft Through 180.000 MHz
3 Power Settings, 50 Watts Max
Manual, Mounting Bracket, Like New In The Box
$200.00 OBO
Send Inquiries To
kaliman@multipro.com

1281. Re: MOON "BOUNSE" (sic)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-13 00:00:00 UTC
From: yodoc@aol.com
Message-ID: <19970413060600.CAA26604@ladder01.news.aol.com>
Source record: 19221

In article <33504031.8724759@news.bctel.ca>, masa@writeme.com (Masa) writes:

>
> Hello. I was testing moon bounse and see if I could get
>someone out there, but it failed. I have 2M 45W output with a small
>antenna. do you think it is good enough ? I was sending out on
>144.000~144.200, but I never got the responses.

Masa:

I strongly recommend that you obtain, and read, some books on the
subject of Moon Bounce. Starting with the correct way to spell the
word "bounce."

Moon bounce is usually done with maximum power output signals being
fed to very high-gain antenna arrays -- preferably to a very large parabolic
dish. The mode used is always very slow CW.

Your 45w. never made it to the Moon, IMHO.

73 de Larry, K3LT

Lawrence J. Roll, WR2F | wr2f@n3omq.#cde.de.usa.noam
wr2f@ka3bdr.#cde.de.usa.noam | yodoc@aol.com
wr2f@juno.com | (302) 678-4841

1282. Repeater for satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: Dana Irvin <irvind@seds.lpl.arizona.edu>
Message-ID: <5isabfcmm1@news.ccit.arizona.edu>
Source record: 19138
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.equipment

Anyone know a company that sells mil grade 2m repeater? I'm part of a amateur satellite project that's trying to get started and I want to put a mode A voice repeater on it. I have the downconverter, just need the repeater. Something that can stand extreme temps and its power can be computer controlled with a minimum of .75 watts would be great. E-mail me directly if you have any input.

--

| Irvin
| UASEDS/UAARC
| Phone: 520.695.0676
| CallSign: KC7VDD
| E-mail: irvind@seds.org
| URL: www.seds.org/~irvind
|
| "There is no off position
| on the genius switch."
| - David Letterman

1283. Amateur CW/Voice Satellite Frequencies FAQ 04.14.97

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1404970026010001@cqtlm-ppp070.dowco.com>
Source record: 19139
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ04.14
Amateur CW/Voice Satellite Frequencies for April 14, 1997.

BID: $FREQ0414
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater (Mir)
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal, please do not
use the satellite if the beacon seems to be humming. This occurs when the
```

satellite is in long periods of eclipse and the batteries are run down.

* Radio Sport-15 has battery chargeing problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective method for using this satellite.

* Radio Sport-16 currently has it's Mode A transponder turned off. Some activity over Europe was reported but uplinking via Mode A was not possible. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or early June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Digital mode until April 25. Here is the latest schedule:

Apr.11(Fri) 10:16z JD 1200bps
18(Fri) 00:46z JD 9600bps
25(Fri) 01:24z JA
May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex and SAFEX have been reported to have been curtailed until certain repairs to the Mir complex can be completed. Some Packet over North America has been noted as of 08:00 Z Monday April 14. I would appreciate any activity reports for future updates.

* Unfortunately the STS-83 mission was ended early due to a problem with a Hydrogen Fuel Cell but if you were lucky enough to QSO them;

QSLs: Send reports and QSLs to ARRL EAD, STS-83 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Linear Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 2M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1284. Feedback WSR513

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: jpharrington@comms.kst.dit.ie
Message-ID: <861015587.17990@dejanews.com>
Source record: 19140

I am a member of a project group involved in setting up an A.P.T.
ground station as part of my final year project in the Dublin
institute ot Technology. I am using a Feedback weather systems WSR 513
and would like to talk to others who are currently using this system.

Please e-mail me at: jpharrington@comms.dit.kst.ie

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

1285. Re: Repeater for satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E8MG92.3Jv@pe1chl>
Source record: 19141
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.equipment

In <5isabfcmm1@news.ccit.arizona.edu> Dana Irvin <irvind@seds.lpl.arizona.edu> writes:

>Anyone know a company that sells mil grade 2m repeater? I'm part of a
>amateur satellite project that's trying to get started and I want to put a
>mode A voice repeater on it. I have the downconverter, just need the
>repeater. Something that can stand extreme temps and its power can be
>computer controlled with a minimum of .75 watts would be great. E-mail me
>directly if you have any input.

Do you *really* want to make a transponder by connecting a downconverter
to an in-band repeater??
I would advise you to read a bit on theory of transmitters and receivers,
and preferably transponders.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1286. Re: MOON "BOUNSE" (sic)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5itdj9$9km@freenet-news.carleton.ca>
Source record: 19142

(yodoc@aol.com) writes:
> In article <33504031.8724759@news.bctel.ca>, masa@writeme.com (Masa) writes:
>
>>
>> Hello. I was testing moon bounse and see if I could get
>>someone out there, but it failed. I have 2M 45W output with a small
>>antenna. do you think it is good enough ? I was sending out on
>>144.000~144.200, but I never got the responses.
>
> Masa:
>
> I strongly recommend that you obtain, and read, some books on the
> subject of Moon Bounce. Starting with the correct way to spell the
> word "bounce."

This gentleman's first tongue MAY not be English. Perhaps you may wish
to cut him a bit of slack in this regard.

>
> Moon bounce is usually done with maximum power output signals being
> fed to very high-gain antenna arrays -- preferably to a very large parabolic
> dish. The mode used is always very slow CW.

Actually, in 1992 CO2KK worked KB8RQ with with 22 watts and 2 five elements
yagis. As well, on 2 metres, it's my understanding that many stations use
18-22 wpm CW to take advantage of libration effects. Yagis are the norm on 2 metres

However, I DO agree that reading up on the subject would be appropriate, and
not just for Masa.

73 de va3rr/aa8lu

1287. Images of Earth from Space

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: dougmunn@aol.com
Message-ID: <19970414202800.QAA03842@ladder01.news.aol.com>
Source record: 19143

I wasn't sure if you had seen the Satellite Image Gallery CD-ROM yet. Quite a few ham operators (especially "weather" people) have already ordered it (or our previous CD the "Satellite Image Sampler"). The CD has over 600 beautiful satellite images of the Earth along with games, tutorials and image processing software.

We've had the CD out for a little over a month and have just secured national distribution with a major catalog company. To celebrate, we are selling it for over the Internet for only $10.00 + shipping - until May 1st.

I won't waste your time here. You can visit http://www.idi-ut.com/sig.htm for more information and online ordering.

Thanks,

Doug Munn
Intermountain Digital Imaging
PH (801) 355-4030 - FAX (801) 355-4063
email: dougmunn@aol.com

1288. NORAD Two-Line Orbital Element Sets (TLE977)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5iuaq5$4jr@blackbird.afit.af.mil>
Source record: 19144

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #977 -
Alouette 1
1 00424U 62049A 97103.77085998 .00000072 00000-0 74939-4 0 2813
2 00424 80.4660 347.1582 0023810 342.9655 17.0687 13.67892095723432
ATS 1
1 02608U 66110A 97096.97617772 -.00000123 00000-0 10000-3 0 113
2 02608 14.5377 349.6801 0006945 98.7944 261.2636 1.00287509 27817
ATS 3
1 03029U 67111A 97100.41739194 -.00000132 00000-0 10000-3 0 6410
2 03029 14.9036 356.5831 0008472 284.3166 322.7732 1.00273118107749
Starlette
1 07646U 75010A 97098.53700854 -.00000116 00000-0 22465-4 0 466
2 07646 49.8214 63.2082 0205727 125.8784 236.1458 13.82192146119818
LAGEOS
1 08820U 76039A 97103.25940437 .00000016 00000-0 00000+0 0 2783
2 08820 109.8287 128.8288 0043515 63.1538 297.3552 6.38664183232999
ETS-2
1 09852U 77014A 97102.24488100 -.00000291 00000-0 10000-3 0 1077
2 09852 13.5971 29.5554 0004540 145.8383 214.1324 1.00000592 20632
GOES 2
1 10061U 77048A 97099.61389965 .00000035 00000-0 10000-3 0 8200
2 10061 12.7502 33.7478 0011207 119.0711 89.9159 1.00265991 17417
IUE
1 10637U 78012A 97097.58844404 -.00000130 00000-0 10000-3 0 3773
2 10637 35.9377 78.8604 1353670 65.4455 63.9663 1.00083584 22882
GOES 3
1 10953U 78062A 97100.28059135 -.00000108 00000-0 10000-3 0 7971
2 10953 11.7625 36.7181 0001530 230.4609 285.0655 1.00264244 22032

```
SeaSat 1
1 10967U 78064A 97102.53343656 -.00000021 00000-0 37418-4 0 5663
2 10967 107.9940 74.1565 0002925 260.7130 99.3678 14.38162726984485
Nimbus 7
1 11080U 78098A 97104.15880744 -.00000063 00000-0 -19520-4 0 6629
2 11080 98.9085 317.1401 0008208 236.8371 123.1998 13.83683003932794
GOES 5
1 12472U 81049A 97103.91340848 -.00000007 00000-0 10000-3 0 9931
2 12472 8.6712 47.2031 0004371 72.6616 287.3403 1.00330178 16111
Cosmos 1383
1 13301U 82066A 97099.89319058 .00000058 00000-0 49994-4 0 5782
2 13301 82.9282 276.2395 0027943 139.3081 221.0167 13.68082604737942
LandSat 4
1 13367U 82072A 97100.14703650 .00000046 00000-0 19837-4 0 591
2 13367 98.0352 147.3476 0006280 305.6201 54.4412 14.57200818783783
DMSP B5D2-1
1 13736U 82118A 97102.52473754 .00000186 00000-0 96457-4 0 2146
2 13736 98.6216 292.0782 0007499 232.0093 128.0410 14.25827649743729
IRAS
1 13777U 83004A 97104.04132666 -.00000226 00000-0 -12577-3 0 6342
2 13777 98.9709 289.2103 0013398 347.6376 12.4452 13.99273521395449
Cosmos 1447
1 13916U 83021A 97103.16683573 .00000084 00000-0 72078-4 0 6710
2 13916 82.9461 329.1671 0039317 37.4338 322.9544 13.74355107704941
TDRS 1
1 13969U 83026B 97101.11111576 -.00000311 00000-0 10000-3 0 7334
2 13969 9.4207 40.7735 0001973 327.9725 181.7140 1.00279009 24379
GOES 6
1 14050U 83041A 97100.22353135 .00000013 00000-0 10000-3 0 6453
2 14050 7.5182 50.8903 0001981 51.6066 50.9595 1.00231798109175
AO-10
1 14129U 83058B 97098.22948610 -.00000078 00000-0 10000-3 0 4711
2 14129 25.8122 154.0385 6072130 106.8498 324.7491 2.05881733 75942
LandSat 5
1 14780U 84021A 97103.72788658 .00000052 00000-0 21720-4 0 6042
2 14780 98.2938 166.8633 0003682 73.4256 286.7346 14.57075045697725
UO-11
1 14781U 84021B 97102.94020787 .00000128 00000-0 29392-4 0 9644
2 14781 97.8290 86.8052 0010840 208.1775 151.8856 14.69540643701677
Cosmos 1574
1 15055U 84062A 97104.22764322 .00000046 00000-0 33577-4 0 8713
2 15055 82.9577 23.9204 0025977 221.9675 137.9497 13.73646831642316
Cosmos 1602
1 15331U 84105A 97100.78265093 .00000294 00000-0 31599-4 0 5529
2 15331 82.5345 194.1918 0021906 46.0123 314.2895 14.84865796677133
ERBS
1 15354U 84108B 97103.83396508 -.00000121 00000-0 10698-4 0 2694
2 15354 56.9956 256.6829 0008518 75.1587 285.0388 14.95031145681803
NOAA 9
1 15427U 84123A 97103.76853695 .00000063 00000-0 56859-4 0 1040
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2 15427 98.9089 174.2655 0014631 178.8171 181.3036 14.13849788636103
Mir
1 16609U 86017A 97104.09151618 .00004303 00000-0 56354-4 0 1940
2 16609 51.6524 47.8114 0010349 296.6605 63.3357 15.60973149637023
SPOT 1
1 16613U 86019A 97102.54223265 -.00000044 00000-0 00000+0 0 550
2 16613 98.7923 175.4508 0002527 100.9032 259.2441 14.19999287262790
Cosmos 1766
1 16881U 86055A 97101.86938596 .00000366 00000-0 41114-4 0 4681
2 16881 82.5163 250.7783 0021027 70.7814 289.5685 14.83838261578133
EGP
1 16908U 86061A 97102.17963426 -.00000083 00000-0 10000-3 0 1686
2 16908 50.0088 157.7748 0011457 53.1660 307.0225 12.44416086153638
NOAA 10
1 16969U 86073A 97103.79028744 .00000028 00000-0 30253-4 0 354
2 16969 98.5423 98.5075 0012329 192.4974 167.5901 14.25025634549415
MOS-1
1 17527U 87018A 97104.22816519 -.00000043 00000-0 00000+0 0 5310
2 17527 98.8883 164.9749 0018622 215.2507 144.7429 14.00426202517127
GOES 7
1 17561U 87022A 97100.41676896 -.00000175 00000-0 10000-3 0 3401
2 17561 3.6490 67.3841 0004565 333.8667 212.1904 1.00262607 20284
Kvant-1
1 17845U 87030A 97102.81110270 .00004143 00000-0 54511-4 0 9556
2 17845 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413570936
DMSP B5D2-3
1 18123U 87053A 97103.73114313 .00000027 00000-0 35977-4 0 8725
2 18123 98.7666 295.0268 0014899 113.9410 246.3326 14.15472289507013
RS-10/11
1 18129U 87054A 97101.89872507 .00000058 00000-0 47337-4 0 3398
2 18129 82.9232 287.7339 0013183 48.6164 311.6122 13.72377173491149
Meteor 2-16
1 18312U 87068A 97101.08496120 .00000056 00000-0 37209-4 0 5567
2 18312 82.5545 115.8078 0013818 100.1500 260.1220 13.84094337487389
Meteor 2-17
1 18820U 88005A 97103.69499863 .00000072 00000-0 50754-4 0 2294
2 18820 82.5436 168.0503 0017080 157.3714 202.8203 13.84772871465118
DMSP B5D2-4
1 18822U 88006A 97104.01597450 .00000021 00000-0 27480-4 0 5056
2 18822 98.3821 287.7111 0005280 199.5086 160.5886 14.23222970477367
Glonass 34
1 19163U 88043A 97103.85310153 .00000018 00000-0 10000-3 0 1714
2 19163 65.3845 75.7133 0009676 150.1832 209.8693 2.13102279 68645
Glonass 36
1 19165U 88043C 97102.97189684 .00000014 00000-0 10000-3 0 5788
2 19165 65.3681 75.6899 0007264 322.0529 37.8797 2.13101895 69241
METEOSAT 3
1 19215U 88051A 97096.49703683 -.00000075 00000-0 00000+0 0 3122
2 19215 3.8563 66.2657 0003977 160.7323 199.4795 0.96947128 20029
OKEAN 1
```

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1 19274U 88056A 97102.72360002 .00000258 00000-0 29109-4 0 1676
2 19274 82.5150 351.2029 0018280 215.3831 144.6169 14.82603546473756
Meteor 3-2
1 19336U 88064A 97102.64256515 .00000051 00000-0 10000-3 0 5649
2 19336 82.5390 314.5250 0015980 204.6619 155.3739 13.16981273418896
Glonass 39
1 19503U 88085C 97090.80207566 .00000006 00000-0 10000-3 0 4586
2 19503 65.4809 314.9951 0012724 166.6398 193.4342 2.13101643 66479
NOAA 11
1 19531U 88089A 97103.80008820 -.00000015 00000-0 17148-4 0 9226
2 19531 99.1629 135.3636 0012413 113.6772 246.5698 14.13127575440905
TDRS 3
1 19548U 88091B 97100.00000000 -.00000213 00000-0 10000-3 0 2804
2 19548 3.0642 70.4849 0000824 244.5998 328.4335 1.00275212 18503
Glonass 40
1 19749U 89001A 97103.97858320 .00000018 00000-0 10000-3 0 6732
2 19749 65.3396 75.2095 0007773 256.8413 103.0579 2.13101539 64263
Glonass 41
1 19750U 89001B 97100.27919270 .00000090 00000-0 10000-3 0 5825
2 19750 65.3347 75.4010 0009010 247.9733 111.9676 2.13103683 64215
GPS BII-01
1 19802U 89013A 97101.29538307 -.00000001 00000-0 00000+0 0 3957
2 19802 55.4685 98.7675 0065103 206.2939 153.3994 2.00568981 59695
Akebono
1 19822U 89016A 97100.69153724 .00004433 00000-0 24451-3 0 8992
2 19822 75.1153 310.3901 3717731 240.6147 77.4010 7.96947909190320
Meteor 2-18
1 19851U 89018A 97098.15427488 .00000015 00000-0 -78233-7 0 5535
2 19851 82.5180 45.8813 0012617 228.5691 131.4386 13.84428011409640
MOP-1
1 19876U 89020B 97096.96158636 -.00000072 00000-0 00000+0 0 2548
2 19876 2.5872 70.7356 0019060 284.7272 75.3672 0.97108760 9471
TDRS 4
1 19883U 89021B 97103.03076389 -.00000287 00000-0 10000-3 0 3238
2 19883 0.4925 86.8546 0003658 285.5255 158.9609 1.00269677202114
GPS BII-02
1 20061U 89044A 97100.14031681 -.00000032 00000-0 10000-3 0 3821
2 20061 54.0117 274.1341 0166344 222.3319 136.3378 2.00562771 57415
Nadezhda 1
1 20103U 89050A 97100.34975377 .00000051 00000-0 38219-4 0 1153
2 20103 82.9558 249.5010 0037055 308.1804 51.6017 13.73876683389484
GPS BII-03
1 20185U 89064A 97101.33683030 -.00000001 00000-0 00000+0 0 4128
2 20185 55.2662 99.1617 0019861 338.8468 21.0761 2.00557600 56016
GMS 4
1 20217U 89070A 97097.62666209 -.00000389 00000-0 10000-3 0 5558
2 20217 2.3804 73.2289 0001508 72.7618 35.4323 1.00261929 28377
INTERCOSMOS 24
1 20261U 89080A 97100.90618934 .00000188 00000-0 47883-4 0 5798
2 20261 82.5876 80.5584 1242844 84.6298 289.4982 12.47397833343022
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2 20302 53.1665 213.7365 0034377 188.2607 171.6753 2.00572803 54835
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2 20305 82.5484 276.9040 0004786 297.5027 62.5608 13.04439161357361
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2 20322 98.9314 120.0824 0008174 281.4820 78.5427 14.03466195379132
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2 20335 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413419947
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2 20391 4.3995 61.5467 0001918 226.6718 133.3979 1.00268799 26978
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2 20436 98.7297 179.8014 0001379 114.5140 245.6182 14.20027757374563
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2 21217 64.7878 313.1207 0011263 215.7684 144.1581 2.13101885 46898
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TDRS 5
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Meteor 3-5
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Glonass 53
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Glonass 55
1 21855U 92005C 97102.97502646 .00000011 00000-0 00000+0 0 3989
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JERS-1
1 21867U 92007A 97104.25521624 .00043266 00000-0 35839-2 0 1476
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NOAA 13
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IO-26
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Glonass 65
1 23203U 94050A 97102.19069911 -.00000009 00000-0 00000+0 0 4245
2 23203 64.7610 194.0823 0006941 149.2042 210.8773 2.13102070 20775
Glonass 66
1 23204U 94050B 97103.36255538 -.00000022 00000-0 00000+0 0 4456
2 23204 64.7481 194.0671 0014819 348.0402 11.9605 2.13102182 20795
Glonass 67
1 23205U 94050C 97103.71398170 -.00000025 00000-0 00000+0 0 4291
2 23205 64.7586 194.0490 0001961 302.9870 57.0304 2.13102465 20806
DMSP B5D2-7
1 23233U 94057A 97103.79623724 .00000069 00000-0 60450-4 0 1837
2 23233 98.7872 163.5368 0013428 50.1121 310.1225 14.12793181135275
OKEAN 1-7
1 23317U 94066A 97102.59673474 .00000206 00000-0 27717-4 0 2343
2 23317 82.5443 143.5850 0025502 184.1030 175.9978 14.74092118134642
ELEKTRO (GOMS)
1 23327U 94069A 97101.60751032 -.00000123 00000-0 00000+0 0 2738
2 23327 0.6394 94.5603 0002341 6.0321 34.1620 1.00270286 8998
RESURS 1-3
1 23342U 94074A 97102.05984738 .00000299 00000-0 57871-4 0 7182
2 23342 97.9219 157.3048 0001769 90.3177 269.8238 14.69913768130715
Glonass 68
1 23396U 94076A 97103.55840429 .00000014 00000-0 00000+0 0 4029
2 23396 65.2158 74.0818 0028426 195.4872 164.4076 2.13102577 18643
Glonass 69
1 23397U 94076B 97099.98106141 -.00000007 00000-0 00000+0 0 4019
2 23397 65.2048 74.2127 0014650 314.6889 45.1667 2.13101677 18566
Glonass 70
1 23398U 94076C 97100.33413060 -.00000006 00000-0 00000+0 0 4078
2 23398 65.1933 74.1698 0005236 291.9464 67.9752 2.13101917 18583
LUCH (Altair-2)
1 23426U 94082A 97101.81955801 -.00000029 00000-0 00000+0 0 5105
2 23426 0.8500 263.1066 0021942 98.9686 207.8418 0.99876786 8491
RS-15
1 23439U 94085A 97103.85908147 -.00000039 00000-0 10000-3 0 2113
2 23439 64.8147 256.8581 0151178 144.3717 216.7409 11.27526336 94680
NOAA 14
1 23455U 94089A 97103.81418809 .00000134 00000-0 98107-4 0 31
2 23455 98.9837 54.9768 0010358 109.3881 250.8414 14.11659987117869
Glonass 71
1 23511U 95009A 97102.16771240 -.00000035 00000-0 00000+0 0 3231
2 23511 64.5451 313.7222 0004843 214.1490 145.8505 2.13103859 16343
Glonass 72
1 23512U 95009B 97100.41260767 -.00000037 00000-0 00000+0 0 3226
2 23512 64.5347 313.7857 0006551 335.5951 24.4085 2.13101024 16303
Glonass 73
1 23513U 95009C 97100.70281717 -.00000038 00000-0 00000+0 0 3510
2 23513 64.5416 313.7925 0011932 199.7639 160.2237 2.13102903 16315
GMS 5
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1 23522U 95011B 97099.63114443 -.00000307 00000-0 10000-3 0 2325
2 23522 0.4571 14.3826 0001462 181.9553 8.9457 1.00270645 7423
DMSP B5D2-8
1 23533U 95015A 97103.72493523 -.00000015 00000-0 15857-4 0 9347
2 23533 98.8484 108.4146 0006261 288.5823 71.4665 14.12783341106060
OSC 1
1 23545U 95017A 97104.26507964 .00000264 00000-0 91937-4 0 2146
2 23545 69.9715 191.4038 0011806 132.2097 228.0035 14.45510002107161
OSC 2
1 23546U 95017B 97103.25985846 .00000299 00000-0 10175-3 0 2483
2 23546 69.9753 193.9898 0011157 125.0194 235.1988 14.45528176107024
Microlab 1
1 23547U 95017C 97104.22210892 .00000179 00000-0 67534-4 0 1864
2 23547 69.9772 191.3908 0011437 125.5809 234.6395 14.45679081107173
OFEQ 3
1 23549U 95018A 97104.23859000 .00033487 00000-0 75947-3 0 5147
2 23549 143.3631 273.2049 0195352 167.3224 193.2484 15.23683976112154
GFZ-1
1 23558U 86017JE 97103.24092957 .00005680 00000-0 63734-4 0 2262
2 23558 51.6492 37.4270 0004756 276.4893 83.5561 15.64357330636949
ERS-2
1 23560U 95021A 97103.19069745 .00000053 00000-0 35646-4 0 3545
2 23560 98.5431 178.9246 0000959 67.9352 292.1933 14.32250416103517
Spektr
1 23579U 95024A 97102.81110270 .00004143 00000-0 54511-4 0 6196
2 23579 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413108259
GOES 9
1 23581U 95025A 97101.43316177 .00000060 00000-0 10000-3 0 3590
2 23581 0.2132 91.2620 0002141 254.3675 235.3105 1.00284335 6910
Helios 1A
1 23605U 95033A 97104.11050493 .00000017 00000-0 12330-4 0 4907
2 23605 98.1495 41.9407 0001596 66.3173 293.8166 14.63831111 94586
UPM SAT 1
1 23606U 95033B 97100.36506837 .00000225 00000-0 48409-4 0 2656
2 23606 98.1303 40.2813 0007741 334.5546 25.5271 14.67376220 94294
CERISE
1 23607U 95033C 97099.88331968 .00000062 00000-0 19741-4 0 1679
2 23607 98.1325 39.5564 0006193 337.1529 22.9399 14.67012195 94237
TDRS 7
1 23613U 95035B 97091.34070635 .00000086 00000-0 00000+0 0 3189
2 23613 1.2773 81.5990 0003306 282.8174 137.2896 1.00282438 6272
Glonass 74
1 23620U 95037A 97102.83280868 -.00000017 00000-0 00000+0 0 2721
2 23620 64.8160 193.9446 0018265 169.2149 190.8616 2.13102784 13395
Glonass 75
1 23621U 95037B 97100.66469228 .00000007 00000-0 00000+0 0 2818
2 23621 64.8314 194.0258 0018246 180.3534 179.6829 2.13102008 13346
Glonass 76
1 23622U 95037C 97103.06885781 -.00000019 00000-0 00000+0 0 2861
2 23622 64.8171 193.9441 0036441 166.4919 193.6446 2.13102326 13398
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Prognoz-M2
1 23632U 95039A 97103.40536290 -.00001128 00000-0 00000+0 0 1243
2 23632 71.5690 247.3850 7476267 329.0700 50.9000 0.26375100 1644
SICH-1
1 23657U 95046A 97102.66816862 .00000180 00000-0 24160-4 0 1605
2 23657 82.5309 284.8900 0027524 153.9155 206.3450 14.73544216 86935
RADARSAT
1 23710U 95059A 97103.09457705 .00000142 00000-0 72025-4 0 2583
2 23710 98.5825 111.5142 0001371 73.4309 286.7019 14.29978983 75101
Glonass 79
1 23734U 95068A 97101.77933213 -.00000005 00000-0 00000+0 0 2684
2 23734 64.8208 193.9008 0018194 322.2610 37.6531 2.13102109 10339
Glonass 78
1 23735U 95068B 97100.55232714 .00000008 00000-0 00000+0 0 2545
2 23735 64.8161 193.9309 0007313 213.4622 146.5319 2.13124647 10309
Glonass 77
1 23736U 95068C 97103.42150160 -.00000023 00000-0 00000+0 0 2446
2 23736 64.8079 193.8451 0007703 200.0619 159.9466 2.13102051 10368
XTE
1 23757U 95074A 97101.57521118 .00000782 00000-0 36199-4 0 1392
2 23757 22.9829 180.4307 0013669 33.6177 326.5169 14.97808589 70258
Polar
1 23802U 96013A 97100.63068858 .00000076 00000-0 00000+0 0 1304
2 23802 86.3823 22.8042 6542573 271.5552 20.1735 1.36264707 5610
1996010E
1 23824U 96010E 97103.55665739 .00021903 00000-0 98204-2 0 2073
2 23824 47.4260 160.4616 6822958 113.4181 329.0392 2.85114984 9916
GPS BIIA-25
1 23833U 96019A 97100.05087827 -.00000082 00000-0 00000+0 0 1710
2 23833 54.6163 335.8923 0026942 145.9645 214.2468 2.00565423 7636
Priroda
1 23848U 96023A 97102.81110270 .00004143 00000-0 54511-4 0 3080
2 23848 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413 55349
MSX
1 23851U 96024A 97100.36245006 -.00000047 00000-0 00000+0 0 2223
2 23851 99.4126 92.3041 0008420 64.2476 295.9565 13.97395192 49007
SAX
1 23857U 96027A 97098.82826311 .00001348 00000-0 57283-4 0 674
2 23857 3.9568 114.7318 0014856 330.7479 29.1847 14.91780699 51360
MSTI 3
1 23868U 96031A 97103.60146722 .00003812 00000-0 77493-4 0 1310
2 23868 97.1126 294.8425 0009159 143.7232 216.4640 15.46875479 51246
TOMS-EP
1 23940U 96037A 97102.58738982 .00003485 00000-0 15414-3 0 1037
2 23940 97.4167 10.3563 0014186 18.9586 341.2190 15.22268545 43163
GPS BIIA-26
1 23953U 96041A 97100.96780197 -.00000005 00000-0 00000+0 0 1296
2 23953 55.1564 96.3350 0051923 324.4873 35.1014 2.00555768 5442
ADEOS
1 24277U 96046A 97104.19504934 -.00000044 00000-0 00000+0 0 1612
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2 24277 98.5999 182.7338 0000963 75.7131 284.4162 14.27649820 34239
FO-29
1 24278U 96046B 97100.68076356 -.00000030 00000-0 59153-5 0 708
2 24278 98.5493 151.0965 0351985 1.2589 358.9359 13.52628887 31990
FAST
1 24285U 96049A 97103.86490050 .00001910 00000-0 18545-3 0 810
2 24285 82.9816 68.9211 2207105 106.6229 278.7272 10.81961186 25460
1996049B
1 24286U 96049B 97103.87868880 .00002036 00000-0 19605-3 0 911
2 24286 82.9964 69.0598 2205896 106.1854 279.1735 10.82384037 25463
Microsat
1 24291U 96050A 97102.17113023 .00054751 66493-5 39752-3 0 1722
2 24291 62.7931 357.2135 0556068 140.0100 224.3360 14.77824442 33166
MO-30
1 24305U 96052B 97102.85716310 .00000204 00000-0 20364-3 0 913
2 24305 82.9265 42.8482 0032777 28.1949 332.0923 13.73092372 30096
GPS BIIA-27
1 24320U 96056A 97085.86671287 .00000006 00000-0 00000+0 0 739
2 24320 54.6186 276.9699 0049761 99.7791 260.8140 2.00573265 3802
SAC-B/HETE
1 24645U 96061A 97100.84475827 .00000986 00000-0 56993-4 0 580
2 24645 37.9748 264.7365 0046699 113.3715 247.1973 15.14951982 23844
Soyuz TM-25
1 24717U 97003A 97102.81110270 .00004143 00000-0 54511-4 0 453
2 24717 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413636823
ZEYA
1 24744U 97010A 97098.76380272 .00003691 00000-0 12544-3 0 276
2 24744 97.2810 5.1265 0007711 353.6766 6.4377 15.31063184 5465
DMSP B5D2-9
1 24753U 97012A 97103.80898633 .00000339 00000-0 20569-3 0 211
2 24753 98.9368 148.2227 0008337 228.1849 131.8613 14.12970161 1294
1997012B
1 24756U 97012B 97104.09175169 .00000829 00000-0 46791-3 0 138
2 24756 98.9401 148.5025 0004332 168.4589 191.6707 14.13052632 1206
Progress M-34
1 24757U 97014A 97102.81110270 .00004143 00000-0 54511-4 0 202
2 24757 51.6516 54.2582 0010121 291.3673 68.5895 15.60963413 978
Cosmos 2340
1 24761U 97015A 97103.87852274 -.00000734 00000-0 27871-3 0 102
2 24761 63.0417 281.2434 7405135 315.8011 14.4581 2.01539376 99
1997015B
1 24762U 97015B 97103.87213348 .00314332 38660-4 74935-3 0 118
2 24762 62.8476 265.1980 0172409 118.6208 243.2381 15.75521805 716
1997015C
1 24763U 97015C 97104.14322336 .00583901 75602-5 78522-3 0 112
2 24763 62.8574 264.2710 0232102 117.4998 244.9505 15.71357656 754
1997015D
1 24764U 97015D 97101.80000000 -.00000592 00000-0 00000+0 0 22
2 24764 62.9840 281.4780 7365120 315.7400 301.9350 2.03140946 42
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1289. * SpaceNews 14-Apr-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-04-14 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0414.1997@ampr.org>
Source record: 19145
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0414
* SpaceNews 14-Apr-97 *

BID: $SPC0414

=========
SpaceNews
=========

MONDAY APRIL 14, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
At 1730 UTC on 08-Apr-97, the Russian Space Center in Moscow reported that
the docking of the Progress module with the MIR Space Station was a success.
The Progress is bringing up vital spare parts to repair the carbon dioxide
scrubber on MIR. The scrubber shut itself off late last week when a coolant
leak caused it to overheat. Both NASA and Moscow are reporting there is no
danger to the crew.

In other news, the Associated Press reported last week that Russian controllers
had literally "pulled the plug" on ALL non-essential Mir activities until
further notice. There is little doubt that this also includes ham radio
since it is considered to be a non essential activity.

[Info via James Flynn and Bill Pasternak, WA6ITF]

* STS-83 MISSION SCRUB *
========================
Shuttle mission STS-83 was scrubbed early due to a problem with one of
the fuel cells carried on the space shuttle Columbia. Columbia landed
safely on Tuesday after cutting short its 16-day mission.

J. Dave Mayfield, KB9BNR, points out that the scrub was due not to any
partcularly danger condition on the space shuttle, but rather because of
space shuttle flight rules that require the proper functioning of three
fuel cells.

Quoting from NASA:

"The shuttle has three fuel cells, which use a reaction of liquid
hydrogen and liquid oxygen to generate electricity and produce drinking
water. Although one fuel cell produces enough electricity to conduct
on-orbit and landing operations, shuttle flight rules require that all

three be functioning well to ensure the safety of the crew and provide sufficient backup capability for the highly dynamic reentry and landing periods."

* SOLAR FLARE NEWS *
==========
A solar flare was detected by the Solar and Heliospheric Observatory (SOHO) satellite on 07-Apr-97 at 1400 UTC. The flare was reported to be a class C6/3N event meaning it was optically large, but contained relatively little x-ray energy. The next sunspot cycle is expected to bring solar flares 100 to 1000 times more powerful than last week's event over the next three to six years. These could produce suddent ionospheric disturbances, geomagnetic distrubances, auroral displays in many areas of the world, as well as anomalies and even failures of satellites in earth orbit.

Spectacular images of last week's storm taken by the SOHO spacecraft may be found at:

http://pao.gsfc.nasa.gov/gsfc/newsroom/flash/flash.htm

Current images of the sun and the solar corona may be found at:

http://umbra.gsfc.nasa.gov

Current predictions and other information can be obtained from the Space Environment Center at:

http://www.sec.noaa.gov

Information regarding current solar flux and geomagnetic data can be found at:

http://solar.uleth.ca/solar

A great deal of information is available from IPS Radio and Space Services in Australia pertaining to this subject may be found at:

http://www.ips.oz.au

* AO-27 NEWS *
==========
Michael Wyrick, N4USI, AO-27 satellite control operator reports that an Internet Web page describing the AO-27 satellite, its operating schedule, and a description of TEPR states may be found at the following URL:

http://www.umbra.com/sats/

* CALL FOR PAPERS *
==========
The final call for papers to authors who wish to present papers at the 1997 Space Symposium in Toronto on Oct. 17-19, 1997 has been made. Authors and titles are due by May 1st with abstracts by June 1st. Final versions are due by Aug. 1st. Planners also encourage those not able to attend to consider a paper for publication in the Proceedings of the symposium.

Submissions should be made to Wayne Chandler, ve3whc@amsat.org, or by mail to:

W. H. Chandler
Box 6
Carlisle, On. L0R1H0
Ontario, Canada.

[Info via Wayne Chandler, VE3WHC]

* RS-16 NEWS *
==============
Pat Gowen, G3IOR, had the oppotunity to confirm that spurious emissions are indeed coming from the RS-16 satellite. These emissions are on the 70-cm band when the 435.504 MHz beacon is active.

At first, Pat looked for spurious emissions using his 2 x 1/2 wave verticals in phase. With this arrangement, he heard the 435.504 MHz beacon at an S9 signal level with no other signals detected. Pat then connected his 2 x 13 element RHCP AZ/EL Yagis, and sure enough, the spurious emissions reported by Leo, UA3CR, could be heard. The strongest was just S2, which Pat estimates to be about 35 dB below the beacon. Pat heard these emissions as very rough T2 auroral like signals on 435.461, 435.478, 435.483, 435.491, 435.507, 435.516, 435.524, 435.538 and 435.544 MHz. These frequencies are approximate due to the rapid Doppler shift of the downlink signals.

* FEEDBACK/INPUT WELCOMED *
============================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-
--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco

1290. Remote Telescope via packet?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: andy@tiedye.com
Message-ID: <5iv5sh$kl8@masters0.InterNex.Net>
Source record: 19146
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc

Has anyone tried setting up a telescope in a remote location and accessing it (sending control commands, receiving image data) via Amateur packet radio? We are looking into this and would gladly benefit from anyone else's experience in this area.

Andy Nourse - KC1IP

1291. Professional and Affordable Web Design and Hosting

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: Kris Thompson <thomp132@expressionsmedia.com>
Message-ID: <5ivqjc$9h8$6828@msunews.cl.msu.edu>
Source record: 19147

Welcome to Expressions Multimedia...

We would like to extend an invitation to visit us at http://www.expressionsmedia.com.

We specialize in providing professional yet inexpensive web page designs and web site hosting.

Please be forwarned, many of our sites include ActiveX and Java and are optimized for Internet
Explorer 3.0, so they many not look right in some browsers.

Also, check out our newest site for the Blue Cardinal Motorsport racing team, they can be found
at http://www.expressionsmedia.com/bluecard.

I would like to thank you for your time,

Kris Thompson
thomp132@expressionsmedia.com

1292. Re: MIR is dead

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: Stephan Greene <greenes@csf.arl.bdm.com>
Message-ID: <3353CC83.C2B19ABF@csf.arl.bdm.com>
Source record: 19148

Swiat wrote:
>
> What is the deal??? Is MIR dead? Many people, including myself, have not heard
> any passes for WEEKS? Did that fire destroy their communications equipment?

As recently reported in Space News and ANS, I believe, Mir's controllers
have directed the crew to suspend all non-essential activities until
problems with the station's environmental control system (e.g. O2
generation, CO2 scrubbing, etc.) are fixed. The recent Progress supply
ship carries replacement parts for these systems.

Like it or not, the Mir amateur station is considered non-essential.

Hopefully, they should be back on the air soon.

73
Steve KA1LM@amsat.org

1293. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <3353DCD4.699D@codem.com>
Source record: 19149

Brandon and Kristin wrote:
>
> Where'd you get the hair-brained idea that NAY of the frequencies are
> anything BUT public knowledge. Granted, you have to do some digging to
> find a couple of them, but they are NOT CLASSIFIED!

Well, in the United States, most government frequencies were classified
as confidential quite a few years ago.

73 Larry N1TX
--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1294. Re: help with antenna theroy...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <3353d5dd.9199607@news.erols.com>
Source record: 19150

On Sun, 13 Apr 1997 19:55:28 GMT, Brian Gibbs
<brian@brimar.demon.co.uk> wrote:

>
>In article: <19970412075901.DAA02684@ladder01.news.aol.com>
>iceextreme@aol.com (IceExtreme) writes:
>>
>> I am new amateur radio, and i was looking to see if i could build an
>> antenna, but
>> i seem to have no information,

Then go buy some information.

i was wondering if someone out here could explain,
>> how everything works, !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

You must be joking

or for that matter send me some electronic
>> expliantions or how to's... thanks for your time.
>> ````````````
>> Ice
>>
>> Everything sent will be apperecited!
>> ````````````
>>
>
>Hey Ice, you picked a very broad subject here!
>You will need to be much more specific with your requests, or
>folk will be posting you whole books on the subject.
>
>What type of antenna do you want to build? What bands is it to
>be used on etc etc.
>
>Oh, and I'd send your spell-checker back to the makers!
>
>Cheers.......Brian
>
>--
>---
> Brian Gibbs EMail brian@brimar.demon.co.uk
> Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
>---
>
Ice - how can you ask such questions and claim to have a Ham license.
Do they give them away with popcorn?

Jim/AC4CZ

1295. Re: Software query

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <3353D7A0.6DB1@codem.com>
Source record: 19151

awilki@zetnet.co.uk wrote:
>
> Hi, anyone know of some software to obtain images from hrpt data
> downloaded from the NOAA web site ?
> I have tried Paintshop Pro , Imdisplay, etc, but nothing doing.
>
> Regards.......Allen, G3XJI.

I'm afraid I'm not much help, since I haven't played with HRPT data yet. However,
NOAA describes the data file format at http://www2.ncdc.noaa.gov/POD/c3/sect32.html It's obviously not compliant with common image formats like JPG, GIF, etc.

FWIW, folks interested in building their own receiving station should check out http://www.msoft.it/noaa95/ for hardware and software tips.

73 Larry N1TX
--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1296. MIR is dead

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: mjswiatk@mtu.edu
Message-ID: <5j0c40$pqn@maxwell11.ee>
Source record: 19152

What is the deal??? Is MIR dead? Many people, including myself, have not heard
any passes for WEEKS? Did that fire destroy their communications equipment?

If anyone has any information on when they will be back on the air please email me ASAP at
kc8fgx@qsl.net or mjswiatk@mtu.edu It might also be nice to
post your information for everyone else Thanks.

1297. Re: Remote Telescope via packet?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: Jim Wagner <wagnerj@proaxis.com>
Message-ID: <33546B56.1B04@proaxis.com>
Source record: 19153
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc

There is an astronomy group in Portland, OR which is doing or working on combinations of packet and astronomy.

If you get no response from them, I will pass along a packet bbs address.

Jim, KA7EHK
Corvallis, OR

1298. Re: help with antenna theroy...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-15 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <33541A3E.6B3D@icss.net>
Source record: 19154

James C Sutton wrote:
>
> On Sun, 13 Apr 1997 19:55:28 GMT, Brian Gibbs
> <brian@brimar.demon.co.uk> wrote:
>
> >
> >In article: <19970412075901.DAA02684@ladder01.news.aol.com>
> >iceextreme@aol.com (IceExtreme) writes:
> >>
> >> I am new amateur radio, and i was looking to see if i could build an
> >> antenna, but
> >> i seem to have no information,
>
> Then go buy some information.
>
> i was wondering if someone out here could explain,
> >> how everything works, !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
>
> You must be joking
>
> or for that matter send me some electronic
> >> expliantions or how to's... thanks for your time.
> >> ````````````
> >> Ice
> >>
> >> Everything sent will be apperecited!
> >> ````````````
> >>
> >
> >Hey Ice, you picked a very broad subject here!
> >You will need to be much more specific with your requests, or
> >folk will be posting you whole books on the subject.
> >
> >What type of antenna do you want to build? What bands is it to
> >be used on etc etc.
> >
> >Oh, and I'd send your spell-checker back to the makers!
> >
> >Cheers.......Brian
> >
> >--
> >---
> > Brian Gibbs EMail brian@brimar.demon.co.uk
> > Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

> >--
> >
> Ice - how can you ask such questions and claim to have a Ham license.
> Do they give them away with popcorn?
>
> Jim/AC4CZ
Brian/ice, it was all explained to me once a long time ago. All I can
remember is the phrase PFM, and something about magic.
Really, doesn't the RSGB make the equivalent of the ARRLs, "NOW YOU'RE
TALKING?" Then get the Handbook, then get the Antenna Handbook, etc.
The trick is to read.
Good luck,
Brian/N0iMD

1299. Message to large for system

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <postmaster@emarkt.com>
Source record: 19155

```
Message to large for system
```

1300. Decoding RS12/13 TLM

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <763395470wnr@brimar.demon.co.uk>
Source record: 19156

Hi.

I am trying to obtain a copy of an article published in the
AMSAT journal, vol 15, No.1 Jan/Feb 1992. It was written by
Keith Bergland and called "Decoding RS-12/13 Telemetry"

Has anyone out there got a copy of this article, which
they'd be willing to let me have, all expenses paid of
course.

Replies to my Email address please....TIA....Brian

--

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

1301. Re: help with antenna theroy...

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3354D6AB.B7D@ix.netcom.com>
Source record: 19157

IceExtreme wrote:
>
> I am new amateur radio, and i was looking to see if i could build an
> antenna, but
> i seem to have no information, i was wondering if someone out here could
> explain,
> how everything works, or for that matter send me some electronic
> expliantions or how to's... thanks for your time.
> Ice
>
> Everything sent will be apperecited!
Good Morning Ice. Very broad subject -- but try the following books.
ARRL Antenna Handbook, Bill Orr's excellent Books on antennas, Easy-Up
Antennas for Radio Listeners and Hams by Edward M. Knoll, HF Antennas
For All Locations by Les Moxon. For ARRL Publications go to URL:
http://p1k.arrl.org/catalog/
Others are available at Ham Stores or your local book store.

Good Luck
Rod in San Diego
--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
Main Page: http://www.netcom.com/~ac6v/index.html
Index: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

1302. Re: MIR is dead

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: Mike Cat <anti@spam.address>
Message-ID: <3354D9C9.48F8@spam.address>
Source record: 19158

Swiat wrote:
>
> What is the deal??? Is MIR dead? Many people, including myself, have not heard
> any passes for WEEKS? Did that fire destroy their communications equipment?
>
> If anyone has any information on when they will be back on the air please email me ASAP at kc8fgx@qsl.net or mjswiatk@mtu.edu It might also be nice to
> post your information for everyone else Thanks.

From Space News 14 April 1997:

At 1730 UTC on 08-Apr-97, the Russian Space Center in Moscow reported that
the docking of the Progress module with the MIR Space Station was a success.
The Progress is bringing up vital spare parts to repair the carbon dioxide
scrubber on MIR. The scrubber shut itself off late last week when a coolant
leak caused it to overheat. Both NASA and Moscow are reporting there is no
danger to the crew.

In other news, the Associated Press reported last week that Russian controllers
had literally "pulled the plug" on ALL non-essential Mir activities until
further notice. There is little doubt that this also includes ham radio
since it is considered to be a non essential activity.

From another very reliable (but seperate) source:

Mir is only running 5 watts for school contacts because the existing
power supply is not big enought to run the radio at 45 watts. A
replacement power supply was ready to be shipped last week to Mir in the
Progress module, but because of the Air supply problem, the Power Supply
was removed from the supply rocket and replaced with air filters etc.

I keep my receiver on 24 x 7 listening for MIR. As soon as I hear
ANYTHING over the Eastern part of the USA, I will send out a message to
this newsgroup stating such.

73 de Mike
catman@codem.com

1303. Re: Dish wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33552840.7A5A@codem.com>
Source record: 19159

Joshua Coale wrote:
>
> Hi, I am looking for a dish I could buy for satellite communications. The
> bigger the better.
> Thank you,

Joshua, what frequencies and modes are you talking about here?
Bigger is not necessarily better.

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1304. ARLK029 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk029.1997@arrl.org>
Source record: 19160
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK029
ARLK029 Keplerian data

ZCZC SK29
QST de W1AW
Keplerian Bulletin 29 ARLK029
From ARRL Headquarters
Newington, CT April 15, 1997
To all radio amateurs

SB KEP ARL ARLK029
ARLK029 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97098.22948610 -.00000078 00000-0 10000-3 0 4711
2 14129 25.8122 154.0385 6072130 106.8498 324.7491 2.05881733 75942
RS-10/11
1 18129U 87054A 97105.03373325 .00000034 00000-0 21087-4 0 03615
2 18129 82.9228 285.4144 0013148 40.5718 319.6413 13.72377151491574
UO-11
1 14781U 84021B 97104.98289781 .00000150 00000-0 33152-4 0 09779
2 14781 97.8291 88.7642 0010942 201.2822 158.7930 14.69541572701978
RS-12/13
1 21089U 91007A 97105.08650302 .00000074 00000-0 61840-4 0 09919
2 21089 82.9221 325.4510 0030417 111.1576 249.2836 13.74079945310493
UO-14
1 20437U 90005B 97104.77377910 .00000020 00000-0 24382-4 0 02800
2 20437 98.5204 187.8093 0011902 36.9153 323.2847 14.29955583377155
RS-15
1 23439U 94085A 97104.92340742 -.00000039 00000-0 10000-3 0 02179
2 23439 64.8145 255.1372 0151201 144.2027 216.9144 11.27526278094805
AO-16
1 20439U 90005D 97105.14049672 .00000047 00000-0 35022-4 0 00760
2 20439 98.5364 190.9604 0012287 36.6085 323.5952 14.30004279377222
RS-16
1 24744U 97010A 97105.23397323 .00003915 00000-0 13270-3 0 290
2 24744 97.2795 11.4746 0006961 329.4913 30.5920 15.31113347 6451
```

```
DO-17
1 20440U 90005E 97105.13271528 .00000042 00000-0 32919-4 0 00619
2 20440 98.5418 191.7711 0012200 37.2810 322.9239 14.30146796377255
WO-18
1 20441U 90005F 97105.12916168 .00000044 00000-0 33671-4 0 00893
2 20441 98.5408 191.6762 0012870 35.9386 324.2659 14.30114742377253
LO-19
1 20442U 90005G 97105.10150231 -.00000008 00000-0 13722-4 0 00866
2 20442 98.5444 192.2820 0012885 36.6774 323.5276 14.30228246377275
FO-20
1 20480U 90013C 97104.95816484 -.00000005 00000-0 57231-4 0 09845
2 20480 99.0383 78.4609 0541236 160.5456 201.7200 12.83237294336599
AO-21
1 21087U 91006A 97105.01826906 .00000094 00000-0 82657-4 0 08262
2 21087 82.9363 98.3313 0036937 83.1904 277.3452 13.74580709311471
UO-22
1 21575U 91050B 97105.16432976 .00000061 00000-0 34597-4 0 07925
2 21575 98.3108 167.9154 0008537 80.6218 279.5951 14.37065291301439
KO-23
1 22077U 92052B 97105.00031302 -.00000037 00000-0 10000-3 0 06753
2 22077 66.0802 277.5340 0012005 229.8834 130.1131 12.86302197219623
KO-25
1 22828U 93061F 97105.15345712 .00000058 00000-0 40541-4 0 05381
2 22828 98.5446 181.0711 0011158 51.7873 308.4314 14.28174452153219
IO-26
1 22826U 93061D 97105.17411918 .00000014 00000-0 22884-4 0 05677
2 22826 98.5500 181.0170 0010104 66.4294 293.7947 14.27832114185091
AO-27
1 22825U 93061C 97105.13076066 .00000039 00000-0 33440-4 0 05546
2 22825 98.5498 180.7428 0009657 65.3711 294.8475 14.27723089185077
FO-29
1 24278U 96046B 97105.19273472 .00000006 00000-0 43346-4 0 716
2 24278 98.5487 154.9971 0351832 349.5953 9.8035 13.52629478 32605
MO-30
1 24305U 96052B 97105.33471925 .00000204 00000-0 20364-3 0 920
2 24305 82.9248 41.0174 0032809 21.6239 338.6275 13.73092374 30434
Mir
1 16609U 86017A 97105.62965278 .00001768 00000-0 28582-4 0 1994
2 16609 51.6553 40.0756 0010129 262.8837 105.8047 15.59181324637268

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
April 19, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1305. Re: Weather Sat. Recordings

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33552797.13C@codem.com>
Source record: 19161
Cross-posted to: rec.radio.amateur.space,uk.radio.amateur

Roland Brade wrote:
>
> I am just putting the final touches to a simple polar weather sat
> decoder but I need a couple of audio tape recordings of good passes so
> that I can tweek the circuit.
> Does anyone have any recordings that they have made and can let me have.
> I will pay all the costs involved.

Roland, would .WAV files help you out? I have several I could email.
About ten minutes long each.

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1306. Re: MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-16 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33552C09.4DF6@codem.com>
Source record: 19162
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

Masa wrote:
>
> Hello. I was testing moon bounse and see if I could get
> someone out there, but it failed. I have 2M 45W output with a small
> antenna. do you think it is good enough ?

No. Your expectations from such a modest arrangement are not realistic. EME is one of the most demanding modes for hams. Although moonbounce can be done using a couple of Cushcraft boomers and some high power and a very low noise receiver at one end, a more typical setup is like this:

From 1990 to 1994 the AF9Y 2 Mtr EME station consisted of:

Antenna - 6 x 22 element, 42' Boom Yagis
Amp - 4CX1500, 1500 Watts Out
Preamp - MGF 1302, 0.25 dB NF
Tx Coax - 300 foot run of 1 5/8 Hardline
Radio - Microwave Module & ICOM 781

You have a lot of work to do, Masa, but you have to start somewhere.
Check out these links for EME information:
http://www.webcom.com/~af9y/#Bullet 1
http://www.mindspring.com/~wave/eme.html

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1307. $ INTERNATIONAL CALLING JUST 25-CENTS / MIN

Newsgroup: rec.radio.amateur.space
Date: 1997-04-17 00:00:00 UTC
From: superdeal@greatnews.com
Message-ID: <E8rryx.KwL@nonexistent.com>
Source record: 19163

INTERNATIONAL CALLING
Your Passport to International Savings
JUST 25 CENTS / MIN
CALL: ASIA ANYTIME
MIDDLE EAST
AFRICA PASSPORT (tm) CALLING CARD
LATIN AMERICA No Upfront Charges
EUROPE Pay Only For Time Used
ANYWHERE ELSE
CALL : 810 - 932 - 0464 (24 hrs)

1308. Re: MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-17 00:00:00 UTC
From: jayk@fc.hp.com
Message-ID: <5j5je7$pi@fcnews.fc.hp.com>
Source record: 19164
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

: > Hello. I was testing moon bounse and see if I could get
: > someone out there, but it failed. I have 2M 45W output with a small
: > antenna. do you think it is good enough ?
:
: No. Your expectations from such a modest arrangement are not
: realistic. EME is one of the most demanding modes for hams. Although
: moonbounce can be done using a couple of Cushcraft boomers and some high
: power and a very low noise receiver at one end, a more typical setup is
: like this:
:
: From 1990 to 1994 the AF9Y 2 Mtr EME station consisted of:
:
: Antenna - 6 x 22 element, 42' Boom Yagis
: Amp - 4CX1500, 1500 Watts Out
: Preamp - MGF 1302, 0.25 dB NF
: Tx Coax - 300 foot run of 1 5/8 Hardline
: Radio - Microwave Module & ICOM 781

IMO this setup is a bit better than typical.

To make an initial few contacts with the big stations you can just get by with the following. A single long yagi with ~30 foot boom (CC 17B2, M^2 2M5WL, etc) mounted horizontally and a 160w brick. A low noise sensitive receiver with a low noise preamp mounted near the antenna will help alot. With this setup you could work some of the big guns like W5UN, KB8RQ and SM5FRH on a schedule at your moonrise/moonset. You would need to have an idea at what elevation angle your antenna has lobes and have a fairly clean shot at the horizon. Antenna modeling programs can get you fairly close on figuring out where the lobes are located. I made my first few 2m EME contacts on a single Cushcraft 17B2 with 1200w output and no preamp. Programs using MiniNEC and NEC were almost right on in predicting the angle of my lobes (I have flat ground and no obstructions). On 2m EME contacts are almost exclusively CW as signals are generally very weak.

With two ~30 foot boom yagis and 1KW (with elevation control and preamp) you will be able to hear your own echos most of the time. I would pretty much consider this a entry level serious EME setup. With four 30 foot boom yagis and 1KW+ you get into the class of station that can to call CQs and effectively make random QSOs. I would consider this a typical/average 2m EME setup.

73, Jay K0GU DN70mq jayk@fc.hp.com

FT-1000D DEM 144-28 8877 (1500w)
4x CC17B2 SSB preamp mast mounted Full elevation

1309. HAM RADIO VACATION IN CRETE,GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-17 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc4b52$d6cea680$ea915cc1@dummy.forthnet.gr>
Source record: 19165

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO 31/October/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

1310. Re: Helical Antennas's: Do they out-perform beams?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-17 00:00:00 UTC
From: "Ralph B. Holland" <vk1brh@dynamite.com.au>
Message-ID: <3356A703.1607@dynamite.com.au>
Source record: 19166

Rob Kling wrote:
>
> I am planning my satellite station and I have read a lot about helical antenna's.
> From what I have read they appear to be better than beams and easier to build

you may visit http://www.tuc.nrao.edu/~demerson/helixgain/helix.htm for
performance data.

--
Regards, 73

Ralph Holland, VK1BRH

http://www2.dynamite.com.au/vk1brh
http://www.qsl.net/vk1brh

Distribute knowledge to further mankind

1311. CD-R's at good prices

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: mcxv./mv./m@asoiruewoiu.com
Message-ID: <5j7f43$ni9@chile.earthlink.net>
Source record: 19167

We have the following CD-R media and CD-Recorders for Sale:

Brand: Pioneer
Type: Printable Media (Surface of cd is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Unbranded (CD and Jewel Case is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Unbranded (CD is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 4.75
Packaging: Spindled
Minimum Order: 50

Brand: TDK (IEC Nippon)
Type: Gold on Green
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Type: Unbranded (CD is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 4.75
Packaging: Spindled
Minimum Order: 50

CD-Recorders

Brand: Yamaha
Speed: 4 Write X 4 Read (4 X 4)
Version: CD-R 100 Internal Version
Software: Gear 4.0
SCSI Card: Adaptec
Comes complete with All Cables and Software need for Installation.
Media: 5 Pieces of your choice
Price: $ 999.99 US

Please take note that our phone number as changed from (213) 650-1680 to: (714)-461-5150
and our fax number has changed from: (213)-650-9110 to: (714) 461-5155

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions feel free to call.

Cordially,

The Copy Cat Shop
714-461-5150
714-461-5155 Fax

Ask for Shelly when calling.

1312. Re: MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaE8u4MI.AnM@netcom.com>
Source record: 19168
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

In article <5j5je7$pi@fcnews.fc.hp.com> jayk@fc.hp.com writes:

[snip]

>
>IMO this setup is a bit better than typical.
>
>To make an initial few contacts with the big stations you can just get by
>with the following. A single long yagi with ~30 foot boom (CC 17B2, M^2
>2M5WL, etc) mounted horizontally and a 160w brick. A low noise sensitive
>receiver with a low noise preamp mounted near the antenna will help alot.
>With this setup you could work some of the big guns like W5UN, KB8RQ and
>SM5FRH on a schedule at your moonrise/moonset.

[lotsa good stuff snipped]

On a somewhat related topic, is there anyone who has surveyed which
non-amateur transmitters (or radars for that matter) can be heard
via moonbouce (or even moon bounse :))? I've been told that the
NAVSPASUR VHF (216.98 MHz, I think) transmitter at Lake Kickapoo, TX
is easy to hear when the moon passes through the beam.

1313. Re: Helical Antennas's: Do they out-perform beams?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <5j8ddk$rgd@canyon.sr.hp.com>
Source record: 19169

Rob Kling (rkling@umich.edu) wrote:
: I am planning my satellite station and I have read a lot about helical antenna's.
: From what I have read they appear to be better than beams and easier to build
: Helical Pros:
: greater bandwidth
: easy and inexpensive to build
: somewhat lightweight (UHF)
: Helical Cons:
: Single polarity
: Heavy for VHF
: More difficult to match than a beam.
: I am looking for someone who has used or is using helical antennas to tell me how they
: perform. Becuase right now, my plan is to make a 440 helical antenna and purchase a 144
: antenna. Before I spend the money I would like to have more information.
: Any help will be greatly appreciated.

In addition to the pointer alread given to

http://www.tuc.nrao.edu/~demerson/helixgain/helix.htm

for relative gain discussions, I would point you to some of our recent
experience with helixes and OCARs (on-channel active repeaters)

http://www.tapr.org/~n6gn/ocar/build.html

and comment:

: Helical Cons:
: Single polarity

choice of RHCP or LHCP is, I suppose, single in that an
orthogonal polarization exists but relative to linearly
polarized antennas they are normally only 3 dB down in
performance for any choice. They work very nicely for
spinning satellites and for terrestrial use the negative
effects of a first reflection in a multipath environment
is reduced because it is counter-rotating.

: Heavy for VHF
Probably true, I've built them for wx satellite reception at
137 MHz but the structure is pretty big and mine was slightly
comical. It sure worked well though.

: More difficult to match than a beam.

I might take issue with this. I find that achieving a
good broadband match with a helix is extremely easy.

Normally I just taper the first section of the helix
conductor along the groundplane for a quarter
wavelength. If the spacing is set to the desired match
impedance at the feed end and tapered upward (normally)
to ~140 ohms at the helix end a very nice broadband
match is easily achievable. This is far broader than
the matches I normally get with parasitic arrays (yagis)
or colinear arrays.

My experience coincides with the above reference on helix gain vs. boomlength.
For higher gains, helixes start to have reduced return on investment and
stacking makes more sense than extending the number of turns. This starts
to diminish some of the benefits a short to mid-length helix offers.
Still, I think they are a great antenna.

Glenn Elmore n6gn

amateur IP: glenn@SantaRosa.ampr.org
Internet: ge@sr.hp.com

|--------------- N6GN's Higher Speed Packet WWW Page --------------------|
| |
| http://www.tapr.org/~n6gn/index.html |

1314. Re: CD-R's at good prices

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E8uF48.F2D@pe1chl>
Source record: 19170

In <5j7f43$ni9@chile.earthlink.net> mcxv./mv./m@asoiruewoiu.com writes:

> The Copy Cat Shop
> 714-461-5150
> 714-461-5155 Fax

> Ask for Shelly when calling.

When you live in an area where this phonenumber can be economically
called, please ask Shelly to slowly burn in hell.

Rob
--
+-----------------------------------+---------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+-----------------------------------+---------------------------------------+

1315. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: schinds@palmnet.net
Message-ID: <861418080.8652@dejanews.com>
Source record: 19171

In article <3353DCD4.699D@codem.com>,
ledlow@delphi.com wrote:
>
> Brandon and Kristin wrote:
> >
> > Where'd you get the hair-brained idea that NAY of the frequencies are
> > anything BUT public knowledge. Granted, you have to do some digging to
> > find a couple of them, but they are NOT CLASSIFIED!
>
> Well, in the United States, most government frequencies were classified
> as confidential quite a few years ago.
>
> 73 Larry N1TX
> --
> --
> N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
> PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
> Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

The aggregate collection of Federal government radio frequency assignments, called the Government Master File (GMF), is classified as Confidential. Within the GMF there are some assigments that are classified as Confidential. Assignments with higher classifications are not listed in the GMF.

It appears that the National Telecommunications and Information Administration, keeper of the GMF, will soon begin releasing radio frequency assignment information from the GMF for assignments that are not classified or Freedom of Information Act (FOIA) exempt.

A good number of the assignments in the GMF have become public knowledge and, for the most part, the Federal agencies are not too concerned. Individual assignments are classified for reasons other than trying to avoid eavesdropping. Encrytion, not "security by obscurity," keeps conversations private.

Steve Schindler steven.schindler-1@ksc.nasa.gov
Voice Systems/Spectrum Management schinds@palmnet.net
NASA - Kennedy Space Center

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

1316. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-04-18 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-1804972307170001@host46.clr.cyberg8t.com>
Source record: 19172

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

1317. New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <33588298.559D5954@acm.org>
Source record: 19073

Hi,

I am mentoring a satellite design project at the University of California, San Diego (UCSD). The group is designing a very small satellite (10-15 cm smooth sphere with NO external projections of any kind) that will be used to characterize, to extremely high precision, the atmospheric drag characteristics of LEO orbits.

The satellite will contain just enough intelligence to gather data and figure out when it is over our ground station. During the 2-4 minute window while it is approximately overhead, it will dump accumulated data. It is expected that passes directly overhead (or close enough) will occur about 3 times per month, and that one is likely to be lost due to ground station problems (weather, power, repairs, whatever).

The satellite will be completely powered by alkaline batteries, with separate sets for the CPU and transmitter. For a 3-6 month mission, it is expected that the available power will support at most 1W of radiated power, with 250mW being the more likely target.

The satellite's small diameter, combined with it's complete lack of attitude controls (it will tumble), means the transmission must be omni-directional. The antenna(s) must be very efficient, very small, and very light. The only technology that seems even remotely possible appears to be some novel form of an array of patch antennas.

One goal (among many) is to minimize ground station cost and complexity. There is no uplink. And we'd like to use a Ham band so we can mazimize the number of potential ground stations, in case our position calculation software miscalculates and transmits over the wrong piece of ground. We'll be posting the orbital elements frequently.

Since I am a no-code Technician (KE6RGA) software type, I am rather stymied where to go from here. So I have a few questions for any of you sat-savvy net-heads who're up to the challenge:

1. Can we get decent antenna efficiency (for the itty-bitty Tx antennas) anywhere in any Ham band?
2. Would a packet-like downlink be bandwidth and cost efficient?
3. Can the 1.24GHz band work? The Yaesu ft736 sure looks nice!
4. If we have to leave the ham bands, where would be a good place to go? 5GHz looks good, and there are some new miniature Tx's that are fairly efficient in that band. We will be able to get the required FCC/ITU clearances, which are trivial for 1/4W with only overhead Tx.
5. Would anyone be interested in a cash contest driven by the reception

of data from our nanosat? If we miss our own ground station, the first Ham to get each data set to us would get $100. That would be one award every week or so, for the 3-6 month duration of the mission, which ends when the satellite burns up on reentry.
6. Any recommendations for an inexpensive PC-controlled high-gain steerable ground station antenna?

There are probably many more "obvious" questions I forgot to ask, so please feel free to ask and/or answer all you can!

The project's Web site will be up within 2 weeks (after the preliminary design review is completed), and lots more technical information will be available then.

Thanks, in advance!

- Bob Cunningham, KE6RGA
http://www.snafu.dyn.ml.org

1318. * CALL ANYWHERE WORLDWIDE 25 CENTS/MIN

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: thetruth@cozmic.com
Message-ID: <E8vrBv.Iu3@nonexistent.com>
Source record: 19074

INTERNATIONAL CALLING
Your Passport to International Savings
JUST 25 CENTS / MIN
CALL: ASIA ANYTIME
MIDDLE EAST
AFRICA PASSPORT (tm) CALLING CARD
LATIN AMERICA No Upfront Charges
EUROPE Pay Only For Time Used
ANYWHERE ELSE
CALL : 810 - 932 - 0464 (24 hrs)

1319. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <337293bd.1627893557@news.sci.fi>
Source record: 19075

"Robert W. Cunningham" <rcunning@acm.org> wrote:

>Since I am a no-code Technician (KE6RGA) software type, I am rather
>stymied where to go from here. So I have a few questions for any of you
>sat-savvy net-heads who're up to the challenge:
>
>1. Can we get decent antenna efficiency (for the itty-bitty Tx
> antennas) anywhere in any Ham band?

>2. Would a packet-like downlink be bandwidth and cost efficient?

Since you only have a downlink (no uplink to send ACKs/NAKs) I would strongly recommend using a robust forward error correction code and interleaving to avoid problems with multipath fading (unless you have a very narrow beam receive antenna). The FEC is important as you had very few chances to capture the data.

>3. Can the 1.24GHz band work? The Yaesu ft736 sure looks nice!

The frequency ranges 1260 - 1270 MHz and 5650 - 5670 MHz are allocated for amateur satellite service, but only for uplink (CCIR Radio Regulations 664, I do not know if ITU-R still uses the same numbering).

The band 5830-5850 MHz is also allowed for Amateur Satellite service, but only for downlinks (RR 808).

>4. If we have to leave the ham bands, where would be a good place to
> go? 5GHz looks good, and there are some new miniature Tx's that
> are fairly efficient in that band. We will be able to get the
> required FCC/ITU clearances, which are trivial for 1/4W with only
> overhead Tx.

There are space research and satellite communication allocations near 5 GHz, so the FCC/ITU clearance should not be too hard to get.

However, there is one problem when you go up in frequency. When you are using an omnidirectional transmitter antenna, the power density at the ground is constant regardless of frequency (about -96 dBm/m2 at 0.25 W and 300 km) so an antenna with an effective capture area of 1 m2 should give a good signal with a comfortable margin (this margin is certainly required, since you only had very few chances to dump the data). At low VHF frequencies, a dipole has that capture area of 1 m2 and you do not need to turn the receiving antenna during the pass. However, on 5 GHz you need a parabolic reflector to get 1 m2 of effective capture area (a 1.2 m dish should suffice). Unfortunately, this antenna has a high directivity (3 degree beam width, about 6

times the diameter of the moon or the sun), so you would have to be able to control the antenna quite accurately. This can be difficult for a low flying fast satellite and you need very accurate elements so you can accurately predict the time of arrival.

A lower frequency would be preferable as this reduces the pointing accuracy requirements.

>5. Would anyone be interested in a cash contest driven by the reception
> of data from our nanosat? If we miss our own ground station, the
> first Ham to get each data set to us would get $100. That would be
> one award every week or so, for the 3-6 month duration of the
> mission, which ends when the satellite burns up on reentry.

The problem is that most ham equipment for the microwave bands are tranverters converting to the 2 m bands and the transverter input is centered at the narrow band segment on each amateur band. The Phase-3D satellite might change the situation with more user equipment tuneable on a larger range.

General coverage scanners are available up to 1.5 GHz and some even to 2.5 GHz, so this also suggests using a frequency in the low end of the microwave band.

>6. Any recommendations for an inexpensive PC-controlled high-gain
> steerable ground station antenna?
>

Paul OH3LWR

1320. ARLK030 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk030.1997@arrl.org>
Source record: 19076
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK030
ARLK030 Keplerian data

ZCZC SK30
QST de W1AW
Keplerian Bulletin 30 ARLK030
From ARRL Headquarters
Newington, CT April 19, 1997
To all radio amateurs

SB KEP ARL ARLK030
ARLK030 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97108.42650919 .00000091 00000-0 10000-3 0 4722
2 14129 25.8265 152.2714 6072518 109.7301 322.5753 2.05879408 76158
RS-10/11
1 18129U 87054A 97108.09583449 .00000016 00000-0 87978-6 0 03516
2 18129 82.9225 283.1495 0013053 33.2834 326.9128 13.72376889491995
UO-11
1 14781U 84021B 97107.91075220 .00000160 00000-0 34805-4 0 09694
2 14781 97.8294 91.5729 0011106 191.5698 168.5258 14.69542753702407
RS-12/13
1 21089U 91007A 97108.07200146 .00000056 00000-0 43107-4 0 09790
2 21089 82.9221 323.2370 0030589 103.2178 257.2392 13.74080000310909
UO-14
1 20437U 90005B 97108.20241397 .00000050 00000-0 36081-4 0 02757
2 20437 98.5196 191.1631 0011823 27.8153 332.3664 14.29956538377645
RS-15
1 23439U 94085A 97108.47115889 -.00000039 00000-0 10000-3 0 2120
2 23439 64.8144 249.4003 0151109 143.5596 217.5725 11.27526343 95201
AO-16
1 20439U 90005D 97108.21916594 .00000048 00000-0 35306-4 0 00752
2 20439 98.5364 193.9792 0012148 28.2784 331.9056 14.30004791377667
RS-16
1 24744U 97010A 97108.17490310 .00003099 00000-0 10552-3 0 00446
2 24744 97.2795 14.3594 0006518 316.8233 43.2509 15.31128767006903
```

```
DO-17
1 20440U 90005E 97108.21107663 .00000080 00000-0 47642-4 0 00878
2 20440 98.5416 194.7926 0012236 27.9623 332.2210 14.30147751377694
WO-18
1 20441U 90005F 97108.20759429 .00000015 00000-0 22615-4 0 00771
2 20441 98.5408 194.6968 0012809 27.6254 332.5608 14.30114874377698
LO-19
1 20442U 90005G 97108.17968892 .00000026 00000-0 26683-4 0 00764
2 20442 98.5445 195.3046 0012896 27.4819 332.7044 14.30228903377714
FO-20
1 20480U 90013C 97107.99899769 -.00000040 00000-0 -22325-4 0 09733
2 20480 99.0395 80.9287 0541367 153.6683 209.3037 12.83236992336981
AO-21
1 21087U 91006A 97108.07546799 .00000094 00000-0 82657-4 0 08192
2 21087 82.9359 96.0664 0037026 75.1485 285.3772 13.74580870311894
UO-22
1 21575U 91050B 97108.15827169 .00000034 00000-0 25644-4 0 07764
2 21575 98.3108 170.8071 0008583 72.3823 287.8293 14.37065582301862
KO-23
1 22077U 92052B 97107.95481481 -.00000037 00000-0 10000-3 0 06622
2 22077 66.0799 271.3478 0011814 229.0353 130.9644 12.86302279220009
KO-25
1 22828U 93061F 97108.16600984 .00000052 00000-0 38223-4 0 05322
2 22828 98.5448 184.0202 0011111 43.9660 316.2405 14.28174851153643
IO-26
1 22826U 93061D 97108.18739389 .00000014 00000-0 23171-4 0 05632
2 22826 98.5499 183.9657 0010078 58.6320 301.5848 14.27832484185528
AO-27
1 22825U 93061C 97108.70491872 -.00000001 00000-0 17041-4 0 5514
2 22825 98.5492 184.2382 0009664 57.0499 303.1597 14.27723116185584
FO-29
1 24278U 96046B 97108.15140676 .00000012 00000-0 49740-4 0 00894
2 24278 98.5481 157.5539 0351750 341.9477 16.9426 13.52629766033002
Mir
1 16609U 86017A 97108.19185524 .00002233 00000-0 34371-4 0 02124
2 16609 51.6564 27.2066 0009206 268.0772 91.9166 15.59183761637669

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 22, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1321. TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: gascomark@aol.com
Message-ID: <3358d3d0.3359187@news.4dcomm.com>
Source record: 19077

Only $5.95 http://6com.com

TUNE IN to messages and conversations of many Governmental Agencies, Military Installations, Space Shuttle Missions, Police stations, Airports and more. Simply set your scanner to the listed frequencies and VOILA; Your in the know.

Contains 100's of SECRETGoverment RADIO FREQUENCY

Also contains Fire and Police Department frequencies for most major cities, Cab companies, Cable TV, Business Bands, Pagers, Marine Radio and lots more. As an added BONUS disk includes complete translations of all Governmental brevity and ten codes. All the above lists come on one 3 1/2" Disk (PC Format). Buyer prepays we will pay shipping. Visit our web page for more great deals and FREE info.

http://6com.com

1322. MOON BOUNSE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-19 00:00:00 UTC
From: Mark Keefer <Mark.Keefer@gateway.igate.net>
Message-ID: <1632330090@f0.n612.z97.ftn>
Source record: 19078

RE: MOON BOUNSE
BY: Masa to All on Sat Apr 12 1997 09:10 pm

> From: masa@writeme.com (Masa)
> Reply-To: masa@writeme.com
>
> .Hello. I was testing moon bounse and see if I could get
> someone out there, but it failed. I have 2M 45W output with a small
> antenna. do you think it is good enough ? I was sending out on
> 144.000~144.200, but I never got the responses.
>
>
>
> Masataka Noda
> Masa@WriteMe.com
> http://www.geocities.com/Yosemite/1325/

I think you may need a bit more for EME. The EME stations I have read about used arrays of beams. I would imagine they also used more power.

I would be interested in learning what the minimum you can get away with is.

It might be useful to try and set up a sched (time & freq) with someone or a group.

I think another fun thing to try would be meteor scatter. I read an article on it in one of the HAM mags (QST possibly?)

73 Mark (N3JNC)

1323. START a FREE Online Business TODAY

Newsgroup: rec.radio.amateur.space
Date: 1997-04-20 00:00:00 UTC
From: glucas@netusa1.net
Message-ID: <5jbu5p$8p1@news.netusa1.net>
Source record: 19079

FREE TURNKEY ONLINE BUSINESS

Build a residual income from time you spend on the Internet placing FREE advertisements.

Successful Internet company wants you to help them market their services online. Place FREE advertisements and get paid residual commissions on any sales that you bring to the company. NO cost to start immediately, and all you have to do is place pre-written ads online in your sparetime. Complete training and instructions will be provided to you FREE.

You can even choose to get other online entrepreneurs involved and build your own "sales organization" where you can even earn commissions from the work of others.

You can get started TODAY absolutely FREE, and you can even check the status of your sales ONLINE!

PLEASE WRITE THIS DOWN: GD2854

You will need the above code to join this FREE program.

For more information, retrieve an auto-reply from OVERVIEW@NETOPP.COM, or visit: http://www.netopp.com.

This message is being brought to you by Dynamic Mail software - the powerful online marketing tool to explode your business easier and faster. For more information please visit our web site at :
http://www.australia.net.au/~apexpi/dynamail.htm

1324. Heathkit SB104 Extender board

Newsgroup: rec.radio.amateur.space
Date: 1997-04-20 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5jd52p$hne@news.asu.edu>
Source record: 19080

Does anyone have a Heathkit SB104 extender board laying around.
Please let me know if you do. Will buy or trade.

73 George in Phoenix

--

1325. Re: CD-R's at good prices

Newsgroup: rec.radio.amateur.space
Date: 1997-04-20 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <335a71de.20798614@news.erols.com>
Source record: 19081

On Fri, 18 Apr 1997 16:57:44 GMT, rob@pe1chl (Rob Janssen) wrote:

>
>In <5j7f43$ni9@chile.earthlink.net> mcxv./mv./m@asoiruewoiu.com writes:
>
>
>> The Copy Cat Shop
>> 714-461-5150
>> 714-461-5155 Fax
>
>> Ask for Shelly when calling.
>
>When you live in an area where this phonenumber can be economically
>called, please ask Shelly to slowly burn in hell.
>
>Rob
>--
>+-----------------------------------+---------------------------------------+
>| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
>| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
>+-----------------------------------+---------------------------------------+

Rob -- that is a pretty strong thought. Just what has shell done to
you?

Jim/AC4CZ

1326. Space Station MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-04-20 00:00:00 UTC
From: masa@writeme.com
Message-ID: <335a8132.21875937@news.bctel.ca>
Source record: 19082
Cross-posted to:
rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.digital.misc

I will try to update Space Station MIR Information from now on till
all the problem for contacting to MIR are resolved.

I post the message into this newsgroup, but if you prefer subscribing
the MIR unofficial message (same one as I post), contact me at:
masa@writeme.com

Masataka Noda
Masa@WriteMe.com
http://www.geocities.com/Yosemite/1325/

1327. WTB Auto Tracker unit

Newsgroup: rec.radio.amateur.space
Date: 1997-04-20 00:00:00 UTC
From: "R.E. Dodson WB5APD/4" <rdodson@worldnet.att.net>
Message-ID: <335AAAE6.2C53@worldnet.att.net>
Source record: 19083

Looking for a auto tracker. If you have one for sell let me know
cond/price/accessories included/sftwr version.

Thanks
bob

1328. UNSUBSCRIBE mikespeece@juno.com

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: mikespeece@juno.COM
Message-ID: <19970419.193139.6823.1.mikespeece@juno.com>
Source record: 19084

```
unsubscribe mikespeece@juno.com
unsubscribe mikespeece@juno.com
unsubscribe mikespeece@juno.com
```

1329. Ham sats imagery

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: pga@correio.cc.fc.ul.pt
Message-ID: <5jffnp$50r@master.di.fc.ul.pt>
Source record: 19085

Hi!
I've recently started working on our university's satelite tracking station,
as I am an Ham I would like to use this station to introduce our students to
ham satelite comunication and possibilities. On thing I would like to do is
to get some pictures.
I teach geology and would like to use those pictures as examples of
remote imagery study. I know i can get some pictures on the internet, and I would also
appreciate if someone could send me some addresses, but one of the main goal would be
direct programing and aquisition from the satelite. Could someone
send me info on what satelites (ham sats) have cameras, and what do I need to do to operate
it, and what software do I need.
Our station is currently using Wisp form amsat, and is composed of a kenwood 790 dual band,
yaesu 5600 rotor, 1 linear output amp for 150W, a pre amp. two crossed yagis with mast pre
amps for VHF and UHF, and an MFJ 9600 modem.
Thank you for your attention!
Best '73 de CT2FYW
Pedro

--

+---+
Pedro Gabriel Almeida
e-mail : pga@cc.fc.ul.pt
fax+data+voice : +351 1 938 88 60 28800/14400 8N1
CB : CALIMERO (CQS8351) CH26
HAM : CT2FYW 145.55 434.55 R4 R2X
... e sempre que o Homem sonha,
o mundo pula e avanca ...
Antonio Gedeao
____

1330. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335b5fe6.773535@news.atl.bellsouth.net>
Source record: 19086

On Tue, 08 Apr 1997 07:15:55 -0400, "k.d. tentarelli"
<tentarelli@lucent.com> wrote:

>Gary,
>Thanx for the info. The Yaesu brochure doesn't give a detailed
>explanation of how 736R tuning works. Is it possible to track
>the transmitter and receiver (one on 2 the other on 432) with one
>tuning knob, and then decouple the two to correct for doppler
>shift by tuning only one -- either the tx or rx. If so, can
>it do this even when working through an inverting transponder ?
>
>Tnx, Ken AC1H

The short answer is YES. The radio does track tune, and you can
set it to track upright or inverted transponders at the flip of one
switch.

Gary

1331. (no subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: ac6v@ix.NETcom.COM
Message-ID: <335B69EA.2117@ix.netcom.com>
Source record: 19087

unsubscribe

1332. Re: Ham sats imagery

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970421160700.MAA22568@ladder01.news.aol.com>
Source record: 19088

try
http://members.aol.com/jkktl/ham.htm

1333. HELP with antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: John Mc Hugh <JohnK.Mchugh@worldnet.att.net>
Message-ID: <335C0F53.229A@worldnet.att.net>
Source record: 19089

Hi, I want to install, two yagis a 2m and a 70cm for satellite work.
What should be the minimum horizontal spacing between them?
I have also noticed that many Hams use a fiberglass horizontal boom to
mount these kind of antennas, what is the reason for this, can an
aluminum boom be used?
I would appreciate you valuable input. Thank you.John KF4KWW

1334. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: Charlie Hicks <chicks@ix.netcom.com>
Message-ID: <335BF878.305A@ix.netcom.com>
Source record: 19090

Gary Coffman wrote:
>
> On Tue, 08 Apr 1997 07:15:55 -0400, "k.d. tentarelli"
> <tentarelli@lucent.com> wrote:
>
> >Gary,
> >Thanx for the info. The Yaesu brochure doesn't give a detailed
> >explanation of how 736R tuning works. Is it possible to track
> >the transmitter and receiver (one on 2 the other on 432) with one
> >tuning knob, and then decouple the two to correct for doppler
> >shift by tuning only one -- either the tx or rx. If so, can
> >it do this even when working through an inverting transponder ?
> >
> >Tnx, Ken AC1H
>
> The short answer is YES. The radio does track tune, and you can
> set it to track upright or inverted transponders at the flip of one
> switch.
>
> Gary

So, for 2m + 432 only, would you prefer the FT736R or IC 821H? What features, signal qualities, etc. are better on either for working the birds?

Thanks...

Charlie

--
Charlie Hicks o Systems and Network Consulting
HICKS Systems & Associates, Inc. o Project Management
phone: (402) 339-4545 o Software Development
fax: (402) 339-4242 o Hardware and Software Sales
email: chicks@ix.netcom.com
ARS: WB0LJP
"For by grace you are saved by faith - and this not of yourselves, it is the gift of God - not of works, lest any man boast." Eph 2:8,9

1335. Astronomy Search Category

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: Tom Kuegler <kuegler@skyline.net>
Message-ID: <335C050D.27AD@skyline.net>
Source record: 19091

REX- the search engine now has a section dedicated to astronomy and related topics. Feel free to stop by and search for astronomy sites or add your favorite URL to the fastest growing Web search engine, REX.

http://rex.skyline.net/html/Astronomy.html

1336. Blackout's Box REAL AUDIO pranks are hilarious!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: Blackout <Blackout@wizlink.net>
Message-ID: <5jgpb0$11c@wiznet.wiznet.net>
Source record: 19092

Ok, it may not go in this group but I have to get the word out somehow so
I am letting you know here.

The funniest web site EVER has now officially opened using REAL AUDIO technology.

Blackout's Box
WWW.BLACKOUT.COM

You will laugh, you will cry, you will pee on yourself... you will cough up your lunch
from the intense amount of laughter you will be experiencing.

You MUST check out Blackout's Box at

http://www.blackout.com

Hear the most insane stuff you have ever heard, broadcast to your
computer instantly over the net with REAL AUDIO 3.0 which you can DL
for FREE if you don't have it already. This is not a commercial site or a business
or any other type of advertisement. It is just a very funny and very FREE site that I
want Everyone to know about. If you like Monty Python, Jerky Boys, Howard Stern,
Kids In The Hall, The State, Robin Williams, Who's Line Is It Anyway,
or anything like that - you will love Blackout's Box, there is nothing like it on the net.
Don't let the words 'prank call' scare you away.. this is no 12 year old fun, this is
intensely funny candid phone call radio drama that critics on and off the net are giving
two thumbs up.

Blackout's Box simply kicks ASS, stop whatever work you are doing,
take a break, and check it out now! Life is short - LAUGH some.

Blackout's Box
Insanity On the Net
http://WWW.BLACKOUT.COM

1337. * SpaceNews 21-Apr-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0421.1997@ampr.org>
Source record: 19093
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0421
* SpaceNews 21-Apr-97 *

BID: $SPC0421

=========
SpaceNews
=========

MONDAY APRIL 21, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* GOES-K READY FOR LAUNCH *
==========================
The launch of the GOES-K weather satellite for NASA and the National Oceanic
and Atmospheric Administration (NOAA) aboard a Lockheed Martin Atlas 1 rocket
(AC-79) is scheduled for April 24. Liftoff is targeted to occur at the
opening of a launch window which extends from 1:50 - 3:09 a.m. EDT (0550 to
0709 UTC), a duration of one hour and 19 minutes. Launch will occur from
Pad B at Complex 36 on Cape Canaveral Air Station.

GOES-K is the third spacecraft to be launched in the new advanced series of
geostationary weather satellites for NOAA. The spacecraft is a three-axis
internally stabilized weather satellite which has the dual capability of
providing pictures while performing atmospheric sounding at the same time.
Once in orbit the spacecraft is to be designated GOES-10.

AC-79 marks the final launch of an Atlas 1 rocket, a derivative of the
original Atlas Centaur developed by NASA which had its first successful
launch in 1963. Future launches of GOES weather satellites in the current
series will be on Atlas II vehicles.

NASA Television will carry live the GOES-K/AC-79 Prelaunch Press Conference
on Tuesday, April 22 starting at 1 p.m. (1700 UTC). NASA Television is
available on the GE-2 satellite, Transponder 9C, located at 85 degrees West.

[NASA Press Release via Larry Van Horn]

* OSCAR-10 NEWS *
=================
Several users of the AMSAT-OSCAR-10 Mode B communications transponder have
reported some frequency instability ("FMing") of downlink signals and the
beacon during use. This is probably due to a lack of illumination on the
spacecraft's solar panels. Users are asked to refrain from using AO-10

during such periods.

* OSCAR-11 NEWS *
==========
It has been a quiet month on OSCAR-11. During the period 19-Mar to 16-Apr, good steady signals have been received from OSCAR-11's 145.826 MHz beacon.

Recent telemetry shows that the increasing solar eclipses have continued to reduce the internal temperatures by a further four degrees, now about 12 degrees C below the full sunlight condition. The battery voltage continues to be rather low, in the range 13.3 to 13.8 volts.

The single WOD survey of channels 40, 50, 52, 63, (Array voltage, battery charge, battery voltage, BCR status) dated 22-Feb has been transmitted during this period. A short file of this WOD is available from the Clive Wallis's OSCAR-11 WWW site, and will be updated when the WOD is changed and the maximum amount of data has been received.

Two AMSAT bulletins by Richard G3RWL have been uploaded. Topics have included RS-16 / Zeya information and a Phase-3D progress report. Bulletins always include current Keplerian elements for OSCAR-11, and often for satellites featured in the bulletin.

The operating schedule is unchanged:

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

OSCAR-11 can be heard on 145.825 MHz. Modulation is 1200 baud AFSK, with tones of 1200/2400 Hz. There have been many designs for suitable decoders, including the high performance correlation demodulator (used by ground control), designed by James Miller G3RUH. However, the simplest way is to use an old telephone modem that uses Bell 202 or V23 tones. It is essential to invert the modem's output signal before feeding it into the computer.

It is also possible to use a BAYCOM type modem which does not require any output inversion. Just connect its output to RXD instead of CTS.

Another way is to use a HAMCOM interface instead of a modem. A small program called EM1200M2.COM (which is part of EMBAYCOM) emulates a modem on port 2. Port 1 is used for the terminal display program. Unfortunately, this method uses two COM ports, and can be a little tricky to wire up.

For ASCII, the serial port should be set to 1200,E,7,1. If the port is set up to eight bits, then some filtering of the data will be requiredi before it can be displayed.

Further information and software is contained in file CTERM.ZIP, which
can be downloaded from the following URL:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV g3cwv@amsat.org]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-
Linux: Turns your PC into a workstation. NT: Turns your workstation into a PC.

1338. NORAD Two-Line Orbital Element Sets (TLE982)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-21 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5jguv0$1r6@blackbird.afit.af.mil>
Source record: 19094

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #982 -
Alouette 1
1 00424U 62049A 97108.08631063 .00000065 00000-0 66545-4 0 2829
2 00424 80.4660 342.9009 0023619 331.9978 27.9898 13.67892457724024
ATS 1
1 02608U 66110A 97106.94703583 -.00000107 00000-0 10000-3 0 143
2 02608 14.5337 349.5726 0006994 99.1380 260.9129 1.00287797 27914
ATS 3
1 03029U 67111A 97109.27049413 -.00000117 00000-0 10000-3 0 6458
2 03029 14.9026 356.4882 0008097 280.2446 282.7677 1.00272849107835
Starlette
1 07646U 75010A 97107.21293430 -.00000130 00000-0 10494-4 0 486
2 07646 49.8249 28.9730 0205546 154.5590 206.5591 13.82191926121016
LAGEOS
1 08820U 76039A 97107.48736972 .00000032 00000-0 00000+0 0 2798
2 08820 109.8321 130.2790 0043308 61.9697 298.5358 6.38664243233260
ETS-2
1 09852U 77014A 97102.24488100 -.00000291 00000-0 10000-3 0 1077
2 09852 13.5971 29.5554 0004540 145.8383 214.1324 1.00000592 20632
GOES 2
1 10061U 77048A 97109.56957674 .00000052 00000-0 10000-3 0 8225
2 10061 12.7630 33.6376 0012769 121.6103 81.1301 1.00268781 17517
IUE
1 10637U 78012A 97109.39536082 -.00000155 00000-0 10000-3 0 3807
2 10637 35.9591 78.6746 1353814 65.6852 357.9858 1.00083633 23000
GOES 3
1 10953U 78062A 97109.29846061 -.00000090 00000-0 10000-3 0 7995
2 10953 11.7748 36.6183 0000250 274.8531 255.8680 1.00265837 22125

```
SeaSat 1
1 10967U 78064A 97110.88023977 .00000020 00000-0 51176-4 0 5688
2 10967 107.9947 91.4288 0002750 255.9961 104.0876 14.38165052985682
Nimbus 7
1 11080U 78098A 97108.56971794 -.00000011 00000-0 27218-4 0 6630
2 11080 98.9037 321.3152 0008166 224.2945 135.7544 13.83683916933400
GOES 5
1 12472U 81049A 97108.89670819 -.00000002 00000-0 10000-3 0 9954
2 12472 8.6788 47.1544 0004275 72.6933 287.3131 1.00331370 16165
Cosmos 1383
1 13301U 82066A 97109.98596870 .00000038 00000-0 26642-4 0 5809
2 13301 82.9279 268.8352 0028653 112.4229 247.9963 13.68082685739327
LandSat 4
1 13367U 82072A 97109.14221323 .00000037 00000-0 17852-4 0 610
2 13367 98.0342 156.0239 0005847 273.9347 86.1182 14.57202516785091
DMSP B5D2-1
1 13736U 82118A 97111.22638597 .00000083 00000-0 53352-4 0 2212
2 13736 98.6200 300.6357 0007664 205.5644 154.5158 14.25829356744964
IRAS
1 13777U 83004A 97111.04880255 -.00000246 00000-0 -13913-3 0 6419
2 13777 98.9714 296.0747 0013094 327.5536 32.4821 13.99270207396422
Cosmos 1447
1 13916U 83021A 97107.68056789 .00000063 00000-0 50520-4 0 6720
2 13916 82.9457 325.8286 0039214 25.2033 335.1023 13.74355408705565
TDRS 1
1 13969U 83026B 97110.37720066 -.00000293 00000-0 10000-3 0 7364
2 13969 9.4215 40.7358 0002193 357.3566 257.4790 1.00276191 24465
GOES 6
1 14050U 83041A 97110.37467047 .00000039 00000-0 10000-3 0 6502
2 14050 7.5345 50.7982 0003886 56.2761 109.3935 1.00235284109273
AO-10
1 14129U 83058B 97108.42650919 .00000091 00000-0 10000-3 0 4722
2 14129 25.8265 152.2714 6072518 109.7301 322.5753 2.05879408 76158
LandSat 5
1 14780U 84021A 97108.19151435 -.00000136 00000-0 -19945-4 0 6057
2 14780 98.2931 171.3029 0003740 66.5847 293.5743 14.57073961698376
UO-11
1 14781U 84021B 97110.97478484 .00000117 00000-0 27642-4 0 9663
2 14781 97.8298 94.5120 0011332 181.0820 179.0361 14.69543452702859
Cosmos 1574
1 15055U 84062A 97108.23384782 .00000055 00000-0 42521-4 0 8726
2 15055 82.9578 20.9666 0026097 210.3699 149.5945 13.73647211642868
Cosmos 1602
1 15331U 84105A 97109.54303446 .00000286 00000-0 30620-4 0 5544
2 15331 82.5346 185.9848 0021412 19.6840 340.5185 14.84870416678431
ERBS
1 15354U 84108B 97107.84594127 -.00000030 00000-0 18894-4 0 2703
2 15354 56.9948 240.6443 0008469 78.3402 281.8580 14.95032748682400
NOAA 9
1 15427U 84123A 97110.77460381 .00000054 00000-0 51889-4 0 1133
```

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2 15427 98.9086 181.2454 0014914 158.5327 201.6472 14.13851350637094
Mir
1 16609U 86017A 97110.75557622 .00003310 00000-0 47779-4 0 2124
2 16609 51.6557 14.3307 0009379 277.7707 82.2204 15.59204439638069
SPOT 1
1 16613U 86019A 97109.23613550 -.00000044 00000-0 00000+0 0 586
2 16613 98.7929 182.1007 0002087 83.9012 276.2405 14.19999885263743
Cosmos 1766
1 16881U 86055A 97110.43353445 .00000304 00000-0 33572-4 0 4702
2 16881 82.5168 242.7502 0020995 45.2125 315.0789 14.83842849579401
EGP
1 16908U 86061A 97110.21097408 -.00000083 00000-0 10000-3 0 1712
2 16908 50.0083 133.0812 0011361 73.3342 286.8739 12.44416171154637
NOAA 10
1 16969U 86073A 97110.81170788 .00000026 00000-0 29244-4 0 447
2 16969 98.5428 105.3432 0012664 171.0292 189.1118 14.25026356550416
MOS-1
1 17527U 87018A 97108.22915743 -.00000043 00000-0 00000+0 0 5324
2 17527 98.8900 168.8659 0018548 204.0470 155.9831 14.00425907517685
GOES 7
1 17561U 87022A 97110.34024896 -.00000154 00000-0 10000-3 0 3442
2 17561 3.6655 67.3233 0005110 306.3611 221.6619 1.00261331 20385
Kvant-1
1 17845U 87030A 97110.81967491 -.00013862 00000-0 -16688-3 0 9653
2 17845 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474572186
DMSP B5D2-3
1 18123U 87053A 97110.79988244 .00000008 00000-0 26365-4 0 8822
2 18123 98.7643 301.9771 0015190 95.3456 264.9462 14.15473205508019
RS-10/11
1 18129U 87054A 97110.06432726 -.00000003 00000-0 -19903-4 0 3415
2 18129 82.9225 281.6937 0012886 28.3441 331.8382 13.72376745492260
Meteor 2-16
1 18312U 87068A 97109.54290544 .00000041 00000-0 23644-4 0 5582
2 18312 82.5538 109.0967 0014149 79.6968 280.5786 13.84094744488554
Meteor 2-17
1 18820U 88005A 97110.55920915 .00000009 00000-0 -55292-5 0 2355
2 18820 82.5436 162.5912 0017516 138.5830 221.6664 13.84772839466064
DMSP B5D2-4
1 18822U 88006A 97110.83538373 .00000046 00000-0 38464-4 0 5109
2 18822 98.3823 294.2063 0005671 177.8684 182.2533 14.23224006478335
Glonass 34
1 19163U 88043A 97108.07645218 .00000013 00000-0 10000-3 0 1733
2 19163 65.3856 75.5719 0010415 153.4237 206.6322 2.13102272 68730
Glonass 36
1 19165U 88043C 97109.07229000 .00000009 00000-0 10000-3 0 5798
2 19165 65.3704 75.4840 0007116 320.0433 39.8864 2.13101895 69370
METEOSAT 3
1 19215U 88051A 97109.90535936 -.00000056 00000-0 00000+0 0 3148
2 19215 3.8811 66.1505 0003904 160.0231 200.0393 0.96946993 20153
OKEAN 1
```

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1 19274U 88056A 97107.17798081 .00000283 00000-0 32114-4 0 1681
2 19274 82.5150 347.0340 0018628 199.6247 160.4252 14.82605932474410
Meteor 3-2
1 19336U 88064A 97111.07539147 .00000051 00000-0 10000-3 0 5663
2 19336 82.5382 308.5565 0016202 182.2842 177.8208 13.16981336420002
Glonass 39
1 19503U 88085C 97107.69553344 -.00000022 00000-0 10000-3 0 4624
2 19503 65.4516 314.4500 0005013 151.7175 208.3465 2.13101896 66832
NOAA 11
1 19531U 88089A 97110.80969395 -.00000013 00000-0 17993-4 0 9313
2 19531 99.1625 142.5362 0012689 95.4006 264.8610 14.13128543441891
TDRS 3
1 19548U 88091B 97107.83636917 -.00000200 00000-0 10000-3 0 2811
2 19548 3.0997 70.2939 0008477 210.2347 311.8736 1.00271038 18585
Glonass 40
1 19749U 89001A 97108.20194136 .00000012 00000-0 10000-3 0 6746
2 19749 65.3416 75.0670 0007776 256.8119 103.0858 2.13101539 64359
Glonass 41
1 19750U 89001B 97107.78739705 .00000013 00000-0 10000-3 0 5848
2 19750 65.3516 75.1457 0008739 233.8309 126.0783 2.13101734 64362
GPS BII-01
1 19802U 89013A 97110.27006750 .00000037 00000-0 00000+0 0 4002
2 19802 55.4725 98.4093 0044004 203.9987 155.8204 2.00569262 59879
Akebono
1 19822U 89016A 97110.98372368 .00005823 00000-0 31695-3 0 9030
2 19822 75.1035 304.3536 3717834 232.7508 87.3466 7.97038908191140
Meteor 2-18
1 19851U 89018A 97109.21199696 .00000058 00000-0 38609-4 0 5550
2 19851 82.5212 37.0677 0013285 191.8374 168.2477 13.84429776411178
MOP-1
1 19876U 89020B 97105.19926012 -.00000177 00000-0 00000+0 0 2563
2 19876 2.6076 70.8038 0019120 285.1381 74.7906 0.97110851 9555
TDRS 4
1 19883U 89021B 97104.00000000 -.00000286 00000-0 10000-3 0 3243
2 19883 0.4954 86.5350 0002282 311.7763 122.9294 1.00270946202127
GPS BII-02
1 20061U 89044A 97110.11186835 -.00000033 00000-0 10000-3 0 3877
2 20061 54.0092 273.7173 0165808 222.9342 135.7258 2.00562927 57616
Nadezhda 1
1 20103U 89050A 97109.45320719 .00000038 00000-0 24678-4 0 1179
2 20103 82.9584 242.7882 0036410 281.8598 77.8474 13.73876915390731
GPS BII-03
1 20185U 89064A 97106.32273701 .00000036 00000-0 00000+0 0 4141
2 20185 55.2687 98.9579 0019870 338.3512 21.5697 2.00558136 56111
GMS 4
1 20217U 89070A 97110.37918403 -.00000369 00000-0 10000-3 0 5617
2 20217 2.4246 73.5058 0001618 178.8083 212.9332 1.00275902 28504
INTERCOSMOS 24
1 20261U 89080A 97108.92660303 .00000240 00000-0 64542-4 0 5818
2 20261 82.5895 75.4365 1242868 66.4101 306.2453 12.47400634344026
```

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GPS BII-04
1 20302U 89085A 97110.47224662 -.00000022 00000-0 10000-3 0 4060
2 20302 53.1712 213.3997 0034476 192.5516 167.3686 2.00570127 54993
Meteor 3-3
1 20305U 89086A 97110.93306260 .00000044 00000-0 10000-3 0 7954
2 20305 82.5452 271.8071 0005782 283.0927 76.9513 13.04439868358325
COBE
1 20322U 89089A 97108.50670058 -.00000221 00000-0 -11340-3 0 2980
2 20322 98.9313 124.4225 0008069 268.5121 91.5122 14.03463615379756
Kvant-2
1 20335U 89093A 97110.81967491 -.00013862 00000-0 -16688-3 0 8730
2 20335 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474421198
GPS BII-05
1 20361U 89097A 97110.99475209 -.00000067 00000-0 00000+0 0 2073
2 20361 56.1748 41.1253 0093759 136.1807 224.5415 2.00567486 44481
COSMOS 2054 (Altair-1)
1 20391U 89101A 97105.64958154 -.00000148 00000-0 00000+0 0 5302
2 20391 4.4106 61.5764 0001673 242.5264 117.4508 1.00268534 27030
SPOT 2
1 20436U 90005A 97110.56052870 -.00000044 00000-0 00000+0 0 2137
2 20436 98.7294 186.0578 0001532 106.9627 253.1718 14.20028622375462
UO-14
1 20437U 90005B 97110.79138267 .00000025 00000-0 26458-4 0 2631
2 20437 98.5197 193.6965 0011734 20.9737 339.1924 14.29956743378010
AO-16
1 20439U 90005D 97110.24828886 .00000022 00000-0 25123-4 0 594
2 20439 98.5365 195.9693 0012092 22.9682 337.2032 14.30004825377959
DO-17
1 20440U 90005E 97109.19055550 .00000061 00000-0 40333-4 0 614
2 20440 98.5418 195.7543 0012246 25.1769 335.0006 14.30147777377832
WO-18
1 20441U 90005F 97110.79627545 .00000006 00000-0 18893-4 0 640
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Meteor 2-20
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Glonass 59
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NOAA 13
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2 23439 64.8144 249.4003 0151109 143.5596 217.5725 11.27526343 95201
NOAA 14
1 23455U 94089A 97110.83109778 .00000149 00000-0 10662-3 0 128
2 23455 98.9846 62.0040 0010534 91.1234 269.1151 14.11661837118856
Glonass 71
1 23511U 95009A 97108.73730004 -.00000002 00000-0 00000+0 0 3259
2 23511 64.5416 313.4928 0004892 212.3671 147.6423 2.13104160 16489
Glonass 72
1 23512U 95009B 97110.26710969 -.00000002 00000-0 00000+0 0 3259
2 23512 64.5321 313.4406 0006328 338.9078 21.0973 2.13101462 16519
Glonass 73
1 23513U 95009C 97110.55723122 -.00000002 00000-0 00000+0 0 3549
2 23513 64.5376 313.4484 0012019 198.7452 161.2484 2.13103383 16527
GMS 5
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1 23522U 95011B 97110.32602853 -.00000291 00000-0 10000-3 0 2458
2 23522 0.4463 15.8817 0001822 170.7879 279.1292 1.00265721 7536
DMSP B5D2-8
1 23533U 95015A 97110.66545926 .00000031 00000-0 40166-4 0 9431
2 23533 98.8486 115.2722 0006161 267.0061 93.0404 14.12784781107042
OSC 1
1 23545U 95017A 97108.48618537 .00000132 00000-0 54322-4 0 2155
2 23545 69.9720 181.6066 0011514 125.8514 234.3662 14.45511191107770
OSC 2
1 23546U 95017B 97110.24881933 -.00000031 00000-0 82528-5 0 2503
2 23546 69.9770 177.7746 0010198 111.4751 248.7458 14.45528194108031
Microlab 1
1 23547U 95017C 97108.23514990 .00000124 00000-0 52111-4 0 1871
2 23547 69.9774 182.0757 0011150 118.4584 241.7655 14.45680437107756
OFEQ 3
1 23549U 95018A 97111.24900823 .00023932 00000-0 53275-3 0 5218
2 23549 143.3620 316.4704 0194987 227.1751 131.2428 15.24010596113225
GFZ-1
1 23558U 86017JE 97108.22360083 .00003805 00000-0 44493-4 0 2283
2 23558 51.6490 12.2174 0004618 298.3724 61.6806 15.64402462637727
ERS-2
1 23560U 95021A 97109.19867190 .00000046 00000-0 33053-4 0 3565
2 23560 98.5430 184.8440 0000989 66.6641 293.4647 14.32251440104377
Spektr
1 23579U 95024A 97110.81967491 -.00013862 00000-0 -16688-3 0 6260
2 23579 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474109509
GOES 9
1 23581U 95025A 97107.09112730 .00000000 00000-0 10000-3 0 3625
2 23581 0.1923 103.2237 0006205 215.2198 144.7411 1.00264622 6972
Helios 1A
1 23605U 95033A 97109.57887072 .00000126 00000-0 33195-4 0 4940
2 23605 98.1500 47.3491 0001638 55.7620 304.3754 14.63833600 95387
UPM SAT 1
1 23606U 95033B 97108.88874908 .00000281 00000-0 58315-4 0 2679
2 23606 98.1311 48.7416 0007201 307.9083 52.1448 14.67382287 95547
CERISE
1 23607U 95033C 97109.36401369 .00000110 00000-0 28356-4 0 1695
2 23607 98.1332 48.9623 0005496 305.2379 54.8310 14.67015373 95621
TDRS 7
1 23613U 95035B 97109.51277185 .00000090 00000-0 00000+0 0 3227
2 23613 1.3164 81.6443 0003601 314.0077 185.3627 1.00266823 6455
Glonass 74
1 23620U 95037A 97107.99464663 -.00000017 00000-0 00000+0 0 2742
2 23620 64.8177 193.7728 0018288 169.4286 190.6488 2.13102899 13508
Glonass 75
1 23621U 95037B 97108.17284132 -.00000014 00000-0 00000+0 0 2854
2 23621 64.8255 193.7750 0018273 181.2867 178.7513 2.13102362 13503
Glonass 76
1 23622U 95037C 97110.10774679 .00000012 00000-0 00000+0 0 2915
2 23622 64.8173 193.7055 0036309 166.7469 193.4013 2.13102623 13540
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Prognoz-M2
1 23632U 95039A 97110.40536290 -.00001514 00000-0 00000+0 0 1251
2 23632 71.7390 247.2810 7468927 329.1550 355.2060 0.26372925 1667
SICH-1
1 23657U 95046A 97110.88470774 .00000092 00000-0 10577-4 0 1627
2 23657 82.5300 277.3212 0028596 127.5945 232.7869 14.73545769 88149
RADARSAT
1 23710U 95059A 97111.07129949 .00000142 00000-0 72025-4 0 2610
2 23710 98.5804 119.3743 0001264 72.7360 287.3960 14.29976181 76247
Glonass 79
1 23734U 95068A 97107.87970293 -.00000018 00000-0 00000+0 0 2707
2 23734 64.8185 193.6972 0018327 321.9547 37.9564 2.13102139 10469
Glonass 78
1 23735U 95068B 97110.40573672 .00000016 00000-0 00000+0 0 2584
2 23735 64.8087 193.5984 0007930 218.5430 141.4536 2.13125229 10514
Glonass 77
1 23736U 95068C 97108.11410376 -.00000015 00000-0 00000+0 0 2468
2 23736 64.8079 193.6888 0007702 204.0607 155.9550 2.13102374 10469
XTE
1 23757U 95074A 97110.23533003 .00000605 00000-0 21448-4 0 1419
2 23757 22.9867 121.4793 0014091 135.1160 225.0469 14.97813729 71556
Polar
1 23802U 96013A 97100.63068858 .00000076 00000-0 00000+0 0 1304
2 23802 86.3823 22.8042 6542573 271.5552 20.1735 1.36264707 5610
1996010E
1 23824U 96010E 97110.91597909 .00014065 00000-0 71271-2 0 2115
2 23824 47.4276 157.7813 6816973 115.9738 325.9148 2.85343659 10128
GPS BIIA-25
1 23833U 96019A 97110.52114787 -.00000052 00000-0 00000+0 0 1750
2 23833 54.6267 335.4629 0028031 142.0237 218.3042 2.00565510 7849
Priroda
1 23848U 96023A 97110.81967491 -.00013862 00000-0 -16688-3 0 3154
2 23848 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474 56598
MSX
1 23851U 96024A 97108.88289535 -.00000047 00000-0 00000+0 0 2245
2 23851 99.4127 101.0273 0009054 35.6420 324.5343 13.97394261 50199
SAX
1 23857U 96027A 97106.31576983 .00001491 00000-0 71004-4 0 682
2 23857 3.9570 59.9995 0014725 79.4869 280.6892 14.91792126 52485
MSTI 3
1 23868U 96031A 97109.55279499 .00003202 00000-0 65272-4 0 1335
2 23868 97.1178 300.6965 0010169 124.5824 235.6387 15.46912887 52163
TOMS-EP
1 23940U 96037A 97106.92574978 .00003341 00000-0 14780-3 0 1049
2 23940 97.4203 14.6414 0013780 5.7349 354.4028 15.22298373 43827
GPS BIIA-26
1 23953U 96041A 97105.95389441 .00000031 00000-0 00000+0 0 1307
2 23953 55.1632 96.1394 0059985 323.3677 36.1590 2.00556412 5548
ADEOS
1 24277U 96046A 97110.22235701 -.00000044 00000-0 00000+0 0 1638
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2 24277 98.6001 188.6648 0000719 94.6894 265.4379 14.27650623 35095
FO-29
1 24278U 96046B 97109.55677694 -.00000001 00000-0 37179-4 0 728
2 24278 98.5472 158.7664 0351821 338.3003 20.3519 13.52629885 33192
FAST
1 24285U 96049A 97107.37866737 .00001633 00000-0 15806-3 0 829
2 24285 82.9812 67.2872 2206847 100.4141 285.1226 10.81971523 25847
1996049B
1 24286U 96049B 97107.94565022 .00001838 00000-0 17664-3 0 928
2 24286 82.9973 67.1707 2205706 99.0038 286.5201 10.82398066 25904
Microsat
1 24291U 96050A 97111.03243523 .00047358 65384-5 34900-3 0 1785
2 24291 62.7955 328.0878 0551092 141.3702 222.8185 14.78759422 34475
MO-30
1 24305U 96052B 97110.36269570 .00000204 00000-0 20364-3 0 942
2 24305 82.9230 37.3036 0032340 7.8647 352.2964 13.73092366 31124
GPS BIIA-27
1 24320U 96056A 97090.85289143 .00000025 00000-0 00000+0 0 742
2 24320 54.6058 276.7729 0050667 93.4440 267.1164 2.00550612 3909
SAC-B/HETE
1 24645U 96061A 97109.67683485 .00000790 00000-0 46817-4 0 601
2 24645 37.9748 211.9598 0047320 185.9834 174.0369 15.14970774 25181
Soyuz TM-25
1 24717U 97003A 97110.81967491 -.00013862 00000-0 -16688-3 0 527
2 24717 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474638073
ZEYA
1 24744U 97010A 97110.78903302 .00003218 00000-0 10946-3 0 312
2 24744 97.2788 16.9234 0006084 305.8225 54.2451 15.31145148 7306
DMSP B5D2-9
1 24753U 97012A 97110.81940931 .00000102 00000-0 78811-4 0 20
2 24753 98.9386 155.2204 0008314 208.2443 151.8274 14.12970632 2289
1997012B
1 24756U 97012B 97108.12781031 .00000485 00000-0 28359-3 0 157
2 24756 98.9409 152.5359 0004841 168.5030 191.6295 14.13056420 1779
Progress M-34
1 24757U 97014A 97110.81967491 -.00013862 00000-0 -16688-3 0 275
2 24757 51.6558 14.0125 0009443 278.7805 81.2337 15.59188474 2229
Cosmos 2340
1 24761U 97015A 97109.84379593 .00000315 00000-0 15839-1 0 230
2 24761 62.9242 280.3493 7395403 315.6622 4.0045 2.00610593 214
1997015B
1 24762U 97015B 97110.84521825 .00287744 34714-4 65108-3 0 232
2 24762 62.8296 238.7098 0155467 119.3291 242.3342 15.79491651 1815
1997015C
1 24763U 97015C 97111.25284020 .00539229 77025-5 63853-3 0 283
2 24763 62.8522 237.3580 0201407 118.1597 243.9988 15.79357956 1879
1997015D
1 24764U 97015D 97107.79339633 .00001414 00000-0 13282-1 0 68
2 24764 63.0362 280.4777 7365139 315.9203 4.7524 2.03146126 172
1997012C
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1 24765U 97012C 97109.12142547 .00000641 00000-0 36903-3 0 25
2 24765 98.9367 153.5153 0005257 146.9314 213.2188 14.12833488 1039
THAICOM 3
1 24768U 97016A 97111.06599537 .00003949 00000-0 58259-3 0 69
2 24768 7.0207 8.5025 7292838 181.2127 121.2457 2.28310625 96
BSAT 1A
1 24769U 97016B 97111.15175964 -.00000339 00000-0 00000+0 0 84
2 24769 0.2714 241.0028 0105785 342.5221 151.9815 1.01813980 85
1997016C
1 24770U 97016C 97109.86648862 .00003844 00000-0 12625-2 0 30
2 24770 7.0577 8.5417 7309164 180.6168 177.0017 2.24566106 75
1997016D
1 24771U 97016D 97108.51528420 .00068162 00000-0 98957-2 0 46
2 24771 7.0198 9.5555 7292897 179.0859 183.7231 2.28173222 37
Cosmos 2341
1 24772U 97017A 97110.88713407 .00000758 00000-0 83155-3 0 112
2 24772 82.9174 67.1601 0024418 252.0490 107.7952 13.71024491 459
1997017B
1 24773U 97017B 97111.02916368 .00000239 00000-0 24403-3 0 82
2 24773 82.9187 67.0485 0017858 242.0041 117.9194 13.72596028 478
1997012D
1 24777U 97012D 97110.53606073 .00001018 00000-0 56987-3 0 72
2 24777 98.9376 154.9305 0008485 219.1411 140.9151 14.13004975 355
1997012E
1 24778U 97012E 97109.54482122 -.00000154 00000-0 -58401-4 0 75
2 24778 98.9453 153.9466 0008576 215.5211 144.5400 14.12958913 219
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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1339. (no subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-22 00:00:00 UTC
From: ac6v@ix.NETcom.COM
Message-ID: <335CD1BB.54C2@ix.netcom.com>
Source record: 19095

unsubscribe

1340. Re: Please help a new saetllite starter

Newsgroup: rec.radio.amateur.space
Date: 1997-04-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335cf988.15184363@news.atl.bellsouth.net>
Source record: 19096

On Mon, 21 Apr 1997 18:30:00 -0500, Charlie Hicks
<chicks@ix.netcom.com> wrote:
>
>So, for 2m + 432 only, would you prefer the FT736R or IC 821H? What
>features, signal qualities, etc. are better on either for working the
>birds?

I've never used the IC821H on the satellites, Charlie, so I can't
really comment on it. I have used the Icom Twins, IE IC275 and
IC475, and they are *great*. That's what I'd be using instead of
the FT736R except for the *cost*.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1341. Re: HELP with antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-04-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335cfa6d.15413368@news.atl.bellsouth.net>
Source record: 19097

On Mon, 21 Apr 1997 18:07:32 -0700, John Mc Hugh
<JohnK.Mchugh@worldnet.att.net> wrote:

>Hi, I want to install, two yagis a 2m and a 70cm for satellite work.
>What should be the minimum horizontal spacing between them?
>I have also noticed that many Hams use a fiberglass horizontal boom to
>mount these kind of antennas, what is the reason for this, can an
>aluminum boom be used?
>I would appreciate you valuable input. Thank you.John KF4KWW

The minimum spacing is one where the elements of the two antennas
don't overlap. Optimum is more like 1 wavelength at the lower
frequency. The reason for using non-metallic cross booms is to avoid
distorting the antenna pattern circularity by having metal in the near
field.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1342. Re: TOP SECRET Radio Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-04-22 00:00:00 UTC
From: kk5dr@io.com
Message-ID: <5jira0$823$2@nntp-2.io.com>
Source record: 19098

A frequency is only classified, so long as it is not used, them it is no longer classified.

1343. ARLK031 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-22 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk031.1997@arrl.org>
Source record: 19099
Cross-posted to: rec.radio.info,rec.radio.amateur.space

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SB KEP @ ARL $ARLK031
ARLK031 Keplerian data

ZCZC SK31
QST de W1AW
Keplerian Bulletin 31 ARLK031
From ARRL Headquarters
Newington, CT April 22, 1997
To all radio amateurs

SB KEP ARL ARLK031
ARLK031 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97111.33997046 .00000228 00000-0 10000-3 0 04767
2 14129 25.8312 151.7685 6072451 110.5512 321.9371 2.05878964076214
RS-10/11
1 18129U 87054A 97111.95991285 .00000045 00000-0 32237-4 0 03536
2 18129 82.9222 280.2914 0012821 23.6432 336.5315 13.72377235492526
UO-11
1 14781U 84021B 97112.06421833 .00000096 00000-0 24056-4 0 09742
2 14781 97.8301 95.5575 0011353 177.6724 182.4530 14.69543567703018
RS-12/13
1 21089U 91007A 97112.07693620 .00000034 00000-0 19740-4 0 09767
2 21089 82.9220 320.2667 0030724 92.4878 267.9796 13.74079953311453
UO-14
1 20437U 90005B 97112.12085269 .00000039 00000-0 31956-4 0 02716
2 20437 98.5196 194.9972 0011752 16.8956 343.2629 14.29957082378204
RS-15
1 23439U 94085A 97111.84152312 -.00000039 00000-0 10000-3 0 02330
2 23439 64.8165 243.9524 0150873 142.9043 218.2423 11.27526452095583
AO-16
1 20439U 90005D 97112.13747267 -.00000004 00000-0 15278-4 0 00699
2 20439 98.5366 197.8217 0012010 17.8291 342.3314 14.30004728378225
RS-16
1 24744U 97010A 97112.03073585 .00003000 00000-0 10220-3 0 00430
2 24744 97.2791 18.1424 0005972 301.2249 58.8400 15.31151756007492
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DO-17
1 20440U 90005E 97112.12899336 -.00000008 00000-0 13809-4 0 00844
2 20440 98.5416 198.6374 0012123 16.9486 343.2121 14.30147367378253
WO-18
1 20441U 90005F 97112.12559845 -.00000011 00000-0 12648-4 0 00724
2 20441 98.5405 198.5408 0012723 16.8284 343.3322 14.30114973378251
LO-19
1 20442U 90005G 97112.02742078 .00000035 00000-0 30351-4 0 00788
2 20442 98.5445 199.0830 0012972 15.6947 344.4635 14.30229464378262
FO-20
1 20480U 90013C 97111.97545361 .00000002 00000-0 70329-4 0 09779
2 20480 99.0405 84.1545 0541160 144.6635 219.1616 12.83237706337497
AO-21
1 21087U 91006A 97112.00615124 .00000094 00000-0 82657-4 0 08267
2 21087 82.9358 93.1560 0037461 65.4952 295.0102 13.74580865312430
UO-22
1 21575U 91050B 97112.12698501 .00000015 00000-0 19288-4 0 07757
2 21575 98.3102 174.6382 0008589 62.0204 298.1855 14.37065885302437
KO-23
1 22077U 92052B 97111.84231620 -.00000037 00000-0 10000-3 0 06623
2 22077 66.0794 263.2072 0011774 227.2380 132.7649 12.86302382220504
KO-25
1 22828U 93061F 97112.15939224 .00000033 00000-0 30399-4 0 05299
2 22828 98.5448 187.9284 0010983 33.3051 326.8823 14.28175213154216
IO-26
1 22826U 93061D 97111.83135246 .00000004 00000-0 19135-4 0 05588
2 22826 98.5441 187.5270 0009878 50.7925 309.4128 14.27832934186042
AO-27
1 22825U 93061C 97112.13891254 .00000001 00000-0 17767-4 0 05710
2 22825 98.5492 187.5983 0009651 47.1527 313.0465 14.27723385186072
FO-29
1 24278U 96046B 97112.14562013 -.00000005 00000-0 33545-4 0 00946
2 24278 98.5472 161.0046 0351770 331.6010 26.6343 13.52630028033544
MO-30
1 24305U 96052B 97111.82008030 .00000204 00000-0 20364-3 0 01015
2 24305 82.9219 36.2251 0032213 4.8762 355.2631 13.73092392031327
Mir
1 16609U 86017A 97112.55016834 .00001609 00000-0 26562-4 0 2147
2 16609 51.6567 5.3220 0009275 285.2024 74.7861 15.59210271638342

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
April 26, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
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1344. Mir Crew May Have to Evacuate

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: Mike Cat <anti@spam.address>
Message-ID: <335DFF70.6BCE@spam.address>
Source record: 19100

This email was being circulated about on Tuesday afternoon.

Tuesday April 22 3:45 PM EDT

Mir Crew May Have to
Evacuate

KOROLYOV, Russia (Reuter) - The
Russian-American crew on Russia's 11-year-old Mir
space station are struggling with a leak of antifreeze
vapor and may have to abandon ship, mission control
said Tuesday.

Spokesman Viktor Blagov said that at the moment
there was no reason to evacuate Mir, but added:
"The team is continuing its repairs. It's a difficult task
and if it cannot be solved Mir might be abandoned by
the cosmonauts."

Speaking from space, NASA astronaut Jerry Lineger
said he and his two Russian colleagues had almost
abandoned ship twice in the past few months.

Blagov, deputy head of the flight program, said the
cosmonauts had repaired two leaks in the cooling
system with special glue but had yet to find a third
through which antifreeze was escaping into Mir's air
supply.

"It's on the limit of what is acceptable," he told a
news conference, adding that it was not clear how
dangerous the concentration of antifreeze vapor was.

"We immediately told NASA about the defects on
the station and the American specialists are kept
continually informed about what is happening on
Mir," he added.

He said an urgent evacuation of the cosmonauts
could be ordered from ground control or by the
space station commander.

"That could happen if there's a big fire on the station
or if there is decompression," Blagov said, adding
that the men could reach Earth in an hour using the
Soyuz rocket which is now docked with Mir.

"Mir orbits Earth 16 times in a 24-hour period. Three of them are over the region of the launchpad in Kazakhstan, where everything is ready for a search for the cosmonauts," he said.

The Mir crew could also return to Earth in any other orbit, he added. "But in that case the place of touchdown could be in France, Ukraine, Britain, Asia or the United States."

The leaks, which occurred during the past month, are the most serious so far on the station, which has also suffered four fires while in orbit, the last in February.

Blagov said that leaks had been caused by electric cables touching the pipe carrying anti-freeze to the cooling system. He said that 1.6 liters of antifreeze had leaked out. A liter is about a quart.

In the Kvant module where the main cooling system equipment was, the temperature had soared to between 79 to 88 degrees, which was bad for the cosmonauts trying to carry out repairs and could damage equipment for scientific experiments stored there.

Igor Goncharov, specialist for medical emergencies on the orbiting station, said the crew's morale had been hit by the high temperature and stress suffered by the cosmonauts as a result of a fire Feb. 23.

"They complained of insomnia but an analysis of their blood and urine did not show any abnormalities in their organisms," Goncharov said, adding that the men had interrupted their sleep patterns by working through several nights.

"Now they have been given strict instructions to go to bed at 11 p.m. and wake up at eight in the morning," Goncharov said. The cosmonauts had also resumed their physical exercises.

In four of Mir's six modules, living conditions were normal. "The team spends most of its time in safe sections," he said.

Mike Cat
catman@codem.com

1345. mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: jedentxpoz@phoenix.net
Message-ID: <jedentxpoz.166.0019B15B@phoenix.net>
Source record: 19101

Looks like Mir will have to be abandoned soon. So who wants to set up a pool as to where it will crash land?

1346. New satellite station

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: Nathan Gordon <nathang@bigfoot.com>
Message-ID: <01bc4fe2$d0dd52a0$dff489cc@Sheaffer.mcs.net>
Source record: 19102

Hello, I have been reading about satellite operations and would like to give it a try.

Does anyone know where to start? I have an HF rig and would be happy to buy used equipment if it is available.

Also, would it be better to buy a multimode VHF UHF rig or build transverters and hook them up to my HF radio. I am primarily interested in operating CW and possibly digital, and am not sure what equipment is necessary.

Finally, are there any books that would be helpful for a new guy?

Thank you in advance for your help.

73,
Nathan Gordon KF9LI
nathang@bigfoot.com

1347. ? Rotor Tracking Software GS232

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: cwalthal@mail.delcoelect.com
Message-ID: <5jl5pm$gjg@koinsw08.delcoelect.com>
Source record: 19103

Hi

And thanks for reading this Post, I purchased a Yeasu rotor
and GS232 computer interface. I can not find anyone who sells
automatic tracking software for this rotor. I have found that
most software is for the Kanas City tracker. Does anyone know
if software for the KC Tracker will work with the GS232 or
can I replace the rom in the GS232 to work with this driver.....

Thanks in advance
Carl e-mail n3qom@netusa1.net
cwalthal@eng.delcoelect.com

1348. ? Rotor Tracking Software GS232

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: cwalthal@mail.delcoelect.com
Message-ID: <5jl5t4$gjm@koinsw08.delcoelect.com>
Source record: 19104

Hi

And thanks for reading this Post, I purchased a Yeasu rotor
and GS232 computer interface. I can not find anyone who sells
automatic tracking software for this rotor. I have found that
most software is for the Kanas City tracker. Does anyone know
if software for the KC Tracker will work with the GS232 or
can I replace the rom in the GS232 to work with this driver.....

Thanks in advance
Carl e-mail n3qom@netusa1.net
cwalthal@eng.delcoelect.com

1349. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: sp2xdq@free.polbox.PL
Message-ID: <01BC5012.313F59C0@ppp253.gdynia.tpnet.pl>
Source record: 19105

```
Subscribe my e-mail: sp2xdq@free.polbox.pl
```

1350. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: sp2xdq@free.polbox.PL
Message-ID: <01BC5012.1C5CABC0@ppp253.gdynia.tpnet.pl>
Source record: 19106

```
Subscribe my e-mail: sp2xdq@free.polbox.pl
```

1351. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <335E6CE3.7CB9@codem.com>
Source record: 19107

Robert W. Cunningham wrote:
>
> I am mentoring a satellite design project at the University of
> California, San Diego (UCSD)...

The group is designing a very small
> satellite (10-15 cm smooth sphere with NO external projections of any
> kind) that will be used to characterize, to extremely high precision,
> the atmospheric drag characteristics of LEO orbits.

<snip>

Sounds like an interesting project!

> 1. Can we get decent antenna efficiency (for the itty-bitty Tx
> antennas) anywhere in any Ham band?

Nothing I read in your message specifically precludes an embedded
radiating element. A 15-cm (diameter) ball gives you about 47 cm
(18.5 in) circumference. This is just under 1/4 wavelength for
145 MHz (51 cm). As a rule of thumb, antenna efficiency for 145
MHz and up should not be that much of an issue.

> 2. Would a packet-like downlink be bandwidth and cost efficient?

Maybe/probably. How much data do you have to dump?

> 3. Can the 1.24GHz band work? The Yaesu ft736 sure looks nice!

Yes, but this conflicts with the desire "to use a Ham band so we can
mazimize the number of potential ground stations". There aren't a
heck of a lot of hams on this band (compared to 2m).

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1352. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: ken coleman <acoleman@access.eve.net>
Message-ID: <335EC7FE.5257@access.eve.net>
Source record: 19108

JoeDWadd wrote:
>
> Looks like Mir will have to be abandoned soon. So who wants to set up a pool
> as to where it will crash land?
just because it may be abandoned doesn't mean it's coming down soon.
Sounds like the reason it's being considered for abandonment is internal
atmosphere--not degradation of the orbit. We may not be alive when it
comes down.

1353. Re: New satellite station

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <335E638F.61B3@codem.com>
Source record: 19109

Nathan Gordon wrote:
>
> Hello, I have been reading about satellite operations and would like to
> give it a try.
>
> Does anyone know where to start? I have an HF rig and would be happy to
> buy used equipment if it is available.

Hi there, Nathan. Make sure you visit the AMSAT site for
some introductory information. You can find good staring
info at http://www.amsat.org/amsat/intro/faqs.html, including
"Working the Easy Sats." It is an informal introduction hamsats
combined with hints on getting started using the more easily
accessed satellites.

A multi-mode 2m tx and a 10m receiver will get you on the
Russian satellites in SSB or CW modes. An Isopole or similar
omni VHF antenna and a 10m dipole work fine with 25-30W. Digital
packet requires a little more substantial investment for PACSAT
operation if you don't already have the TNC(s) and/or 2m (up) and
70 cm (down) radios. Although there are 1200 bps sats up there,
the 9600 bps birds are more popular I think.

Re: transverters versus transceivers, if you can find some used
V/UHF rigs, you could pay a premium if they're multimode. Thus,
transverters offer a relatively inexpensive alternative. The
downside is that unless you have another HF rx, you're going to
have trouble with full duplex operation as some modes require.
There's no real all-in-one solution for working all modes and
birds, so you'll need to plan a bit if you want to make the most
of your budget.

Good luck. Stop by here often.

73 Larry N1TX

--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1354. Amateur CW/Voice Satellite Frequencies FAQ 04/23/97

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2304972044040001@cqtlm-pm3-091.dowco.com>
Source record: 19110
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ04.23
Amateur CW/Voice Satellite Frequencies for April 23, 1997.

BID: $FREQ0423
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-----------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective method for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Digital mode until April 25. Here is the latest schedule:

Apr.18(Fri) 00:46z JD 9600bps
25(Fri) 01:24z JA
May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex and SAFEX have been discontinued due to serious mechanical and electrical problems with the MIR space station. At this time it is unknown whether or not the crew will have to abandon ship due to leaking toxic coolant fumes harming the crew.

* Space Shuttle Frequencies when in orbit. Next SAREX mission tentatively et for Summer 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 2M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1355. ADVERTISE TO OVER 100 MILLION PEOPLE FOR FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: nejeh@gdi.net
Message-ID: <5jmd2j$65g@news.gdi.net>
Source record: 19111

Please take the time out to read this email. it is worth your time.

ADVERTISE TO OVER 100 MILLION PEOPLE FOR FREE!!!
Or send a message to millions of people...

NOW YOU CAN ADVERTISE FREE AND GET DRAMATICALLY
MORE RESPONSES THAN ADVERTISING ON NATIONAL TELEVISION

With E-mail your potential customer is forced to read at least the
headline of your letter. Unlike TV, magazines, newspaper ads, and
direct mail where more than 99.99% of the recipients will skip right
over your advertisement.

TURNS YOUR COMPUTER INTO A CASH REGISTER: Conservative estimates indicate
well over 100 MILLION people will have E-mail accounts in the next year!
E-Mail Blaster turns your computer into a cash register by giving you FREE,
immediate access to all of them. Do you think some of the more than 100
million people with E-mail addresses would be interested in your products or
services? Even if you don't have your own products or services you can
still make money buy promoting our computer software!!!
You can make money with our new software called E-MAIL BLASTER

Here's how:
* By Using E-Mail To Sell Your Products & Services
* By Using E-Mail To Sell our Computer Software such as: Email Blaster, Web Walker,
Email Lock Box etc.
* By Renting or Selling Your E-mail Addresses
* By Becoming A Distributor for e-mail BLASTER

MUCH FASTER: With bulk E-mail you get responses back in 1 to 4
days instead of waiting weeks or months like with television or print
advertising. You can begin filling orders the same day you send E-mail.

FREE ADVERTISING WORTH MILLIONS: It costs millions of dollars to mail out
millions of letters using the United States Postal Service! Now you can
send your ad to MILLIONS of people for FREE using E-Mail BLASTER

E-MAIL BLASTER IS ACTUALLY 3 PROGRAMS IN 1: E-Mail Blaster is amazing new
technology and the most advanced bulk E-mail software on the market today.
(1) E-Mail BLASTER automatically extracts E-mail addresses from America
Online, CompuServe, Prodigy, and the other online services, the Internet,
web pages, news groups, and hundreds of other sources. (2) E-Mail BLASTER
automatically stores the E-mail addresses in your computer along with
keywords that describe hobbies and interests to created highly targeted
E-mail addresses. (3) E-Mail BLASTER sends your marketing letter or ad to
MILLIONS of targeted E-mail addresses at the push of a single button!

HOW DOES E-MAIL BLASTER WORK? E-Mail Blaster has dozens of special filters to automatically harvest E-mail addresses from major online services such as: America OnLine, Compuserve, Delphi, Genie, and of course the internet.

AOL AUTO EXTRACTOR: E-Mail Blaster has many special features like the AOL Auto Extractor that let's you use a regular dial-up Internet connection to collect names and addresses from America Online. Collect America Online addresses without being a member. Allows you to download names and addresses from America Online without paying membership fees or online charges. Auto Extractor for all of the online services and Special E-mail database search engines will also be available at no additional charge.

SIMPLE TO USE: E-Mail Blaster does all the work for you. Unlike other programs where you must cut & paste addresses, E-Mail Blaster does it for you automatically. And, unlike other E-mail programs, with E-Mail Blaster there is no need to purchase any additional software

SPEED: Your time is important. E-MAIL Blaster is DRAMATICALLY FASTER at extracting and sending E-mails than all the other programs on the market that we tested it against.

NO SPECIAL EQUIPMENT NEEDED: E-Mail Blaster runs on a PC with Windows 3.xx Windows 95, Windows NT, a 386 or faster processor, 4 MB RAM, and a hard drive with at least 10 MB free and your own SLIP or PPP connection. No other software needed. Also runs on a Macintosh with Soft Windows installed.

****
This message was sent using E-Mail Blaster.

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Our company is in the software business of developing cutting edge products, so we know if you have the opportunity to use our software FREE you will be our future customers. We know we need you to make our software business a true success!

(Please if our lists are incorrect put "remove" in the subject and just hit "REPLY" and you will not be bothered again. Please forgive our mistake).
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****
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like to resell Email Blaster for up to $499. you may purchase additional copies
of Email Blaster for only $165.00. Retails for $499.00 This price is only available
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Nejeh Yusuf mail to: 2168 River Park Blvd. Orlando Florida 32817 or Fax to 1-407-380-3545
along with this order form.
nejeh@gdi.net

1356. PacComm TNC NB-96 and PSK 1 ??

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: kb7hed <kb7hed@nicoh.com>
Message-ID: <335ED870.176B@nicoh.com>
Source record: 19112

I have the PacComm TNC NB-96 and PSK 1 combination for working the digital sats.
They are working very well for KO-23, KO-25, and UO-22. I have been trying to
work FO-29 with no success. I can monitor the downlink 1200 bps PSK signal but
do not seem to be able to connect to FO-29. I have tried monitoring the uplink
with another packet setup and I think I am getting the PTT (keying the radio) but
am not getting any data out. I am hoping that the problem is some simple thing
that I am neglecting - If anyone could offer a suggestion I would be grateful.

Tnx and 73

Dave kb7hed@nicoh.com

1357. Satellite station for sale

Newsgroup: rec.radio.amateur.space
Date: 1997-04-23 00:00:00 UTC
From: mtanner@dns.city-net.com
Message-ID: <336023f0.6944240@news.city-net.com>
Source record: 19113

Yaesu FT-736R with 6 meter module, CW filter, Internal keyer, Ramsey computer control interface cable. All manuals and schematics, original box emaculate condition $1,500.

RF Concepts 4-310 100 watt 440 Mhz amp with 20 db GasFet preamp and 4 foot patch cable made of Wireman Flexi 4GL coax with manual and schematic. Less than 30 hours use, $200.00

MFJ 1278B Turbo 1200/2400 all mode TNC with all manuals. Does all modes except G-Tor $200.00

Cushcraft APO-1 satellite beams 20 ele 2mtr crossed yagi and 18 ele 432 crossed yagi with fiberglass crossboom (crossboom never installed!) Also aluminum cross boom $150.00

2 Aliance rotors $25. ea.

Contact Mike Tanner WB5NLJ
(412)885-8073
mtanner@dns.city-net.com

1358. Re: HELP with antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: johnn0isl@aol.com
Message-ID: <19970424022301.WAA01564@ladder01.news.aol.com>
Source record: 19114

Hi John, The fiberglass boom allows circular polarization. If any metal, including coax breaks the antennas pattern around the antenna the polarization is incorrect. Note that it is important that even the coax be run back down the boom and off the end, Rather that dropping through the pattern

Hope that helps...

73 John N0ISL
John Douglas, N0ISL
AX.25 N0ISL@KZ7I.#MSP.MN.USA.NOAM
I'm in Minnesota only because I must be somewhere!

1359. Looking for room in or near Dayton during "Hamvention"

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: n9xrg@sprynet.com
Message-ID: <3369df62.4981243@news.sprynet.com>
Source record: 19115

If anyone has any information on how I could get a hotel room for two
for Friday and Saturday during "Hamvention". If anyone who has a room
reserved and is not going please e-mail me at hargis@mail.org.
73s
Todd Hargis
N9XRG

1360. New student radio club needs help!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: jwells@argohouston.com
Message-ID: <5jmhsj$58e@lacy.zippo.com>
Source record: 19116

I have founded a new student amateur radio club at Cy-Fair
High School in Cypress, TX, and WE NEED YOUR HELP!! Before
the summer we will be getting our first batch of newly
licensed hams, but very few of them will have any money to
get a station on the air. If you can help with a monetary
or equipment donation of any kind, please point your browser to:

http://www.argohouston.com/pages/g/gewellss/

ALL DONATIONS ARE TAX-DEDUCTIBLE!!!

73's,

James A. Wells, KC5SIZ
President, Cy-Fair HS ARC
mailto:jwells@argohouston.com

1361. Re: ? Rotor Tracking Software GS232

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E94w4D.I5E@pe1chl>
Source record: 19117

In <5jl5t4$gjm@koinsw08.delcoelect.com> cwalthal@mail.delcoelect.com (Carl Walthall) writes:

>And thanks for reading this Post, I purchased a Yeasu rotor
>and GS232 computer interface. I can not find anyone who sells
>automatic tracking software for this rotor. I have found that
>most software is for the Kanas City tracker. Does anyone know
>if software for the KC Tracker will work with the GS232 or
>can I replace the rom in the GS232 to work with this driver.....

I once borrowed someone's GS232 and studied the interface protocol.
I think it was not very clever (understatement of the year).

Then I disassembled the EPROM and sort of planned to make a decent
controller out of this, but I found the "AMSAT-DL tracking interface"
and built that one, because it is even simpeler and much more reliable.

I have never seen software for the GS232, but it would be possible to add
support for it to a tracking package that is available with sourcecode.
(e.g. SatTrack for Unix/Linux)
Unfortunately, availability of sourcecoude is unusual in the DOS/Windows
environment in which you probably are interested.

If I were to use a GS232, I certainly would modify the firmware. As it
is now (open loop, control entirely done in the computer) it just sucks.

Rob
--
+----------------------------------+---------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+---------------------------------------+

1362. Re: New satellite station

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335f697a.6839578@news.atl.bellsouth.net>
Source record: 19118

On 23 Apr 1997 12:39:28 GMT, "Nathan Gordon" <nathang@bigfoot.com> wrote:

>Hello, I have been reading about satellite operations and would like to
>give it a try.
>
>Does anyone know where to start? I have an HF rig and would be happy to
>buy used equipment if it is available.
>
>Also, would it be better to buy a multimode VHF UHF rig or build
>transverters and hook them up to my HF radio. I am primarily interested in
>operating CW and possibly digital, and am not sure what equipment is
>necessary.

With what you have at hand, the best starting point would be to configure
a Mode A station. That'll require you to add a 2m transmitter to your
existing HF rig. The cheapest way to do that is to grab an old Motorola
or GE Tx strip from a land mobile rig. You can VXO the channel element
by inserting a tuning voltage on the temperature compensation pin. And
of course you can CW key the Tx strip. These things come in 80 W and
110 W versions, so they offer plenty of signal for use with a simple omni
2m antenna.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1363. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: waddco@phoenix.net
Message-ID: <waddco.184.001B7003@phoenix.net>
Source record: 19119

In article <335EC7FE.5257@access.eve.net> ken coleman <acoleman@access.eve.net> writes:
>From: ken coleman <acoleman@access.eve.net>
>Subject: Re: mir to be abandoned
>Date: Wed, 23 Apr 1997 22:39:58 -0400

>JoeDWadd wrote:
>>
>> Looks like Mir will have to be abandoned soon. So who wants to set up a pool
>> as to where it will crash land?
>just because it may be abandoned doesn't mean it's coming down soon.
>Sounds like the reason it's being considered for abandonment is internal
>atmosphere--not degradation of the orbit. We may not be alive when it
>comes down.

I thought they had to adjust the orbit of all leos quite offen.

1364. Re: New student radio club needs help!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: Glenn <grhansen@NOSPAM.worldnet.att.net>
Message-ID: <01bc50fe$93b10b20$0b8293cf@Grhansen.hale.bopp>
Source record: 19120

If they really want radios why not work for them rather than
beg for handouts??? A Saturday car wash can net hundreds of dollars.
You are teaching them Ham radio...teach them about working for what
you want rather than begging or looking for a handout.=20

grh

James Wells, KC5SIZ <jwells@argohouston.com> wrote in article =
<5jmhsj$58e@lacy.zippo.com>...
> I have founded a new student amateur radio club at Cy-Fair=20
> High School in Cypress, TX, and WE NEED YOUR HELP!! Before=20
> the summer we will be getting our first batch of newly=20
> licensed hams, but very few of them will have any money to
> get a station on the air. If you can help with a monetary
> or equipment donation of any kind, please point your browser to:
>=20
> http://www.argohouston.com/pages/g/gewellss/
>=20
> ALL DONATIONS ARE TAX-DEDUCTIBLE!!!
>=20
> 73's,
>=20
>=20
> James A. Wells, KC5SIZ
> President, Cy-Fair HS ARC
> mailto:jwells@argohouston.com
>

1365. FS: FT-736R, 440 amp, sat antennas, Aliance rotors, all mode TNC

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: mtanner@dns.city-net.com
Message-ID: <3360aa2e.6488022@news.city-net.com>
Source record: 19121

Yaesu FT-736R with 6 meter module, CW filter, Internal keyer, Ramsey computer control interface cable. All manuals and schematics, original box emaculate condition $1,500.

RF Concepts 4-310 100 watt 440 Mhz amp with 20 db GasFet preamp ("N" connectors) and 4 foot patch cable made of Wireman Flexi 4GL coax with manual and schematic. Less than 30 hours use, $200.00

MFJ 1278B Turbo 1200/2400 all mode TNC with all manuals. Does all modes except G-Tor $200.00

Cushcraft APO-1 satellite beams 20 ele 2mtr crossed yagi and 18 ele 432 crossed yagi with fiberglass crossboom and polarity switch box for the 440 beam. (crossboom never installed!) Also aluminum cross boom $200.00

2 Aliance rotors $25. ea.

Contact Mike Tanner WB5NLJ
(412)885-8073
mtanner@dns.city-net.com

1366. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-24 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5joekqbpc1@news.mhv.net>
Source record: 19122

In article <waddco.184.001B7003@phoenix.net>, waddco@phoenix.net (Wadd) wrote:
>In article <335EC7FE.5257@access.eve.net> ken coleman <acoleman@access.eve.net>
> writes:
>>From: ken coleman <acoleman@access.eve.net>
>>Subject: Re: mir to be abandoned
>>Date: Wed, 23 Apr 1997 22:39:58 -0400
>
>>JoeDWadd wrote:
>>>
>>> Looks like Mir will have to be abandoned soon. So who wants to set up a pool
>>> as to where it will crash land?
>>just because it may be abandoned doesn't mean it's coming down soon.
>>Sounds like the reason it's being considered for abandonment is internal
>>atmosphere--not degradation of the orbit. We may not be alive when it
>>comes down.
>
>I thought they had to adjust the orbit of all leos quite offen.

Latest report is there's an anti-freeze leak and they MAY have to come back.
The station can be kept up without a crew if I'm not mistaken.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio web site:
http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

1367. Discover magazine article

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33604388.226094588@news.erols.com>
Source record: 19025

Discover mag has a very good special edition on space exploration this
month. There is a particularly good article on the Ariane 5 and its
troubles. Very interesting discussion of the software problems.
At the end of the article they mention that the only real passenger
on the second launch attempt will be a ham radio satellite.

I was encouraged by the article and am now more confident about P3D's
chances to get into orbit.

73 Bill N2CQR

1368. Re: New student radio club needs help!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: jwells@argohouston.com
Message-ID: <5jp89g$gtg@lois.zippo.com>
Source record: 19026

>If they really want radios why not work for them rather than
>beg for handouts??? A Saturday car wash can net hundreds of dollars.
>You are teaching them Ham radio...teach them about working for what
>you want rather than begging or looking for a handout.=20
>
>grh
>
>
>James Wells, KC5SIZ <jwells@argohouston.com> wrote in article =

>> I have founded a new student amateur radio club at Cy-Fair=20
>> High School in Cypress, TX, and WE NEED YOUR HELP!! Before=20
>> the summer we will be getting our first batch of newly=20
>> licensed hams, but very few of them will have any money to
>> get a station on the air. If you can help with a monetary
>> or equipment donation of any kind, please point your browser to:
>>=20
>> http://www.argohouston.com/pages/g/gewellss/
>>=20
>> ALL DONATIONS ARE TAX-DEDUCTIBLE!!!
>>=20
>> 73's,
>>=20
>>=20
>> James A. Wells, KC5SIZ
>> President, Cy-Fair HS ARC
>> mailto:jwells@argohouston.com
>>
My apologies to all here, I should have been clearer in my original post. The money we have now is going towards a club station, as we can't get everything from local donations. These kids can only do so much on their own--and fundraising has to be done as a group, and usually has to benefit the group as a whole, as there just isn't enough to spread the wealth around.

Once again, sorry for any confusion that resulted.

73's,

James A. Wells, KC5SIZ
President, Cy-Fair HS ARC
mailto:jwells@argohouston.com

1369. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <3360793D.BD516E3A@acm.org>
Source record: 19027

Larry L. Ledlow, Jr. wrote:
>
> Robert W. Cunningham wrote:
> >
> > I am mentoring a satellite design project at the University of
> > California, San Diego (UCSD)...
>
> The group is designing a very small
> > satellite (10-15 cm smooth sphere with NO external projections of any
> > kind) that will be used to characterize, to extremely high precision,
> > the atmospheric drag characteristics of LEO orbits.
>
> <snip>
>
> Sounds like an interesting project!
>
> > 1. Can we get decent antenna efficiency (for the itty-bitty Tx
> > antennas) anywhere in any Ham band?
>
> Nothing I read in your message specifically precludes an embedded
> radiating element. A 15-cm (diameter) ball gives you about 47 cm
> (18.5 in) circumference. This is just under 1/4 wavelength for
> 145 MHz (51 cm). As a rule of thumb, antenna efficiency for 145
> MHz and up should not be that much of an issue.

>
> > 2. Would a packet-like downlink be bandwidth and cost efficient?
>
> Maybe/probably. How much data do you have to dump?

Well, we need to operate the transmitter for about three months using
only 4 alkaline "D" cells! Here's a list of some of our constraints:

1. Transmit window of 3 minutes 6 times each month.
- Each data set contains 5 days of data, AVERAGE, maybe more
depending on the overhead pass schedule.
2. Each data set is transmitted three times, once during each of three
successive transmit windows.
- That leaves 1 minute for each full data set
3. Transmission overhead (protocol and error correction) is 50%.
4. Lossless data compression of 3:1 is likely.
5. A daily data set will be no more than 10 Kbytes, before compression.
6. A data transmission rate of 4800 baud is desired.
- Do the math, and it all barely fits.
7. Mission duration is 3 months.

- This means there is a total of about 60 minutes transmit time during a nominal mission.
8. There is room for just 4 "D" cells.
9. An alkaline "D" cell (Duracell) is typically rated for 15 Ahr under nominal operating conditions:
Size Voltage Capacity Vcutoff Load Drain
D 1.5 15,000 mAh 0.8 v 10 ohms 115 ma
We, however, will be operating at a 1:2400 duty cycle: 3 minutes on and 5 days (7200 minutes) off.
- Assume a battery derating of 90% for this type of pulsed use (I have no idea if this is a good assumption). That leaves us a total available capacity of 4 * .9 * 15 Ah / 1 hour = 5.4a.
At 1.5v that's 8.1W.
10. The antenna must fit entirely within the sphere (though it may by flush with the surface if it conforms to the spherical shape).

Now, that's 8.1W to the power supply and transmitter. That raises two questions:
a) What are typical electrical-to-RF efficiencies for various transmitters on each frequency available to us?
b) What are typical input-to-radiated efficiencies for the antennas available to use for each frequency?

Here's where I have no data (yet). With 8W in, can we get 1W or 0.5W RADIATED OMNI-DIRECIONALLY from within our 10-15 cm sphere?

If the frequency is high enough, an array of patch antennas may do the trick. But otherwise it looks like we'll want to use some form of folded center-driven dipole. Yes? No?

From other discussions on and off this newsgroup, I expect I will need at least 0.5W from LEO (400 Km orbit) to have a prayer of sending 4800 baud to the ground with any reliability.

Or have I missed something?

What transmitter-antenna combinations are possible? I'm mainly interested in the antenna problem, since I hope to have access to some state-of-the-art miniaturized transmitters.

-BobC

1370. FS: FT-736R, 440 amp, sat antennas, Aliance rotors, all mode TNC

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: mtanner@dns.city-net.com
Message-ID: <33642d52.2492016@news.city-net.com>
Source record: 19028

Yaesu FT-736R with 6 meter module, CW filter, Internal keyer, Ramsey computer control interface cable. All manuals and schematics, original box emaculate condition $1,500.

RF Concepts 4-310 100 watt 440 Mhz amp with 20 db GasFet preamp ("N" connectors) and 4 foot patch cable made of Wireman Flexi 4GL coax with manual and schematic. Less than 30 hours use, $200.00

MFJ 1278B Turbo 1200/2400 all mode TNC with all manuals. Does all modes except G-Tor $200.00

Cushcraft APO-1 satellite beams 20 ele 2mtr crossed yagi and 18 ele 432 crossed yagi with fiberglass crossboom and polarity switch box for the 440 beam. (crossboom never installed!) Also aluminum cross boom $200.00

2 Aliance rotors $25. ea.

Contact Mike Tanner WB5NLJ
(412)885-8073
mtanner@dns.city-net.com

1371. -= MIR TCP/IP packet link up =-

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: ptitze@astron.physics.usyd.edu.au
Message-ID: <33607164.6405010@news.usyd.edu.au>
Source record: 19029
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc,aus.radio.amsat,rec.ham-radio.packet,aus.radio.packet,aus.radio.amateur.digital

Hello everyone,

Does anyone know what happened to the project of linking MIR via
TCP/IP packet radio? I subscribed to their list but have not received
anything.

Paul, VK2THN.

==
ptitze@astron.physics.usyd.edu.au
http://www.physics.usyd.edu.au/~ptitze
==

1372. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E96zC8.oLx@pe1chl>
Source record: 19030

In <3360793D.BD516E3A@acm.org> "Robert W. Cunningham" <rcunning@acm.org> writes:

>Well, we need to operate the transmitter for about three months using
>only 4 alkaline "D" cells! Here's a list of some of our constraints:

>1. Transmit window of 3 minutes 6 times each month.
> - Each data set contains 5 days of data, AVERAGE, maybe more
> depending on the overhead pass schedule.

What kind of orbit makes you have only 6 passes each month?
When I first read that, I assumed it to be a typo. Many amateur satellites
in low orbits have at least 6 passes each day, at my latitude (52 north).

You seem to be looking for exactly overhead passes. In my experience, these
are not optimal because the change of antenna direction per unit of time
is highest for overhead passes, and thus it is most difficult to keep the
antennas pointed. A 40-50 degree pass is much easier to track.
Of course the path is longer, but you should not only focus on path
length. A well pointed yagi will give you more signal over a longer
path than an omni or wide-lobe antenna that you keep sort-of-pointed
at the zenith.

>8. There is room for just 4 "D" cells.
>9. An alkaline "D" cell (Duracell) is typically rated for 15 Ahr under
> nominal operating conditions:
> Size Voltage Capacity Vcutoff Load Drain
> D 1.5 15,000 mAh 0.8 v 10 ohms 115 ma
> We, however, will be operating at a 1:2400 duty cycle: 3 minutes on
> and 5 days (7200 minutes) off.
> - Assume a battery derating of 90% for this type of pulsed use (I
> have no idea if this is a good assumption). That leaves us a
> total available capacity of 4 * .9 * 15 Ah / 1 hour = 5.4a.
> At 1.5v that's 8.1W.

Having 4 cells gives you only 6 volts, which is nice for digital stuff
but a bit low for VHF/UHF electronics. Those circuits usually feel a
bit better at 12v or even more. You could convert the voltage but that
of course introduces another loss.
You could also look for other batteries (lithium?) that may provide more
capacity in the same volume. Philips also recently introduced a new
consumer-grade battery that has more capacity than Duracell's.

>Now, that's 8.1W to the power supply and transmitter. That raises
>two questions:
>a) What are typical electrical-to-RF efficiencies for various
> transmitters on each frequency available to us?

A few VHF and UHF transmitters with pretty impressive DC-to-RF efficiency
were built for the microsat amateur satellites by Matjaz Vidmar.
You can try contacting AMSAT for more info about that, but I have heard
before that there seems to be a documentation problem around those
transmitters.

>b) What are typical input-to-radiated efficiencies for the antennas
> available to use for each frequency?

The antennas may cause you more problems than the transmitter. It
already is difficult to make a good omnidirectional antenna, and you
are posing all kinds of restrictions.
Any solution with arrays usually introduces nulls in the pattern, so
you will have to have an estimation of the spinrate to get an idea
of the effect this will have on the reception (given the characteristics
of the forward error correction protocol).

>From other discussions on and off this newsgroup, I expect I will need
>at least 0.5W from LEO (400 Km orbit) to have a prayer of sending 4800
>baud to the ground with any reliability.

That sounds about right. The more, the better of course. Many amateur
satellites (usually in somewhat higher orbits) work fine with omni radiated
output power in the 1-5W range.

>What transmitter-antenna combinations are possible? I'm mainly
>interested in the antenna problem, since I hope to have access to some
>state-of-the-art miniaturized transmitters.

Have they been designed with DC-to-RF effiency in mind?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1373. Need Extender board for Heathkit SB-104

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5jq9pd$q4q@news.asu.edu>
Source record: 19031

Does anyone have an Extender board for a Heathkit SB104? A friend of mine was given a partially completed 104 and has it finished but needs the extender to do the alignment. Heathkit part number is 85-1465. Thank you.

George in Phoenix

--

1374. Re: -= MIR TCP/IP packet link up =-

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E96yCv.oHv@pe1chl>
Source record: 19032
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc,aus.radio.amsat,rec.ham-radio.packet,aus.radio.packet,aus.radio.amateur.digital

In <33607164.6405010@news.usyd.edu.au> ptitze@astron.physics.usyd.edu.au (Paul Titze) writes:

>Does anyone know what happened to the project of linking MIR via
>TCP/IP packet radio? I subscribed to their list but have not received
>anything.

The usual thing: a lot of messages during the first two weeks, where
everyone said how wonderful it would be. Not much thereafter.

You probably subscribed too late to catch it.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1375. Re: -= MIR TCP/IP packet link up =-

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: n1ist@netcom.com
Message-ID: <n1istE976zo.CuJ@netcom.com>
Source record: 19033
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc,aus.radio.amsat,rec.ham-radio.packet,aus.radio.packet,aus.radio.amateur.digital

In article <33607164.6405010@news.usyd.edu.au> ptitze@astron.physics.usyd.edu.au writes:
-
-Hello everyone,
-
-Does anyone know what happened to the project of linking MIR via
-TCP/IP packet radio? I subscribed to their list but have not received
-anything.

Given all the problems aboard MIR (and the possibility they will have
to evacuate due to the coolant leaks), I'd guess it will be unlikely.
/mike
--
\|/ Michael L. Ardai N1IST n1ist@netcom.com \|/
-*- === Boston Amateur Radio Club: http://www.barc.org/barc === -*-
/|\ or send "info barc-list" to listserv@majordomonetcom.com /|\

1376. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: "F. Feeney" <fkf1@cornell.edu>
Message-ID: <5jqhea$qol@newsstand.cit.cornell.edu>
Source record: 19034

various posters said..

>>>> Looks like Mir will have to be abandoned soon. So who wants to set up a pool
>>>> as to where it will crash land?
>>>just because it may be abandoned doesn't mean it's coming down soon.
>>>Sounds like the reason it's being considered for abandonment is internal
>>>atmosphere--not degradation of the orbit. We may not be alive when it
>>>comes down.
>>
>>I thought they had to adjust the orbit of all leos quite offen.
>
> Latest report is there's an anti-freeze leak and they MAY have to come back.
>The station can be kept up without a crew if I'm not mistaken.

If I'm not mistaken, MIR has been abandoned before and re-inhabited. I recall reading a story about the mission to go back up and recover the station. There were a lot of problems from the cold and I think the electrical system had failed causing the cosmonauts to leave because they couldn't maintain a liveable temperature. Anybody else have the details on that?

I don't think the Russians are planning on letting Mir become another Skylab, although with their funding troubles they might not have the choice.

Kevin, WB2EMS
"It seems as if Clinton really *was* the Manchurian Candidate."

1377. Re: PacComm TNC NB-96 and PSK 1 ??

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <3360FF47.20BE@codem.com>
Source record: 19035

kb7hed wrote:
>
> I have the PacComm TNC NB-96 and PSK 1 combination for working the
> digital sats.
> They are working very well for KO-23, KO-25, and UO-22. I have been
> trying to
> work FO-29 with no success. I can monitor the downlink 1200 bps PSK
> signal but
> do not seem to be able to connect to FO-29.

Dave, which mode(s) are you trying to use on FO-29?
Also, which software/terminal program are you trying
to use, and do you have the callsign correct? (Dumb
question, perhaps, but it caused me some trouble!)
How are you setting modes of the TNCs before trying
the uplink?

I have the same TNCs, and I have been successful in
the 1200 bps mode.

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1378. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970425170207.12732D-100000@spacelink>
Source record: 19036

MIR has been continually inhabited since it's launch in 1986. It has survived well beyond it's projected lifetime, and had the Soviet Union not gone belly-up, would have been replaced with MIR2. The abandoned space station which was recovered for operation was Salyut 6. THe recovery was just short of a miracle, but the space station was eventually deorbitted into the Indian Ocean in a controlled burn.
One of MIR's less well known problems is the amount of flexure in the structure due to gravitational differences over the planet. I wouldn't expect a great deal of amateur radio upgrading on the station in the near future, but I'd expect a heck of a good amateur platform on the I.S.S., assuming it does get launched into orbit. Again, the hangup is with the Russians, who can not deliver the central core unit they promised.
Something to watch for is whether the segments of MIR, that is the Kvant module, Kristall, and others will be doorbitted with the rest of the station. NASA is still planning for the "Atlantis" mission to dock with MIR, so I think they must know something about it's status that the rest of us don't (I would hope so).
MIR has just been boosted into a higher orbit, but needs periodic pushes to keep it from interacting with the Earth's atmosphere. This will be true of each station put into low-earth-orbit, including ours.

Dick N1MDZ

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1379. ARLS013 STS-83 refly is a "go" for July with SAREX on board

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls013.1997@arrl.org>
Source record: 19037
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS013
ARLS013 STS-83 refly is a "go" for July with SAREX on board

ZCZC AS13
QST de W1AW
Space Bulletin 013 ARLS013
From ARRL Headquarters
Newington, CT April 25, 1997
To all radio amateurs

SB SPACE ARL ARLS013
ARLS013 STS-83 refly is a ''go'' for July with SAREX on board

Word from NASA this week is that shuttle mission STS-83--cut short in early April because of a fuel cell problem aboard the spacecraft--will be reflown in July with the Shuttle Amateur Radio EXperiment--SAREX--aboard. The new mission will be dubbed STS-94. The space shuttle Columbia prematurely returned to Earth April 8 without making any of the scheduled QSOs with 18 schools in the US, the People's Republic of China, and Japan. Sixteen schools want to arrange new schedules for the July mission, which will again carry the microgravity science lab. Three hams were aboard STS-83: Jim Halsell, KC5RNI, the mission commander; Janice Voss, KC5BTK; and Donald Thomas, KC5FVF. The same crew likely will be tapped for STS-94, set to launch on July 1 for a 16-day mission.

In the meantime, more QSOs of a scheduled round of ten MIREX school contacts have taken place with Jerry Linenger, KC5HBR, aboard the Russian Mir space station. Students at Holy Angels School in Dayton, Ohio, got a chance to chat with Linenger April 21. The ground station, W8DOZ, was running 35 W into a turnstile antenna. On April 23, students at Jerling Junior High School in Orland Park, Illinois--a Chicago suburb--had a 10-minute contact with Linenger. More than a dozen students got to speak directly to Linenger as an audience of 800 students and 200 visitors looked on. Nearly 2500 students in other schools also got to listen in.

Linenger and his cosmonaut flight companions, Mir-23 Commander Vasily Tsibliev and Flight Engineer Alexander Lazutkin, managed to restore one of two Elektron oxygen generators aboard Mir. The repair ended a serious problem for the Russian space outpost. The three used equipment shipped to Mir April 8 aboard a Progress resupply rocket. With the Elektron electrolysis system at least partially back in operation and the Mir's primary carbon dioxide scrubber also operational once more, the air aboard the Mir is healthier than it

has been in weeks. Because the system is not producing oxygen at a rate sufficient for three crew members, however, the crew is supplementing the Mir's atmosphere with gaseous oxygen. The Mir also has a healthy stock of oxygen-generating candles to use if necessary. Wire service reports say the Mir crew has, for the time being, given up efforts to track down an elusive cooling system leak that's allowing ethylene glycol coolant to leak into the atmosphere of one spacecraft module.

NASA reportedly intends to go ahead with plans for astronaut Michael Foale, KB5UAC, ADD to replace Linenger in mid-May. Foale, who will arrive on the shuttle Atlantis, is scheduled to be replaced in September by astronaut Wendy Lawrence, KC5KII. The last US astronaut scheduled for a tour of duty on Mir is David Wolf, KC5VPF, in early 1998. The 11-year-old Mir space station eventually will be replaced by the International Space Station--a cooperative venture between Russia and the US.
NNNN
/EX

1380. Connecticut QSO Party May 3-4, 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-04-25 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33613A4B.4932@ix.netcom.com>
Source record: 19038
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc

1997 CONNECTICUT QSO PARTY - OPERATING RULES

Connecticut QSO party, sponsored by the Candlewood ARA, 2000Z May 3
until 2000Z May 4, with a rest period 0400Z - 1200Z. Phone, RTTY and CW.

Work stations once per band and mode, mobiles as they cross county
lines. No repeater QSOs.

Single operator, fixed/mobile, Novice, QRP(5W), Multi-single
Multi-multi
classes plus Connecticut club competition.

Connecticut stations may contact other Connecticut stations for
QSO/multiplier credit.

Connecticut stations exchange report and county; others exchange
report
and state/province/DXCC country. Non CT stations work CT stations only.

CW - 40 KHz. up from lower band edges; Novices 25 KHz. up from low
end;
Phone - 1.860, 3.915, 7.280, 14.280, 21.380 28.380. VHF - 50.150,
144.200,
146.580. RTTY - Normal RTTY Bands . All bands (HF,VHF, UHF) except
WARC bands count.

Score one point per phone or RTTY QSO and two points per CW QSO.
QSOs
with club station W1QI and ARRL HQ station W1AW count 5 points.

Connecticut stations multiply QSO points by states/
provinces/Connecticut
counties worked (DX only one multiplier); others multiply by Connecticut
counties worked (work CT stations only).

Plaques and certificates (100 point minimum). Special certificate
for
working all 8 Connecticut counties.

Send entry and SASE for results by June 3 to CARA, P.O. Box 3441,
Danbury CT 06813-3441

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1381. ARLK032 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk032.1997@arrl.org>
Source record: 19039
Cross-posted to: rec.radio.info,rec.radio.amateur.space

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SB KEP @ ARL $ARLK032
ARLK032 Keplerian data

ZCZC SK32
QST de W1AW
Keplerian Bulletin 32 ARLK032
From ARRL Headquarters
Newington, CT April 26, 1997
To all radio amateurs

SB KEP ARL ARLK032
ARLK032 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97114.25343210 .00000159 00000-0 10000-3 0 04751
2 14129 25.8385 151.2672 6072681 111.3600 321.3069 2.05880568076274
RS-10/11
1 18129U 87054A 97115.53236158 .00000051 00000-0 39464-4 0 3430
2 18129 82.9221 277.6490 0012665 14.8836 345.2689 13.72377544493019
UO-11
1 14781U 84021B 97114.99206843 .00000136 00000-0 30719-4 0 9678
2 14781 97.8306 98.3673 0011548 167.7736 192.3752 14.69544838703447
RS-12/13
1 21089U 91007A 97115.57214827 .00000063 00000-0 50644-4 0 9730
2 21089 82.9217 317.6741 0030848 83.5676 276.8987 13.74080372311937
UO-14
1 20437U 90005B 97115.19962593 -.00000012 00000-0 12233-4 0 2641
2 20437 98.5196 198.0099 0011665 8.0338 352.1037 14.29956882378646
RS-15
1 23439U 94085A 97114.76841816 -.00000039 00000-0 10000-3 0 02215
2 23439 64.8159 239.2195 0150758 142.3569 218.8020 11.27526463095915
AO-16
1 20439U 90005D 97115.14617177 -.00000011 00000-0 12581-4 0 00635
2 20439 98.5356 200.7697 0011850 10.3759 349.7668 14.30004930378653
RS-16
1 24744U 97010A 97115.03693996 .00003132 00000-0 10650-3 0 00531
2 24744 97.2791 21.0930 0005513 289.9176 70.1470 15.31169934007951
```

```
DO-17
1 20440U 90005E 97114.78757823 -.00000009 00000-0 13083-4 0 00757
2 20440 98.5411 201.2452 0012032 8.5786 351.5602 14.30147414378636
WO-18
1 20441U 90005F 97115.20402849 .00000015 00000-0 22393-4 0 650
2 20441 98.5404 201.5617 0012560 8.3607 351.7784 14.30115444378698
LO-19
1 20442U 90005G 97114.75581172 .00000025 00000-0 26359-4 0 00676
2 20442 98.5443 201.7613 0012821 8.7622 351.3775 14.30229699378651
FO-20
1 20480U 90013C 97114.93829034 -.00000011 00000-0 40721-4 0 09639
2 20480 99.0410 86.5585 0541221 137.9529 226.4447 12.83237634337873
AO-21
1 21087U 91006A 97114.99055451 .00000094 00000-0 82657-4 0 08202
2 21087 82.9355 90.9447 0037385 56.9296 303.5440 13.74581203312849
UO-22
1 21575U 91050B 97115.19055121 .00000021 00000-0 21160-4 0 7672
2 21575 98.3093 177.5942 0008659 52.0863 308.1104 14.37066387302873
KO-23
1 22077U 92052B 97115.49656745 -.00000037 00000-0 10000-3 0 6571
2 22077 66.0791 255.5559 0011780 225.3063 134.7001 12.86302432220970
KO-25
1 22828U 93061F 97115.17194291 .00000016 00000-0 23890-4 0 05481
2 22828 98.5439 190.8743 0010843 24.8757 335.2943 14.28175452154641
IO-26
1 22826U 93061D 97114.77454931 .00000001 00000-0 17775-4 0 5506
2 22826 98.5451 190.4071 0009837 42.8846 317.3101 14.27833146186465
AO-27
1 22825U 93061C 97115.15241566 .00000015 00000-0 23606-4 0 05602
2 22825 98.5492 190.5465 0009630 38.7399 321.4473 14.27723803186506
FO-29
1 24278U 96046B 97115.10430563 -.00000066 00000-0 -29220-4 0 00863
2 24278 98.5469 163.5617 0351618 323.9248 33.8619 13.52629362033948
Mir
1 16609U 86017A 97115.81884392 .00001861 00000-0 29677-4 0 2253
2 16609 51.6524 348.9082 0008998 296.4492 63.5497 15.59236471638858

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
April 29, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1382. letter campaign to increase NASA funding

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: ahouts@aol.com
Message-ID: <19970426203000.QAA00810@ladder01.news.aol.com>
Source record: 19040

URGENT! PLEASE READ, RESPOND, and FORWARD !!! -Amy

I would like to invite you all to join my national letter writing campaign to VP Al Gore, asking he appropriate more funding to NASA. This non-political, non-scientific "We, the People" letter went live 11 Feb, and so far over 12,000 people have submitted signatures. This is a fabulous response, but it just scratches the surface! I'm giving an extra push to reach 20,000 by May 22nd, Space Day, then tell the press.

The politicians think in votes, and it's our obligation to make our leaders aware of what issues are important to us! All of us who care about space; exploration, technology, spin-offs - I could go on and on - should sign the letter! We MUST let them know that we care. I wrote it to make it easy for everyone to just click on then submit.

You can find the letter a number of places. Through the web sites of Astronomy and Sky & Telescope Magazines.

For world wide access URL
http://pages.prodigy.com/stargazer Scroll down, click on letter.

Or at AOL, the Action Alerts Section of Space Exploration Online.

For hard copies or petitions, please e mail me directly at
donnamcallister@prodigy.com

Have a read!! And..thanks in advance.

Donna McAllister

1383. ***&&***SHAREWARE95.COM! TONS OF GREAT SHAREWARE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Cameron <cameronb@earthling.net>
Message-ID: <5ju5nq$dtk@chronicle.concentric.net>
Source record: 19041

--
I would just like to let all of you "shareware junkies" and shareware lovers that a great new site located at http://www.shareware95.com has been constructed and is the best!! It has thousands of files to download in an easy(and sleek) to use interface. You won't regret it!! http://www.shareware95.com !!!!!

Cameron

****
cameron@shareware95.com
http://www.shareware95.com
****

1384. ***&&***SHAREWARE95.COM! TONS OF GREAT SHAREWARE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Cameron <cameronb@earthling.net>
Message-ID: <5ju5nr$dtk@chronicle.concentric.net>
Source record: 19042

--
I would just like to let all of you "shareware junkies" and shareware lovers that a great new site located at http://www.shareware95.com has been constructed and is the best!! It has thousands of files to download in an easy(and sleek) to use interface. You won't regret it!! http://www.shareware95.com !!!!!

Cameron

****
cameron@shareware95.com
http://www.shareware95.com
****

1385. 2 Million E-Mail Addresses $35.95

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Mark Purdy <mpurdy@mail.tds.net>
Message-ID: <5ju4sj$nq8@news2.tds.net>
Source record: 19043

##
This message is create by Dynamic mail - a most powerful online marketing tool
will explode your business on the internet. For more information please visit
our web site at : http://www.australia.net.au/~apexpi/dynamail.htm
##

2 Million E-Mail Addresses $35.95

Payment by:
Visa, MasterCard, American Express

http://www.tds.net/compurdy/2_million

1386. sattrack + FT736

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Chris Lewicki <chrisl@seds.lpl.arizona.edu>
Message-ID: <5ju4phhdk1@news.ccit.arizona.edu>
Source record: 19044
Cross-posted to: linux.dev.hams,rec.radio.amateur.space

Hi,
Has anyone out there modified SatTrack to address the Yaesu
FT736 via the serial interface, or have other code to command radios
via Linux? I've found the appropriate section in satctrl.c, but it
surely needs modification.
In particular, I'm interested in finding out how to set the
baud rate, start/stop bits, parity, and how to form the
bytecode/opcode stream.

Thanks.

--

Christopher A. Lewicki KC7NYV 520.570.0586 Maintainer of SEDS.LPL.Arizona.EDU
Chair, Students for the Exploration and Development of Space (SEDS-USA)

1387. ***&&***SHAREWARE95.COM! TONS OF GREAT SHAREWARE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Cameron <cameronb@earthling.net>
Message-ID: <5ju5np$dtk@chronicle.concentric.net>
Source record: 19045

--
I would just like to let all of you "shareware junkies" and shareware lovers that a great new site located at http://www.shareware95.com has been constructed and is the best!! It has thousands of files to download in an easy(and sleek) to use interface. You won't regret it!! http://www.shareware95.com !!!!!

Cameron

****
cameron@shareware95.com
http://www.shareware95.com
****

1388. ***&&***SHAREWARE95.COM! TONS OF GREAT SHAREWARE

Newsgroup: rec.radio.amateur.space
Date: 1997-04-26 00:00:00 UTC
From: Cameron <cameronb@earthling.net>
Message-ID: <5ju5ns$dtk@chronicle.concentric.net>
Source record: 19046

--
I would just like to let all of you "shareware junkies" and shareware lovers that a great new site located at http://www.shareware95.com has been constructed and is the best!! It has thousands of files to download in an easy(and sleek) to use interface. You won't regret it!! http://www.shareware95.com !!!!!

Cameron

****
cameron@shareware95.com
http://www.shareware95.com
****

1389. SAREX Reflight Numbering

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: timw@juno.COM
Message-ID: <19970426.150151.3799.0.TimW@juno.com>
Source record: 19047

How do they number space shuttle flights? They must not be in alphabetical order, since the SAREX refly this summer will be dubbed STS-94.

Thanks,
Tim Whitcomb, AB7LP
ab7lp@qsl.net

1390. Re: SAREX Reflight Numbering

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: tssulliv@unix.amherst.edu
Message-ID: <5juv6f$4g2@tom.unix.amherst.edu>
Source record: 19048

timw@juno.COM wrote:
: How do they number space shuttle flights? They must not be in
: alphabetical order, since the SAREX refly this summer will be dubbed
: STS-94.

When a shuttle mission is about 18 months to launch, it recieves the next unassigned STS number. NASA is not interested in whether this numbering sequence gives the actual launch order -- the STS number is primarily used for internal planning and documentation, and all that is needed is some unique designation. In this case, since the reflight was added with short notice, the next available number (94) is similar to the missions that are presently about 18 months from launch. (I don't have a current manifest, but at 7 launches per year, 1.5 years = 10 or 11 flights with numbers assigned; 83+10.5=93.5, which is pretty close.)

If you look on a manifest, you will see numbers farther ahead than 18 months. These numbers are considered provisional and often slide and shift as the manifest is re-evaluated and missions become more clearly developed. There comes a point, however, when the number is locked down to a particular flight. (I should note that this period was 18 months a few years ago, I haven't checked lately to see if the time period changed. Also the space station delays are altering the manifest and probably free up some STS numbers.)

-- Sean Sullivan KC4YES

1391. COME SEE THE HOTTEST SITES ON THE WEB!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: Me <Someone@nowhere.com>
Message-ID: <5jvmm7$3gh@dfw-ixnews6.ix.netcom.com>
Source record: 19049

http://ads.sexroulette.com/cgi-win/trax.exe?972

(FREE XXX VIDEO 24/7)
(TONS OF PIXXXS and MOVIES)

http://megatrondata.com/PleasureIsland/index.htm

(LIVE VIDEO SEX FROM AMSTERDAM!!!!)
(LIVE WOMEN and MEN at your disposal as low as $.89 a minute....bettter than $2.99)
FANTASTIC!!!!!

Satisfaction Guaranteed!!!!!!!!!!!!!!!!!!!!

This message is being brought to you by Dynamic Mail software - the powerful
online marketing tool to explode your business easier and faster. For more
information please visit our web site at :
http://www.australia.net.au/~apexpi/dynamail.htm

1392. WTB: Quorum WEFAX Explorer

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: "Brian K. Short" <ke7gh@qsl.net>
Message-ID: <33637081.1B97@qsl.net>
Source record: 19050
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.equipment

Looking for Quorum Sat WEFAX board with builtin receiver.
-Brian k7on@qsl.net (602)839-3484

1393. Re: letter campaign to increase NASA funding

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E9AyCz.9M4@pe1chl>
Source record: 19051

In <19970426203000.QAA00810@ladder01.news.aol.com> ahouts@aol.com (AHouts) writes:

>I would like to invite you all to join my national letter writing campaign
>to VP Al Gore, asking he appropriate more funding to NASA.

As you ar eposting to this group, how about first getting some funding
for AMSAT? They need some more money for Phase 3D, and the amount must
be peanuts when compared to NASA funding.

Rob
--
+----------------------------------+--+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--+

1394. 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: masa@writeme.com
Message-ID: <3363afec.3162554@news.bctel.ca>
Source record: 19052

I got the digital signal from 145.825. which satellite is this ?

Masataka Noda
Masa@WriteMe.com
http://www.geocities.com/Yosemite/1325/

1395. test

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: fred <fred.inter@magic.fr>
Message-ID: <01bc5330$54933380$LocalHost@default>
Source record: 19053

test

1396. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-04-27 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-2704972129250001@host45.clr.cyberg8t.com>
Source record: 19054

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

1397. Re: 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970427220445.4439A-100000@spacelink>
Source record: 19055

On Sun, 27 Apr 1997, Masa wrote:

> I got the digital signal from 145.825. which satellite is this ?
>
>
>
> Masataka Noda
> Masa@WriteMe.com
> http://www.geocities.com/Yosemite/1325/

You intercepted DOVE, also known as DO-17. DOVE sends telemetry earthward for analysis by amateurs and students. It occasionally carries a digitally encoded voice message. DOVE is a cube shaped amateur bird, measuring about 8inches on each edge. She's afaithful little thing, and has crashed several times, yet always stuck around for revival.

---------- Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1398. Re: 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5k1th8$fl4$1@news.mhv.net>
Source record: 19056

In article <3363afec.3162554@news.bctel.ca>, masa@writeme.com wrote:
>I got the digital signal from 145.825. which satellite is this ?

>Masataka Noda
>Masa@WriteMe.com
>http://www.geocities.com/Yosemite/1325/

The DOVE - 17 satellite. No uplink. Telemetry only. Fun to listen to and decode. Put up for educational purposes. Excellent little sat!

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio web site:
http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

1399. Re: 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: cgregory@uiuc.edu
Message-ID: <3364D4BE.D89@uiuc.edu>
Source record: 19057

Richard David Glueck wrote:
>
> On Sun, 27 Apr 1997, Masa wrote:
>
> > I got the digital signal from 145.825. which satellite is this ?
> >
>
> You intercepted DOVE, also known as DO-17. DOVE sends telemetry
> earthward for analysis by amateurs and students. It occasionally carries
> a digitally encoded voice message. DOVE is a cube shaped amateur bird,
> measuring about 8inches on each edge. She's afaithful little thing, and
> has crashed several times, yet always stuck around for revival.

I believe UO-11 is also still on this frequency, with 1200 baud ASCII teletype (inverted tones). The actual freq is a bit different, but not enough so you can tell with a scanner or handheld rig having no discriminator meter.

Carl
K8CG (k8cg@amsat.org)

1400. SatTrack v3.1 distribution?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: cvoid@netcom.com
Message-ID: <cvoid-2804970953470001@axolotl.macromedia.com>
Source record: 19058

Greets... seems I managed to trash the TLE and data files for my SatTrack v3.1 install. Now, whenever I update my TLE's using the gettle script, I get a whole bunch of errors.

Anyways, I can't seem to find a generic source distribution anywhere in order to acquire a fresh set of data files. Used to be available via Bester's web site, but it has dissapeared.

Anyone know where I can find a copy? Not the HP/UX port, either...

Thanks in advance!

--
Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
* PGP v2.3a Public Key Available Via Finger *
WWW: http://www.morphine.com/cvoid/

1401. NORAD Two-Line Orbital Element Sets (TLE987)

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5k2uol$t5p@blackbird.afit.af.mil>
Source record: 19059

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #987 -
Alouette 1
1 00424U 62049A 97116.57092632 .00000062 00000-0 62402-4 0 2842
2 00424 80.4655 334.5294 0022868 309.8732 50.0402 13.67892984725189
ATS 1
1 02608U 66110A 97116.91790155 -.00000097 00000-0 10000-3 0 162
2 02608 14.5298 349.4659 0006992 104.9267 255.1274 1.00288124 28015
ATS 3
1 03029U 67111A 97109.27049413 -.00000117 00000-0 10000-3 0 6458
2 03029 14.9026 356.4882 0008097 280.2446 282.7677 1.00272849107835
Starlette
1 07646U 75010A 97115.88880720 -.00000157 00000-0 -11575-4 0 506
2 07646 49.8258 354.7359 0205944 183.3134 176.6406 13.82191753122212
LAGEOS
1 08820U 76039A 97115.63011342 .00000026 00000-0 00000+0 0 2817
2 08820 109.8291 133.0670 0043430 60.7341 299.7625 6.38664346233784
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97111.51361156 .00000054 00000-0 10000-3 0 8230
2 10061 12.7656 33.6158 0013534 117.5927 66.9082 1.00269505 17536
IUE
1 10637U 78012A 97113.48545259 -.00000163 00000-0 10000-3 0 3830
2 10637 35.9661 78.6113 1354914 65.7562 31.6395 1.00083100 23042
GOES 3
1 10953U 78062A 97109.29846061 -.00000090 00000-0 10000-3 0 7995
2 10953 11.7748 36.6183 0000250 274.8531 255.8680 1.00265837 22125

```
SeaSat 1
1 10967U 78064A 97114.98408066 -.00000006 00000-0 42511-4 0 5698
2 10967 107.9949 99.9207 0002718 246.8501 113.2355 14.38165793986273
Nimbus 7
1 11080U 78098A 97117.10230374 .00000014 00000-0 49571-4 0 6652
2 11080 98.9063 329.4006 0008218 199.3731 160.7111 13.83683942934586
GOES 5
1 12472U 81049A 97113.87982944 -.00000003 00000-0 10000-3 0 9965
2 12472 8.6862 47.1058 0004222 73.0777 286.8870 1.00332478 16211
Cosmos 1383
1 13301U 82066A 97114.44726433 .00000038 00000-0 26642-4 0 5817
2 13301 82.9275 265.5612 0028804 100.3539 260.0862 13.68082849739937
LandSat 4
1 13367U 82072A 97117.93138923 .00000022 00000-0 14490-4 0 630
2 13367 98.0323 164.4967 0005701 239.3307 120.7327 14.57203694786378
DMSP B5D2-1
1 13736U 82118A 97117.12104475 .00000072 00000-0 48437-4 0 2238
2 13736 98.6209 306.4351 0007854 187.2510 172.8554 14.25830584745802
IRAS
1 13777U 83004A 97116.55468728 -.00000242 00000-0 -13630-3 0 6464
2 13777 98.9716 301.4675 0012657 311.6781 48.3298 13.99268033397198
Cosmos 1447
1 13916U 83021A 97116.56242036 .00000077 00000-0 65733-4 0 6748
2 13916 82.9447 319.2581 0038926 0.8372 359.2840 13.74356156706783
TDRS 1
1 13969U 83026B 97110.37720066 -.00000293 00000-0 10000-3 0 7364
2 13969 9.4215 40.7358 0002193 357.3566 257.4790 1.00276191 24465
GOES 6
1 14050U 83041A 97111.47934042 .00000041 00000-0 10000-3 0 6512
2 14050 7.5361 50.7920 0004012 58.1024 146.2118 1.00236698109282
AO-10
1 14129U 83058B 97113.28228492 .00000205 00000-0 10000-3 0 4737
2 14129 25.8370 151.4342 6072667 111.0875 321.5207 2.05879933 76257
LandSat 5
1 14780U 84021A 97115.74534996 .00000019 00000-0 14563-4 0 6074
2 14780 98.2861 178.8103 0003609 52.0778 308.0789 14.57074320699474
UO-11
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2 22314 0.1127 85.8140 0003870 286.8196 272.1105 1.00267121 15632
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2 22521 31.1038 232.4973 0055275 27.2945 333.0590 15.03478200229515
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2 23398 65.2006 73.5980 0005049 296.7815 63.1500 2.13102000 18940
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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1402. Amateur CW/Voice Satellite Frequencies FAQ 04.28.97

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2804971638360001@cqtlm-pm2-059.dowco.com>
Source record: 19060
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

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SB freqs @ amsat $FREQ04.28
Amateur CW/Voice Satellite Frequencies for April 28, 1997.

BID: $FREQ0428
-------------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

The chances of damaging AO-10 by uplinking during "FMing" are probably remote. The caution mainly stems from a theoretical consideration. AO-10's latching relays are set to the omni antenna and the transponder is on in Mode-B configuration. This all turns out to be perfect since we can't control the attitude, etc. Each time there's a power spike the chance exists that the IHU could have a "seizure" and blurt out a pulse to switch the antennas to higain, switch the transponder off or whatever. Of course these spikes occur every time we come out of eclipse, but the idea is to do what we can to minimize the number of power spikes. Occasionally spikes have "activated" the IHU in the past and caused the beacon to send out nonsensical data rather than the current constant carrier for short periods of time. ..and it isn't clear when AO-10 switched to the omni antenna, so I guess such things may have happened in the past.

I suppose there are also some considerations regarding the effects on the transponder of operating it so far off its normal voltage/current curve, but, again, this doesn't seem to have caused a problem after many years. <thanks to Stacey E. (Chuck) Mills W4SM for this explanation>

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective method for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. The 435.504 beacon is the only one currently being copied. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Digital mode until April 25. Here is the latest schedule:

Apr.25(Fri) 01:24z JA
May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex and SAFEX are still offline as of time of writing although official reports have stated that the emergent situation from coolant leaking into the space station has been relaxed somewhat and the immenent evacuation of the station seems less likely at this time.

* Space Shuttle Frequencies when in orbit. Next SAREX mission tentatively set for July 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 2M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1403. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5k38d2$c9$1@thor.atcon.com>
Source record: 19061

"Robert W. Cunningham" <rcunning@acm.org> wrote:

>the atmospheric drag characteristics of LEO orbits.

<large snip>

>There is no uplink. And we'd like to use a Ham band so we can mazimize
>the number of potential ground stations, in case our position

<snip>

>5. Would anyone be interested in a cash contest driven by the reception
> of data from our nanosat? If we miss our own ground station, the
> first Ham to get each data set to us would get $100. That would be

<snip>

Can I ask a couple of,perhaps naive questions?

1...isn't LEO intended for commercial use? and aren't its proponents
looking at trying to grab amateur spectrum for it?

if yes then

2...being commercial how can you justify or even contemplate using an
amateur band?

and

3... you want to pay a ham for using amateur radio? Isn't that a
violation of th regulations.

Just my $0.02

Dean, VE1CBF VE1CBF@qsl.net
10-X 31826 FN96VC

- - ... ... - -

1404. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <33652B4C.8C1FB1F0@acm.org>
Source record: 19062

W. D. Milner wrote:
>
> "Robert W. Cunningham" <rcunning@acm.org> wrote:
>
> >the atmospheric drag characteristics of LEO orbits.
>
> <large snip>
>
> >There is no uplink. And we'd like to use a Ham band so we can mazimize
> >the number of potential ground stations, in case our position
>
> <snip>
>
> >5. Would anyone be interested in a cash contest driven by the reception
> > of data from our nanosat? If we miss our own ground station, the
> > first Ham to get each data set to us would get $100. That would be
>
> <snip>
>
> Can I ask a couple of,perhaps naive questions?
>
> 1...isn't LEO intended for commercial use? and aren't its proponents
> looking at trying to grab amateur spectrum for it?

Not in particular. Anyone who can safely launch a satellite can put
one up. Commercial, Government, or Private individual, makes no
difference (ref. Space Act of 1958(?) and the Geneva and UN Accords).

> if yes then
>
> 2...being commercial how can you justify or even contemplate using an
> amateur band?

Simple. We're not commercial. Re-read the original post: Most of the
work is being performed under the sponsorship and auspices of the
University of California, in partnership with Tether Applications, who
is providing the fundamental technologies and mission description.
The funding will likely be a collection of grants, SBIR awards, and
partnerships with other public and private institutions.

> and
>
> 3... you want to pay a ham for using amateur radio? Isn't that a
> violation of th regulations.

I never said we'd "pay" anyone to gather data for us! I did say that a contest would be sponsored, the goal of which is that the Ham who can keep his rig trained on our tiny satellite, successfully record the telemetry, and relay the data to us first will receive a REWARD for his efforts. Hams do it all the time! Though if cash is a problem, a gift certificate to Ham Radio Outlet could be easily arranged.

-BobC

1405. CT QSO Party This Weekend - Work W1AW !

Newsgroup: rec.radio.amateur.space
Date: 1997-04-28 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3365272C.63AF@ix.netcom.com>
Source record: 19063
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc

1997 CONNECTICUT QSO PARTY - OPERATING RULES

Connecticut QSO party, sponsored by the Candlewood ARA, 2000Z May 3
until 2000Z May 4, with a rest period 0400Z - 1200Z. Phone, RTTY and CW.

Work stations once per band and mode, mobiles as they cross county
lines. No repeater QSOs.

Single operator, fixed/mobile, Novice, QRP(5W), Multi-single
Multi-multi
classes plus Connecticut club competition.

Connecticut stations may contact other Connecticut stations for
QSO/multiplier credit.

Connecticut stations exchange report and county; others exchange
report
and state/province/DXCC country. Non CT stations work CT stations only.

CW - 40 KHz. up from lower band edges; Novices 25 KHz. up from low
end;
Phone - 1.860, 3.915, 7.280, 14.280, 21.380 28.380. VHF - 50.150,
144.200,
146.580. RTTY - Normal RTTY Bands . All bands (HF,VHF, UHF) except
WARC bands count.

Score one point per phone or RTTY QSO and two points per CW QSO.
QSOs
with club station W1QI and ARRL HQ station W1AW count 5 points.

Connecticut stations multiply QSO points by states/
provinces/Connecticut
counties worked (DX only one multiplier); others multiply by Connecticut
counties worked (work CT stations only).

Plaques and certificates (100 point minimum). Special certificate
for
working all 8 Connecticut counties.

Send entry and SASE for results by June 3 to CARA, P.O. Box 3441,
Danbury CT 06813-3441

CARA - http://www.danbury.org/org/cara/

--
73 de Jim, KD1YV

http://pw1.netcom.com/~jimkd1yv/hamily.html

1406. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc54b1$c2e58ea0$4ce06e97@pc3527.bev.etn.com>
Source record: 18975

> "Robert W. Cunningham" <rcunning@acm.org> wrote:
>
> <large snip>
>
>There is no uplink. And we'd like to use a Ham band so we can mazimize
>the number of potential ground stations, in case our position
>
> <snip>
>
> -BobC

Speaking as a non-expert, I don't see any insurmountable problem. My understanding is that the transmitter must be nominally "controlled" by a licensed amateur and there may be some sort of FCC approval / coordination required (at least for permanent, repeater-type operation, which this isn't :).

This is kinda, sorta like the high-altitude ballons hams send up occasionally. Temporary, but just a little higher. They send back telemetry, sometimes pictures, and sometimes they carry a repeater. I don't believe they require any FCC notification.

If there are no licensed amateurs in your group, the no-code tech exam should be a no-brainer to anyone with a technical background.

As far as cash rewards for data collection contest goes, well, hams are crazy. The ones who are serious would do it for the challenge, for the ones who aren't serious $100 isn't enough. In my opinion, recognition would work as well or better than cash. A certificate, or a mug, or a writeup in QST, for examples.

Good luck.
--
Dana Gould, WA1UIW
*dgould@bev.etn.com

1407. Wisp and Dove

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: jtpjatae@bicc00.bi.ehu.ES
Message-ID: <3.0.1.32.19970429191927.007b7b80@bicc00.bi.ehu.es>
Source record: 18976

I am playing at present with Wisp, a 2nd hand 736R and a lent KCT. I have been able to configure the whole in order to correct the doppler shift and receive information (no good antennas yet, no preamplifier yet) from UO-22, and KO-23 and KO-25. I am trying to configure the DO-17 sat. I have defined the U/L and D/L freqs to be 145.825 but when the pass begins, it still use mode J and doesn't use the freq's I have put.

Any ideas?

Eduardo
Eduardo Jacob - Area de Ingenier'ia Telem'atica
Departamento de Electr'onica y Telecomunicaciones
ETSII y de IT Tel: +34-(9)4-427 8055
UPV / EHU Fax: +34-(9)4-441 4041
Alda Urquijo s/n E-mail: jtpjatae@bi.ehu.es
E-48013 - Bilbao (Spain) : 100021,2212 Compuserve
Ham: EA2BAJ VHF PACKET: EA2BAJ @ EA2URV
PGP Key available: Send email w/subject: PGPKEY
fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD

1408. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <33667F04.1875FDAF@acm.org>
Source record: 18977

Dana Gould wrote:
>
> > "Robert W. Cunningham" <rcunning@acm.org> wrote:
> >
> > <large snip>
> >
> >There is no uplink. And we'd like to use a Ham band so we can mazimize
> >the number of potential ground stations, in case our position
> >
> > <snip>
> >
> > -BobC
>
> Speaking as a non-expert, I don't see any insurmountable problem. My
> understanding is that the transmitter must be nominally "controlled" by a
> licensed amateur and there may be some sort of FCC approval / coordination
> required (at least for permanent, repeater-type operation, which this isn't
> :).

I'm KE6RGA, and we're already looking into FCC/ITU regulations. Looks
like if we keep our satellite radiated power under 100mw, no license of
any sort will be required!

But can anyone hear 100mw if our frequency is "somewhere" in the range
of 0.140-2.500 GHz?

> This is kinda, sorta like the high-altitude ballons hams send up
> occasionally. Temporary, but just a little higher. They send back
> telemetry, sometimes pictures, and sometimes they carry a repeater. I don't
> believe they require any FCC notification.

Turns out that we hope to "pre-flight" some future hardware on baloons!
The Antarctic circum-polar missions will allow us to not only recover
the hardware, but will expose the payload to LEO-like radiation levels.

> If there are no licensed amateurs in your group, the no-code tech exam
> should be a no-brainer to anyone with a technical background.

I think we have a new student member who is a ham as well.

> As far as cash rewards for data collection contest goes, well, hams are
> crazy. The ones who are serious would do it for the challenge, for the ones
> who aren't serious $100 isn't enough. In my opinion, recognition would work
> as well or better than cash. A certificate, or a mug, or a writeup in QST,
> for examples.

Done! QSL cards too?

-BobC
KE6RGA

1409. New nanosat needs UPlink - help on receivers

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: Sameer Samat <ssamat@ucsd.edu>
Message-ID: <3366DFB0.2E6DB53E@ucsd.edu>
Source record: 18978

I'm working on a small (10 - 15 cm spherical satellite) for The University of California, San Diego. We've been concentrating on our downlink systems for a while now, however it just became apparent that we may also need an uplink.

Some team members and I were thinking that a small, low power receiver would be pretty easy to setup on a satellite this tiny. Would the same technology used in pagers do the job? Those run on a AAA battery for a month or so, without any problems ,and their reception is pretty good.

What kind of data can be sent across such a link? Or can ANY kind of data be sent? (I'm not a radio expert ... you'll have to forgive me)

what frequency would such a receiver work on?.. or is that configurable as well?

Thanks for all the help

Sameer Samat

1410. ARLK033 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk033.1997@arrl.org>
Source record: 18979
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK033
ARLK033 Keplerian data

ZCZC SK33
QST de W1AW
Keplerian Bulletin 33 ARLK033
From ARRL Headquarters
Newington, CT April 29, 1997
To all radio amateurs

SB KEP ARL ARLK033
ARLK033 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97115.22456393 .00000099 00000-0 10000-3 0 04760
2 14129 25.8404 151.1006 6072672 111.6370 321.0832 2.05881198076290
RS-10/11
1 18129U 87054A 97118.95899593 .00000030 00000-0 15982-4 0 03545
2 18129 82.9222 275.1149 0012590 5.4783 354.6507 13.72377557493486
UO-11
1 14781U 84021B 97119.00935025 .00000045 00000-0 15457-4 0 09981
2 14781 97.8309 102.2211 0011874 155.2190 204.9589 14.69545166704030
RS-12/13
1 21089U 91007A 97119.06735932 .00000033 00000-0 18383-4 0 09958
2 21089 82.9211 315.0794 0031021 73.7623 286.6933 13.74080381312412
UO-14
1 20437U 90005B 97118.76820292 -.00000018 00000-0 97209-5 0 02896
2 20437 98.5194 201.5016 0011452 358.5063 1.6084 14.29957018379152
RS-15
1 23439U 94085A 97118.75963866 -.00000039 00000-0 10000-3 0 02218
2 23439 64.8152 232.7654 0150458 141.6147 219.5598 11.27526475096368
AO-16
1 20439U 90005D 97119.13444406 .00000047 00000-0 35166-4 0 00891
2 20439 98.5360 204.6825 0011814 358.5976 1.5170 14.30005864379224
RS-16
1 24744U 97010A 97119.02338540 .00002055 00000-0 70697-4 0 00536
2 24744 97.2793 25.0039 0005513 268.2234 91.8378 15.31185018008568
```

```
DO-17
1 20440U 90005E 97118.77545355 .00000012 00000-0 21408-4 0 00714
2 20440 98.5379 205.1560 0011812 358.5270 1.5876 14.30148202379208
WO-18
1 20441U 90005F 97119.12202960 .00000035 00000-0 30135-4 0 00977
2 20441 98.5399 205.4053 0012322 357.5539 2.5582 14.30116046379256
LO-19
1 20442U 90005G 97118.74346015 .00000012 00000-0 21312-4 0 00652
2 20442 98.5439 205.6752 0012514 357.7069 2.4056 14.30229855379228
FO-20
1 20480U 90013C 97118.91470634 -.00000018 00000-0 23122-4 0 09957
2 20480 99.0413 89.7845 0541031 128.9478 236.1129 12.83237626338385
AO-21
1 21087U 91006A 97118.99402047 .00000094 00000-0 82657-4 0 08292
2 21087 82.9356 87.9815 0037461 46.3499 314.0645 13.74581206313396
UO-22
1 21575U 91050B 97119.08963299 .00000028 00000-0 23497-4 0 07883
2 21575 98.3085 181.3567 0008576 42.5907 317.5946 14.37067098303432
KO-23
1 22077U 92052B 97118.83981953 -.00000037 00000-0 10000-3 0 06776
2 22077 66.0786 248.5556 0011800 223.2961 136.7131 12.86302370221406
KO-25
1 22828U 93061F 97118.74496574 .00000034 00000-0 30937-4 0 05486
2 22828 98.5436 194.3699 0010738 15.1698 344.9802 14.28176161155153
IO-26
1 22826U 93061D 97119.11926617 .00000012 00000-0 22240-4 0 05734
2 22826 98.5439 194.6550 0009949 29.1540 331.0212 14.27833830187087
AO-27
1 22825U 93061C 97118.72656952 .00000017 00000-0 24269-4 0 05616
2 22825 98.5484 194.0408 0009580 29.0114 331.1597 14.27724273187019
FO-29
1 24278U 96046B 97119.09854144 -.00000029 00000-0 95432-5 0 00845
2 24278 98.5460 167.0124 0351451 313.5789 43.6665 13.52629841034483
MO-30
1 24305U 96052B 97118.81553009 .00000204 00000-0 20364-3 0 01135
2 24305 82.9201 31.0576 0032127 347.4991 12.5282 13.73092170032280
Mir
1 16609U 86017A 97119.08747601 .00002690 00000-0 39977-4 0 02836
2 16609 51.6547 332.4912 0009090 309.4717 50.5472 15.59260241639360

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
May 3, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1411. Re: 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <269820947wnr@brimar.demon.co.uk>
Source record: 19064

In article: <Pine.SOL.3.91.970427220445.4439A-100000@spacelink> Richard
David Glueck <glue9600@spacelink.msfc.nasa.gov> writes:
>
> On Sun, 27 Apr 1997, Masa wrote:
>
> > I got the digital signal from 145.825. which satellite is this ?
> >
> >
> >
> > Masataka Noda
> > Masa@WriteMe.com
> > http://www.geocities.com/Yosemite/1325/
>
> You intercepted DOVE, also known as DO-17. DOVE sends telemetry
> earthward for analysis by amateurs and students. It occasionally carries
> a digitally encoded voice message. DOVE is a cube shaped amateur bird,
> measuring about 8inches on each edge. She's afaithful little thing, and
> has crashed several times, yet always stuck around for revival.
>
>
> ---------- Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov
>

It may also have been Uosat 11 on 145.826 MHz. This sat sends
ASCII Telemetry too. Good luck.

--
****
Brian Gibbs EMail brian@brimar.demon.co.uk
Nr Corsham, Wilts. UK. Packet G3MBN@GB7SDN.#49.GBR.EU
****

1412. FM voice satellite?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: stevekit@worldnet.att.net
Message-ID: <5k47pg$1o7@mtinsc02.worldnet.att.net>
Source record: 19065

In the past I could track and pick up xx-18 satellite with my scanner. It looks like that satellite is no longer listed anywhere, so I guess it's not operational. Are there any other satellites I can receive with a regular hand held scanner?

Thanks.

stevekit@worldnet.att.net
steve_kittelsen@wxxi.pbs.org
http://home.eznet.net/~redline/steve/

1413. Re: Ham-Space Digest V97 #147

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: mano@spidernet.COM.cy
Message-ID: <199704291427.RAA07373@mail0.spidernet.net>
Source record: 19066

>A digital signal heard on 150.00 mhz FM i belive is a weather
sattelite anyone any ideas ?

thanks Manos
mano@spidernet.com.cy

1414. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33661B9D.2B8B@codem.com>
Source record: 19067

W. D. Milner wrote:

> 1...isn't LEO intended for commercial use? and aren't its proponents
> looking at trying to grab amateur spectrum for it?

Dean:

The abbreviation LEO = low earth orbit. Period. It has no connotations of commercial or otherwise. No doubt the confusion arises from the references to "Big LEO" and "Little LEO" commercial comms systems, of which the latter has been in the news lately.

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1415. How to download telemetry from satellites.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: asset@ryp76.ryp.umu.se
Message-ID: <5k4njm$378$1@studium.student.umu.se>
Source record: 19068

We are two students at the Space Engineers program in Kiruna, Sweden, and we are right now working on our degree project. The goal of this project is to create a practical in satellite groundstation-technique. For this we are going to track a number of amatuer satellites (both existing and future) and download their housekeeping telemetry and then display the data in the practical.

Now to our problem: For this practical to work we need to know how the telemetry data is encoded and transmitted. We have searched all over the Internet but can only find information on frequencies and radio repeaters. Do you think you can help us to find out what we need to know?

Information on the degree project can be found on the following adress:
http://www.ryp.umu.se/~asset/tech/

\ Carina Riber & Krister Sundstroem

1416. Re: FM voice satellite?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: Kees Leune <s722413@kub.nl>
Message-ID: <5k4mn0$d94$1@mailnews.kub.nl>
Source record: 19069

Steve Kittelsen <stevekit@worldnet.att.net> wrote:
* In the past I could track and pick up xx-18 satellite with my scanner. It
* looks like that satellite is no longer listed anywhere, so I guess it's not
* operational. Are there any other satellites I can receive with a regular
* hand held scanner?

Dove (DO-18, 145.825) is still operational as far as I can tell... there are other satelites you could try. THe one that comes to mind is the russian space station Mir (70cm downlink at 437.950 +- doppler).

73
-Kees, PE1RHP
--
Kees Leune Tilburg University
Student of Information Management and Technology The Netherlands

EMail: C.J.Leune@KUB.NL HAM Callsign: PE1RHP
WWW: http://stuwww.kub.nl/people/kees/

1417. Shopping Maxpro and SSB in Germany

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: jtpjatae@bicc00.bi.ehu.ES
Message-ID: <3.0.1.32.19970429192057.007b4e40@bicc00.bi.ehu.es>
Source record: 19070

Does anybody know the e-mail or www address of a shop in Germany that sells
Maxpro and SSB antennas and preamplifiers?

Best regards

Eduardo Jacob - EA2BAJ
VHF PACKET: EA2BAJ @ EA2URV
PGP Key avlb: Send email w/subject: PGPKEY
fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD

1418. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33663063.691@codem.com>
Source record: 19071

Robert W. Cunningham wrote:

> Well, we need to operate the transmitter for about three months using
> only 4 alkaline "D" cells!

I first have a comment about the battery arrangement. I think your assumptions about capacity are too optimistic. No doubt you have done your homework on the batteries selected. However, for the benefit of others, I will quote from Duracell:

"The alkaline-manganese dioxide system is best suited for use over a temperature range of -4 F to 130 F (-20 C to 54 C). At lighter loads, some output can be obtained at temperatures as low as -20 F(-30 C). Actual service depends on cell size and current drain. For most cells, up to 75 percent of the rated capacity at room temperature can be delivered at 32 F(0 C)."

Components in space can get extremely hot and cold. General purpose batteries are designed to operate at about 70 deg F. High temps (over 110 deg F) can and will significantly degrade battery life, although this is less of a problem for alkalines than zinc-carbon. The rapid cycling between high and low temp extremes can quickly kill your batteries, too. Have you estimated internal temps yet?

Also, low temps will really impact the terminal voltage and capacity. Anyone who's tried to take photos or to use their HT outside in the winter can testify to that. At freezing (32 deg F), the terminal voltage will be about 1.45V. Not bad. But suppose the internal temperature is at or below 0 deg F, something not entirely unlikely. I'm gonna guess the terminal voltage will be something like 1.2V or less.

I'm not saying alkaline is not the way to go (especially considering the project constraints). Just be careful when you estimate capacity.

> Here's a list of some of our constraints:
> 1. Transmit window of 3 minutes 6 times each month.
> - Each data set contains 5 days of data, AVERAGE, maybe more
> depending on the overhead pass schedule.

I second Rob's comments about overhead passes being less than optimal, especially for omni antennas. High-gain tracking antennas make this less of an issue, however.

> 10. The antenna must fit entirely within the sphere (though it may by
> flush with the surface if it conforms to the spherical shape).

Say, what's the surface of this sphere supposed to me made of?

> a) What are typical electrical-to-RF efficiencies for various
> transmitters on each frequency available to us?

At VHF (145 MHz), you can expect about 50% efficiency. At L-band (1296 MHz), estimate about 20%. With additional losses, _slightly_ reduced battery capacity, proper matching network design, etc., you can probably reasonably expect 0.5W output into the antenna based on my quick calculations.

> b) What are typical input-to-radiated efficiencies for the antennas
> available to use for each frequency?

I think you're a little too worried about antenna efficiency here. I don't see it as much of a problem, since in no case is the antenna likely to be physically short compared to wavelength; i.e., you're not designing a mobile HF antenna. :-)

> From other discussions on and off this newsgroup, I expect I will need
> at least 0.5W from LEO (400 Km orbit)...

That's about right. Mileage may vary. :-) Results will depend on the modulation scheme, too.

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1419. Re: How to download telemetry from satellites.

Newsgroup: rec.radio.amateur.space
Date: 1997-04-29 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <33663909.27C9@codem.com>
Source record: 19072

Asset team, Kiruna wrote:

> Now to our problem: For this practical to work we need to know how the
> telemetry data is encoded and transmitted. We have searched all over
> the Internet but can only find information on frequencies and radio
> repeaters.

Just a start...

You can find information on RS-15 telemetry here:
http://www.amsat.org/amsat/ftp/satinfo/rs/rs15tlm.txt

Although AO-13 is dead, you can find the TLM specification here:
ftp://ftp.amsat.org/amsat/satinfo/ao13/spec_tlm.doc

You can find descriptions of protocols used on the PACSATs, including
whole orbit data (WOD) here:
ftp://ftp.amsat.org/amsat/satinfo/pacsat/pacdoc.zip

Spend some more time at the AMSAT-NA home page and follow the links.

Good luck.

Larry N1TX

--

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1420. AO-10

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: p000655b@pb.seflin.org
Message-ID: <5k631j$m92@nntp.seflin.org>
Source record: 18980

I am having problems with A0-10, For the last month or so i canot make any
contacts on the bird.I always had good luck with that bird in the pass.
Is any one having the same problem?

73 KB4SVP

--

Richard Bascom
p000655b@pbfreenet.seflin.lib.fl.us

1421. Florida

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: "Steve G." <bocaz@bocaz.org>
Message-ID: <5k6q4d$jin@newsboy.isdn.net>
Source record: 18981

A new site featuring FREE singles, classified ads, websearch, info, chat, and much more...
http://www.bocaonline.com

1422. What is AX.25 protocol?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: Sameer Samat <ssamat@ucsd.edu>
Message-ID: <33672E56.C38BA77A@ucsd.edu>
Source record: 18982

Can any one help me out in finding out more about AX.25 protocol?...

what is it good at / used for.. and are there any web pages with more
information on this?

thanks a lot

Sameer Samat

1423. Re: What is AX.25 protocol?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33674800.530@ix.netcom.com>
Source record: 18983

Sameer Samat wrote:
>
> Can any one help me out in finding out more about AX.25 protocol?...
>
> what is it good at / used for.. and are there any web pages with more
> information on this?
>
> thanks a lot
>
> Sameer Samat

Good Morning Sameer from Sunny San Diego
You can find a detailed technical explanation of AX.25 at the ARRL
Pages, try URL:
http://www.ve7tcp.ampr.org/Packet/ax25-v2.html

For a more general discussion of the use and operation of Packet Radio,
see the links on the AC6V Ham and DX Reference Guide below.

Go to index -- click on "Packet" -- ther you will find several links to
Packet Radio. See Larry Kenny's excellent tutorial.

73
Rod in San Diego
--
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

1424. Re: What is AX.25 protocol?

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc5569$5a661da0$4ce06e97@pc3527.bev.etn.com>
Source record: 18984

Sameer Samat <ssamat@ucsd.edu> wrote in article
<33672E56.C38BA77A@ucsd.edu>...
>
> Can any one help me out in finding out more about AX.25 protocol?...
>
> what is it good at / used for.. and are there any web pages with more
> information on this?
>
> thanks a lot
>
> Sameer Samat

AX.25 is the standard X.25 link-layer protocol specification slightly
modified for amateur packet radio.

From the specification:

"In order to provide a mechanism for the reliable transport of data
between two signaling terminals, it is necessary to define a protocol
that can accept and deliver data over a variety of types of communications
links. The AX.25 Link-Layer Protocol is designed to provide this service,
independent of any other level that may or may not exist.

The complete document is available at
ftp://ftp.tapr.org/tapr/general/ax25.doc

Check out http://www.tapr.org for general packet radio information.

Good luck.

Dana Gould
*dgould@bev.etn.com

1425. HF Frequencys

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: guy767@aol.com
Message-ID: <19970430141000.KAA02516@ladder01.news.aol.com>
Source record: 18985

Does anyone have a list of HF Frequencys in use around the world. If you do I would love to have a list of them.

Thanks G.G.

1426. Re: HF Frequencys

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33676E67.14@ix.netcom.com>
Source record: 18986

GUY767 wrote:
>
> Does anyone have a list of HF Frequencys in use around the world. If you do I would love to have a list of them.
>
> Thanks G.G.

Wow G.G. -- thats an awful broad question -- but you can find
"Frequencies A Bunch" at the URL:

http://pw2.netcom.com/~ac6v/pagev.html

Covers Ham Frequencies, Frequencies DC to Daylight, Satellite
Frequencies, Emergency Frequencies and much more.

For the short wave bands -- goto URL:
http://pw2.netcom.com/~ac6v/pagej.html
Lots of links to the world of short wave broadcasters.

Good Tuning
73
Rod in San Diego
--
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

1427. Re: New nanosat needs UPlink - help on receivers

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc55a8$c6328e80$4ce06e97@pc3527.bev.etn.com>
Source record: 18987

Sameer Samat <ssamat@ucsd.edu> wrote in article
<3366DFB0.2E6DB53E@ucsd.edu>...
>
> I'm working on a small (10 - 15 cm spherical satellite) for The
> University of California, San Diego. We've been concentrating on our
> downlink systems for a while now, however it just became apparent that
> we may also need an uplink.
>
> Some team members and I were thinking that a small, low power receiver
> would be pretty easy to setup on a satellite this tiny. Would the same
> technology used in pagers do the job? Those run on a AAA battery for a
> month or so, without any problems ,and their reception is pretty good.
>
> What kind of data can be sent across such a link? Or can ANY kind of
> data be sent? (I'm not a radio expert ... you'll have to forgive me)
>
> what frequency would such a receiver work on?.. or is that configurable
> as well?
>
> Thanks for all the help
>
> Sameer Samat
>
Well, I'm no expert either, but that never stopped me from having an
opinion :).

Could you make a command receiver small enough to fit in your nanosat, say, about the size of a pager? I'm certain it can be done. Could you run it for three months (I think someone mentioned three months in a previous post) on batteries? Mmm, that's going to be tough. Just a thought, I know you want a spherical design for uniform drag, but maybe you could put some facets on the surface for mounting solar cells for recharging NiCds? Perhaps a uniformly faceted design?

Standard packet radio baudrates in the VHF and UHF amateur bands are 1200 and 9600 baud. You can go higher than that, but you need increasingly sophisticated modem design.

Typically you could use the satellite subband within the 2-meter band (about 145MHz) for uplink and the satellite subband within the 70-cm band (about 435 MHz) for downlink, or visa-versa. Putting the uplink and downlink in separate amateur bands simplifies the shielding between the transmitter and receiver. You would want to coordinate the exact frequencies with what is already in orbit.

I think (in my humble opinion), your biggest problems are going to be power and antennas. Even using the transmitter as little as possible, I think power is going to be very tight, that's why I suggested the use of solar cells if at all possible. And any antenna somehow built into the surface of the satellite I think is going to be fairly directional, which makes sending and receiving data from a tumbling satellite problematic. But I don't know.

Just a couple of suggestions. Have you tried getting in touch with any amateur radio club on campus? The sophistication of college radio clubs varies of course, but they may already have equipment in place for amateur satellite communications.

I seriously recommend getting a amateur radio, no-code tech license. Somebody on your project is going to need one if you're going to use amateur frequencies for uplink and downlink. Preferably more than one someone. It's not that tough.

Also you might get in touch with AMSAT-NA at http://www.amsat.org. They've been designing, building, and flying amateur satellites for over twenty years. In particular, check out their Microsat design.

Good luck.

Dana Gould
*dgould@bev.etn.com

1428. Re: AO-10

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: "Richard L. Tannnehill" <rickw7rt@mailhost.ibag.com>
Message-ID: <3367E051.550E@mailhost.ibag.com>
Source record: 18988

Richard Bascom wrote:
>
> I am having problems with A0-10, For the last month or so i canot make any
> contacts on the bird.I always had good luck with that bird in the pass.
> Is any one having the same problem?
>
> 73 KB4SVP
>
> --
>
> Richard Bascom
> p000655b@pbfreenet.seflin.lib.fl.us
It appears that AO10 has entered one of its periods where it is
partially shadowed from sunlight. Since it has no working batteries,
signals are totally dependent upon the amount of sunlight received. I
have noticed it's signals are rather weak lately, with some FM'ing of
the 145.808 beacom, a sure sign of limited power. I suggest that we
just monitor it until it returns to a more favorable orientation
relative to the sun. This may be only a week, or several months.

73's Rick T.

1429. HALO Rocket Balloon May 3rd

Newsgroup: rec.radio.amateur.space
Date: 1997-04-30 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <3367DB31.587@hiwaay.net>
Source record: 18989

The following message from Bill Brown, WB8ELK, provides the details
for the re-scheduled HALO Rockoon flight.

Gene W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net
w3pm@amsat.org

HALO Rockoon Flight

Location: Hampstead, NC (20 miles northeast of Wilmington, NC)
Date: May 3rd
Time: 6:15 am EDT (Balloon liftoff)
Time: any time after 8:15 am EDT (Rocket Launch from 105,000 feet)

Transmitters:

On Rocket:

Callsign: KE4ROC
1280 MHz FM ATV (3 watts into vertical antenna)
441.050 MHz FM (packet radio with APRS formatted GPS data)

Coverage range: 700 miles from apogee (entire East Coast, Southeast and
part
of Midwest)

On Launch Gondola:

Callsign: WB8ELK
434.00 MHz AM ATV:(live color camera view of rocket liftoff)
Horizontally
polarized.

Coverage range: 400 miles at launch altitude.
(Southeastern states and on up to New Jersey and Pennsylvania.)

HF coordination nets:

3.871 and 7.155 MHz... W4HTB and WA3USG net controls.

Raindate: May 4th or following weekend.

web site: http://fly.hiwaay.net/~bbrown/

email: bbrown@hiwaay.net (Bill WB8ELK)

73s de Bill WB8ELK

1430. Update

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: mr@totally_useless.com
Message-ID: <5k90f6$ud0@camel4.mindspring.com>
Source record: 18990

Change time again. The monthly features get updated tomorrow at:

http://www.geocities.com/SouthBeach/Sands/1961

1431. UPDATE

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: mr@totally_useless.com
Message-ID: <5k90gc$ud0@camel4.mindspring.com>
Source record: 18991

Change time again. The monthly features get updated tomorrow at:

http://www.geocities.com/SouthBeach/Sands/1961

1432. Pointer to New Ham Radio FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0105970653060001@wd1v.mv.com>
Source record: 18992
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On my home page

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1433. QST Hams with Macs

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0105970655410001@wd1v.mv.com>
Source record: 18993
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Mac information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v
```

1434. Re: New nanosat needs UPlink - help on receivers

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: Stephan Greene <greenes@csf.arl.bdm.com>
Message-ID: <3368A2C3.F5A28994@csf.arl.bdm.com>
Source record: 18994

Dana Gould wrote:
>
> Sameer Samat <ssamat@ucsd.edu> wrote in article
> <3366DFB0.2E6DB53E@ucsd.edu>...
> >
> > I'm working on a small (10 - 15 cm spherical satellite) for The
> > University of California, San Diego. We've been concentrating on our
> > downlink systems for a while now, however it just became apparent that
> > we may also need an uplink.
> >
> > Some team members and I were thinking that a small, low power receiver
> > would be pretty easy to setup on a satellite this tiny. Would the same
> > technology used in pagers do the job? Those run on a AAA battery for a
> > month or so, without any problems ,and their reception is pretty good.

VHF FM receiver boards have been repackaged and flown in space. A
motorola board flew on AO-27, and repackaged HT boards have been flown
on other small LEO satellites.

> > What kind of data can be sent across such a link? Or can ANY kind of

1200-9600 bps FSK or MFSK (Macnhester-encoded) data goes across fine.
Slower data rates requrie fewer modifications to the radios but is
likely not a big issue in this situation.

> > data be sent? (I'm not a radio expert ... you'll have to forgive me)

You're going to need one. (not being snide, speaking from experience.)

> > what frequency would such a receiver work on?.. or is that configurable
> > as well?

There are several frequency bands authorized for satellite
communications. Scientific/research satellites use 137 MHz, there's
aband around 150 MHz, and another around 441 MHz I believe. Amateurs
use 145, 435, and 1269 (or is it 1296?) Mhz. US amateurs could probably
use 220 MHz at least as an uplink band, it's not in general usage
beacuase it is not available world-wide.

I would emphatically NOT recommend using VHF (140-150 MHz) as an uplink
if South America and the Carribbean are going to be in the footprint
during satellite commanding. There is a great deal of unlicensed
"pirate" VHF operations in these regions, you can hear this on the
downlinks of amateur birds with 145 MHz uplinks (AO27, FO20, FO29).
Uplinks in the commercial/scientific bands are probably better but are
not clean, either. You will need some software "keys" so that the
command system ignores all data (or noise that gets decoded as data)

transmissions that don't have the correct coding - otherwise you're open
to uncontrolled commanding or random noise-induced events.

> Could you make a command receiver small enough to fit in your nanosat, say,
> about the size of a pager? I'm certain it can be done. Could you run it for

The motorola VHF decks are tiny. I don't recall if crystal-controlled
boards are still available. They were becoming tough to find three
years ago. I'm not sure I would trust a programmable frequency receiver
for my command circuit.

> three months (I think someone mentioned three months in a previous post) on
> batteries? Mmm, that's going to be tough. Just a thought, I know you want a

The command receiver should be on 24x7; there have been a number of
well-known (and not so well-known) satellite failures becuase the
command receiver failed to activate OR it was accidentaly shut off!

I don't think a paging receiver has the specs (sensitivity, selectivity,
frequency stability) to be a good command receiver. This is worth some
testing. Look at finding a small commercial VHF or UHF receiver deck,
test it thoroughly (esp. under varying temperatures) and repackage it.
Limited receiver performance (dues to antennas, etc.) can be compensated
to some extent by improving the command station's performance.

> Typically you could use the satellite subband within the 2-meter band
> (about 145MHz) for uplink and the satellite subband within the 70-cm band
> (about 435 MHz) for downlink, or visa-versa. Putting the uplink and
> downlink in separate amateur bands simplifies the shielding between the

Yes. Dove ran into major problems with uplinks and downlinks on the
same band, I recall. In spite of my comment on NOT using 2M uplink, it
has the advantage that the 3rd harmonic of the transmitter is not going
to bother the satellite's reciever.

> transmitter and receiver. You would want to coordinate the exact
> frequencies with what is already in orbit.

Required by ITU regs anyway.

> I think (in my humble opinion), your biggest problems are going to be power
> and antennas. Even using the transmitter as little as possible, I think

Power budget is a problem on most satellites. Probably more than
weight. There's also the question of link requirements, especially if
there is now an uplink to worry about.

> cells if at all possible. And any antenna somehow built into the surface of
> the satellite I think is going to be fairly directional, which makes
> sending and receiving data from a tumbling satellite problematic. But I

I'm not an antenna engineer, but I'd guess that's the case as well. A
full-size mock up could be easily built and tested on a home-made
antenna range, just like AMSAT has done in the past.

The suggestion to get hooked up with the local ham club on campus and get someone on the team licened is a good one. You can build up expereince with satellite operations using the amateur and weather satellites, especially for the niceties of telemetry download and analysis on a schedule. (If the satellite is overhead at 1AM, SOMEONE had better be in the command station, unless it's fully automated and you just want to capture telemetry)

BTW, Bobb Twiggs, who had a hand in the Microsat development when he was in Utah, is now a professor at Stanford and is involved in small satellite development. You might try contacting him (I assume Stanford and UCSD are on speaking terms <grin>).

There is an excellent textbook treatment of all aspects of satellite design by Wertz (I forget the title - "spacecraft design or something like that comes to mind). If you're team doesn't have a copy, GET ONE. Excellent resource.

Sure wish we had hands-on projects like this when I was in school.

73, Steve Greene KA1LM@amsat.org

1435. Ham Trader Yellow Sheets - HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: johnsi@sprynet.com
Message-ID: <5ka9me$32p@lal.interserv.com>
Source record: 18995

HELP! - I lost the address for the Ham Trader Yellow Sheets.
Please email me with the address.
All I have is the old winter address in Florida.
P.S. If you know of another place to post an ad I would be grateful.
Thanks,
John N7MTB

1436. * SpaceNews 28-Apr-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0428.1997@ampr.org>
Source record: 18996
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0428
* SpaceNews 28-Apr-97 *

BID: $SPC0428

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SpaceNews
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MONDAY APRIL 28, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
The Russian-American crew on Russia's 11-year-old Mir space station are
struggling with a leak of antifreeze vapor and may have to abandon ship,
mission control said last week.

Spokesman Viktor Blagov said that at the moment there was no reason to
evacuate Mir, but added: "The team is continuing its repairs. It's a
difficult task and if it cannot be solved Mir might be abandoned by the
cosmonauts."

Speaking from space, NASA astronaut Jerry Lineger said he and his two
Russian colleagues had almost abandoned ship twice in the past few months.

Blagov, deputy head of the flight program, said the cosmonauts had repaired
two leaks in the cooling system with special glue but had yet to find a third
through which antifreeze was escaping into Mir's air supply.

"It's on the limit of what is acceptable," he told a news conference, adding
that it was not clear how dangerous the concentration of antifreeze vapor
was.

"We immediately told NASA about the defects on the station and the American
specialists are kept continually informed about what is happening on Mir,"
he added.

He said an urgent evacuation of the cosmonauts could be ordered from ground
control or by the space station commander.

"That could happen if there's a big fire on the station or if there is
decompression," Blagov said, adding that the men could reach Earth in an
hour using the Soyuz rocket which is now docked with Mir.

"Mir orbits Earth 16 times in a 24-hour period. Three of them are over the region of the launchpad in Kazakhstan, where everything is ready for a search for the cosmonauts," he said.

The Mir crew could also return to Earth in any other orbit, he added. "But in that case the place of touchdown could be in France, Ukraine, Britain, Asia or the United States."

The leaks, which occurred during the past month, are the most serious so far on the station, which has also suffered four fires while in orbit, the last in February.

Blagov said that leaks had been caused by electric cables touching the pipe carrying anti-freeze to the cooling system. He said that 1.6 liters of antifreeze had leaked out. A liter is about a quart.

In the Kvant module where the main cooling system equipment was, the temperature had soared to between 79 to 88 degrees, which was bad for the cosmonauts trying to carry out repairs and could damage equipment for scientific experiments stored there.

Igor Goncharov, specialist for medical emergencies on the orbiting station, said the crew's morale had been hit by the high temperature and stress suffered by the cosmonauts as a result of a fire Feb. 23.

"They complained of insomnia but an analysis of their blood and urine did not show any abnormalities in their organisms," Goncharov said, adding that the men had interrupted their sleep patterns by working through several nights.

"Now they have been given strict instructions to go to bed at 11 p.m. and wake up at eight in the morning," Goncharov said. The cosmonauts had also resumed their physical exercises.

In four of Mir's six modules, living conditions were normal. "The team spends most of its time in safe sections," he said.

[Reuter press release via Michael Catalanotti, N1YHW]

* JAY APT RETIRES *
==========
Four-time Shuttle astronaut Jay Apt, N5QWL, will leave NASA in late May to become director of the Carnegie Museum of Natural History in Pittsburgh, PA.

"The astronaut office will miss Jay's dedication and spirit," said David C. Leestma, director of Flight Crew Operations. "I am sure he will use this new position to continue his efforts to educate and inspire young people to excel."

Apt first flew on STS-37 on Atlantis in 1991, conducting two spacewalks, including one unscheduled EVA to deploy manually the antenna on the Gamma Ray Observatory spacecraft. He flew twice on Endeavour, during STS-47 in 1992 for the Spacelab-J mission, and again for STS-59, the first flight of the Space Radar Laboratory in 1994. Most recently, Apt flew aboard Atlantis on STS-79, the fourth Shuttle-Mir docking mission, in 1996.

"Every minute that I've been a part of the space exploration program has been fascinating" said Apt. "I am delighted to have had the opportunity to fly around our planet hundreds of times, and now it is time to give something back to the people who sent me there. I am thrilled by the chance to return to Pittsburgh and lead one of the best museums in America into the next century. Providing an exciting environment for both families and scientists to learn about this planet is going to be the most challenging and interesting job I can imagine doing."

[Info via NASA]

* NORTH TEXAS BALLOON FLIGHT #7B *
==========
The seventh mission of the North Texas Balloon Project finally took to the air at 10:14 a.m. on 19 April 1997 from the Cleburne, TX Municipal Airport. Two hours later, it had a soft landing in a pasture near Italy, TX and was recovered by NTBP personnel within 30 minutes. The launch was delayed from its scheduled time of 9 a.m. by 1) local winds aloft data not being available, and 2) unexpected burst of the first balloon during inflation, the cause of which was unknown, but the parachute spreader ring, swivels and woven tow line allowed a nice easy descent.

The GPS experiment experienced two separate difficulties during the flight. The Delorme Tripmate GPS receiver failed to maintain track on enough GPS satellites to provide accurate altitude data. In fact, the entire altitude data set was suspect and finally disregarded. However, the Tripmate did provide accurate Latitude and Longitude data. The other difficulty was related to the GPS beacon transmitter itself. The Yaesu FT-530 output power level dropped to near zero at 75 minutes into the flight. It has not been determined why the HT power dropped, but extremely cold temperatures are a likelihood.

The FM crossband voice repeater was the highlight of the mission. The following locations were able to hear and/or work through the balloon. In Texas, Ft. Worth, Dallas, Houston, Plano, Irving, San Angelo, San Antonio, Kerrville, Newberry; Clovis, NM; in Louisiana, Shreveport and Bossier City; Wichita and Hays in Kansas; and last but not least Vicksburg, Mississippi! A great time was had by all operating through the balloon repeater.

In addition, the 35mm still camera took some great pictures every 3.3 minutes which lasted nearly the entire ascent leg. These photos will be scanned and will be available for downloading within the next few weeks at the following Web site:

http://procorp.com/procorp/NTXBP.htm

Those wanting QSL/SWL cards for NTBP #7B, please send requests to kg5ie@flash.net.

Doug Howard, KG5OA, would like to sincerely thank the Lockheed-Martin ARC in Fort Worth for supporting the NTBP. It took two very, very troublesome years to accomplish our seventh flight. Doug is extremely proud of the extraordinary patience and efforts that the members of the LMARC displayed throughout this difficult time. Hopefully, they will be ready to fly again

soon!

[Info via Doug Howard, KG5OA]

* MIR FAN CLUB NEWS *
==========
The Mir Fan Club has a new URL. Its Web Page may be found at:

http://www.geocities.com/CapeCanaveral/Lab/2579/

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-=-=-=-=- Linux: For IQs higher than 95 -=-=-=-=-=-=-=-=-=-=-=-

1437. [ANN] Major new release of MacGPS Pro

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: lwjames@csn.net
Message-ID: <lwjames-ya023180000105971338490001@news-2.csn.net>
Source record: 18997

James Associates is proud to announce a major upgrade of their popular
MacGPS Pro software.

This new version supports direct import of maps in GIF, JPEG, PICT,
Photoshop, MacPaint, Silicon Graphics, and QuickTime Image file formats.

It now supports the Garmin receivers with built-in Depth Sounders,
including display of depth on the track log on the map.

MacGPS Pro is used by thousands of people around the world to connect their
Macintosh to their Garmin GPS receiver. It has been refined over the years
by many new releases with additional features requested by happy users. It
is the only Mac GPS program which can display track logs, routes and
waypoints transferred to and from your GPS receiver, as well as your
current location, on a map. The background map can be almost any scanned
map, any map downloaded from the Internet, or any map copied from a CDROM
or another Mac program.

MacGPS Pro will work on almost any Mac, even an old one. It does not
require a portable Mac with a CDROM in order to show your current position
on the map of your choice.

Larry James
James Associates
http://www.csn.net/~lwjames/GPSPRO.html

1438. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5kause$c3r@blackbird.afit.af.mil>
Source record: 18998

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1439. Re: New nanosat needs UPlink - help on receivers

Newsgroup: rec.radio.amateur.space
Date: 1997-05-01 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc5670$26bbd0a0$4ce06e97@pc3527.bev.etn.com>
Source record: 18999

sigh This message never make it to my news server, I found it while I was browsing on DejaNews.

>Dana Gould wrote:
>> <snip>
>> Speaking as a non-expert, I don't see any insurmountable problem. My
>> understanding is that the transmitter must be nominally "controlled" by a
>> licensed amateur and there may be some sort of FCC approval / coordination
>> required (at least for permanent, repeater-type operation, which this isn't
>> :).
>
>I'm KE6RGA, and we're already looking into FCC/ITU regulations. Looks
>like if we keep our satellite radiated power under 100mw, no license of
>any sort will be required!

Good, I'm glad there's at least one ham on your team.

I hadn't even considered ITU regulations. *sigh* Maybe I should recommend you add a lawyer to your team.

>But can anyone hear 100mw if our frequency is "somewhere" in the range
>of 0.140-2.500 GHz?

With a gain antenna and tracking software to drive it, I sure you could hear it. But you cut down on the potential amateurs that could help you recover data. Ideally, you use enough power so that someone with an omni can hear you. <shrug> It's a trade-off. But I wouldn't recommend any band over 435 MHz, keep it simple.

> <snip>
>
>Turns out that we hope to "pre-flight" some future hardware on baloons!
>The Antarctic circum-polar missions will allow us to not only recover
>the hardware, but will expose the payload to LEO-like radiation levels.
>

Cool!

>> As far as cash rewards for data collection contest goes, well, hams are
>> crazy. The ones who are serious would do it for the challenge, for the ones
>> who aren't serious $100 isn't enough. In my opinion, recognition would work
>> as well or better than cash. A certificate, or a mug, or a writeup in

QST,
>> for examples.
>
>Done! QSL cards too?
>
>-BobC
> KE6RGA
>

Ha, I thought of QSL cards shortly after I posted my message. Yes, QSL cards would be perfect.

Do you have a name for your project yet? I propose LodeStar (Low Orbit Drag Experiment - Satellite Tracking by Amateur Radio :).

Dana
*dgould@bev.etn.com

1440. Two Mir WWW status pages

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: <>
Message-ID: <970401220949.tvr@mocha.ecofe.com>
Source record: 19000

It sounds like we might have to wait until the cooling problems in MIR can be resolved, so that MIR can be restored to its normal orientation with respect to the sun. At last report, it is oriented to reduce the cooling load on the core module, which also has the effect of reducing the output of its solar panels. That sounds like a good reason for not operating amateur equipment until that problem can be resolved. There are two pages which give MIR status reports:

http://shuttle-mir.nasa.gov/mir23/status/ (NASA version)

http://infothuis.nl/muurkrant/main_uk.html (MIRnews [Netherlands])

Note that the Mir mission number[?] will be incremented when there is a crew change, so when Linda Godwin replaces Jerry Linenger, that link should change to '.../mir24/status/'.

-- KD6PAG (networking old-timer, RF newbie)

1441. Watching the Shuttle launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3369f7ef.177377046@news.erols.com>
Source record: 19001

I've watched the Shuttle go over head many times but I've never seen it during its launch and ascent phase. I see that the next launch is set for 15 May and that this is MIR rendevous mission. Luanc is set for around 4 am.

I wonder if there's any possibility of observing the ascent from the Washington D.C. area? Comments, suggestions?

Thanks, 73 Bill N2CQR

1442. Authors Seeking Publication

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: Tim@idt.net
Message-ID: <5kckke$aap@bolivia.earthlink.net>
Source record: 19002

Now*accepting <new> and <previously published> writers for publication.
We are a NEW=YORK based international literary agency with three
offices: 2 in NEW=YORK and one in <FLORIDA.>
<Please follow guidelines for submission:>
For ALL fiction, including screenplays for TV & Movies: Send us a <brief synopsis>,
the first chapter, and include a self-addressed, stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For ALL nonfiction: Send us a <brief synopsis>, the first chapter, and include a S.A.S.E.
Do not send complete manuscript unless invited.
<WOODSIDE=INTERNATIONAL=LITERARY=AGENCY>
<Thirty Three Twenty Nine 58 St.>
<Wood-Side, New York>
<zip: 1.1.3.7.7>
<(Tel)=={718}=651=8145>

AFTER MAY 2nd, 1997, please submit your material to our branch office at:
Woodside International Literary Agency
1190=North=Collier=Blvd.
Marco Island, Florida zip: 34145 Tel: 941-642-9660

1443. Re: FM voice satellite?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <63127.s8804028@mail.student.utwente.nl>
Source record: 19003

On Tue, 29 Apr 1997 07:25:40 GMT,
Steve Kittelsen <stevekit@worldnet.att.net> wrote:

>In the past I could track and pick up xx-18 satellite with my scanner. It
>looks like that satellite is no longer listed anywhere, so I guess it's not
>operational. Are there any other satellites I can receive with a regular
>hand held scanner?
>
Dove at 145.825 can be received with a scanner, and preferable a gp or
something like that, but at quiet locations with a good pass a rubber duck
can also work. I use a 2 meter HT and a 5/8 magnetic base antenna on the
(metal) edge of the roof, and can copy dove quite well at high elevations
(>30 degrees, ie above surrounding roofs). It transmits AX 25 standard bell
202 packet, 1200 baud. I am using a baycom modem on a 386, but anything
which can do normal packet at 1200 baud will work, just grab all the
frames. The telemetry can be decoded with half a dozen packages available
on the ftp sites with a ham directory.
73 Johan pa3fpj@amsat.org
packet radio pa3fpj@pi8daz.#twe.nld.eu

1444. Re: Watching the Shuttle launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: Paul Jordan <jordan@santanet.com>
Message-ID: <01bc571b$08774920$572977cc@jordan>
Source record: 19004

> I've watched the Shuttle go over head many times but I've never seen
> it during its launch and ascent phase. I see that the next launch
> is set for 15 May and that this is MIR rendevous mission. Luanc is
> set for around 4 am.
>
> I wonder if there's any possibility of observing the ascent from the
> Washington D.C. area? Comments, suggestions?

Bill,
I used to live in the Space Coast area of Florida (My parents still do) and I've sat on the bank of the Indian River in Titusville, Florida for many launches. The only time you might be able to see any evidence of a shuttle launch from Washington D.C. is if it's done a night or they show it on CNN...
If you want to see the launch, find a blanket and have a seat along the Indian River. Oh, and bring a book and sack lunch, sometimes the waits can last a while.

73's
Paul Jordan
KL0AN

1445. Re: Watching the Shuttle launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: Jim Price <jprice*NOSPAM*@crosslink.net>
Message-ID: <5ke3ha$2dl$2@kronos.crosslink.net>
Source record: 19005

Bill,

I used to live in Westminster, MD about 40 miles north of D.C.
and have watched two night time launches from there. It has
to be dark and it has to be a high inclination orbit (>50 degrees).
Best bet is to listen to the NASA clubs rebroadcast of the audio
on 2M and then you will know what/when stuff is happening. The
exhaust is clearly visible to the naked eye (but use binocs!) but
when they cut off the main engines it will disappear.
Good luck.
73
Jim - AA3O

Bill Meara wrote in article <3369f7ef.177377046@news.erols.com>...

>I've watched the Shuttle go over head many times but I've never seen
>it during its launch and ascent phase. I see that the next launch
>is set for 15 May and that this is MIR rendevous mission. Luanc is
>set for around 4 am.

>I wonder if there's any possibility of observing the ascent from the
>Washington D.C. area? Comments, suggestions?

>Thanks, 73 Bill N2CQR

1446. STS-83R and Orbit questions

Newsgroup: rec.radio.amateur.space
Date: 1997-05-02 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <336AA4C0.4876@ix.netcom.com>
Source record: 19006

I assume that if the reflight of STS-83 is going to be essentially the same as the original, it also will have a 28 degree inclination, so us poor saps in the higher latitudes don't have a chance to work SAREX. Does anybody know for sure if this is correct.

Which brings me to my next question. What criteria determines which inclination is picked for a particular mission? And while I'm at it, here's another. Is a typical orbit anywhere close to the plane that intersects the center of the earth, or is that plane somewhere between the center and the edge? If so, which of the Keplerian elements describes the angle or distance between the center and/or edge?

Thanks in advance for any help on these.
--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1447. $$ BECOME RICH SOON $$ PLEASE READ THIS

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: "Walter J. Thomas" <aag01@hotmail.com>
Message-ID: <5ke120$gi0@news.skyweb.net>
Source record: 19007

Subject: $$$$: BECOME RICH SOON !!

Dear reader,

PLEASE TAKE A MINUTE TO READ THIS, I'M RICH NOW AND YOU CAN BECOME TOO!

YOU CAN START YOUR OWN INTERNET BUSINESS IN YOUR SPARE TIME!!!

As you know the internet is growing at a tremendous rate. And
I'm sure you realize that millions of dollars are exchanged
for goods and services on the internet each day. Have you ever
said to yourself "I would like to use my computer too make
money" (or to make more money)??
WELL YOU CAN AND WILL MAKE THOUSANDS OF DOLLARS QUICKLY AND
EASILY IF YOU FOLLOW THESE SIMPLE INSTRUCTIONS!!!
The Business program outlined below is a simplified form of
E-mail marketing. Do not take this opportunity lightly, it is a
powerful tool that will allow you to have your own business
and start you on the path to financial freedom.

I KNOW THIS BUSINESS WORKS!! IT HAS WORKED FOR ME AND IT WILL
WORK FOR YOU. By the time you receive this business plan there
is a good chance that I will have been removed from the system.
But thats ok because I have already made a tremendous amount of
money using this system, and I would like to see your life change
as much as mine has. There is nothing more rewarding than
knowing that I have helped many good and honest people enrich
their lives. Follow the instructions listed below EXACTLY and
you will be on your way. Good Luck, and share the wealth.

Sincerely,
Walter J. Thomas

STEP1).
Get 5 pieces of 8.5"x11" paper and write:
"Please add me to your information mailing list"
Now take 5 $1 bills and fold $1 inside each piece of paper.
Place the request and money in 5 seperate envelopes and seal.
Carefully address the envelopes with the 5 addresses provided
below.(Be sure to include a return address and a stamp!)
Now mail the requests In a timely manner.

#1) Shari Davis; 1635 Manning Way; Colorado Springs, CO. 80919

#2) Gene Propp; 5121 W. 72nd Street; Praire village, KS. 66208

#3) Steve Wrubel; 3234 Nebraska Place; Costa Mesa, CA. 92626

#4) Rene van Ratingen; Akker 2 ; 6093 EJ ; Heythuysen ; Netherlands

#5) Walter J. Thomas; 244 5th Ave, 2nd Floor, New York NY, 10001

STEP2).
Copy this entire business plan and make the following changes:
Remove the #1 name off the list.
Place your name in the #5 position and move the other 4 names up. (#5moves to#4, #4moves to#3, #3moves to#2, #2moves to#1)
Your name is now the bottom of the list.

STEP3).
POST THIS ARTICLE ON AT LEAST 200 NEWSGROUPS!!!!!!!
E-MAIL THIS ARTICLE TO EVERYONE YOU CAN!!!!!!!
IMPORTANT NOTE: You MUST post this article to AT LEAST 200 newsgroups. There are about 45,000 newsgroups, with more being added every day. Each time you post on a newsgroup your message will be seen by many different people.
You should send this article via E-mail to as many people as possible. E-mail addresses are available for free through many sources on the internet. You can also purchase E-mail lists from several companies for a very small fee.
Remember it's your business and the more places you send it to, the better your chances of success! (I highly recommend that you send it out to more than 200 places).
REMEMBER TO PUT A CATCHY PHRASE IN THE SUBJECT BOX.

CONGRATULATIONS YOU HAVE JUST JOINED A GROUP OF ENTREPRENEURS!

Let me review why this works.....
Send out 200 articles and with a 5% response you get $10.
Those 10 people send out 200 and at 5% you get $100.
Those 100 people send out 200 and at 5% you get $1000.
Those 1000 people send out 200 and at 5% you get $10,000.
Those 10,000 people send out 200 and at 5% you get $100,000.
EVERYDAY THOUSANDS OF PEOPLE JOIN THE INTERNET!!!!!!!!!!

The above example is a perfect case scenerio. The response rate varies typically from 2% to 10%. To increase your success rate I suggest that you post this article to AT LEAST 200 newsgroups and send it to as many individuals as possible. Remember many people will see this article when it is posted on a newsgroup!! Also note that many of the people you send it to are likely to send it out to more than 200 newsgroups and people.

You don't have to retype this article every time you send it, just follow the instructions below and you will see just how easy this business is. If you follow these simple instructions there is no way you can lose. Every day several thousands of people get on the internet. Don't delay start today, you'll be glad you did!!!!!!!!!!!!!!!!!

POSTING TO NEWSGROUPS USING NETSCAPE:
1) Click on any newsgroup, like normal.

Then click on to " To News" in the top left corner of the
Newsgroups page. This will bring up a message box.
2) Fill in the subject box with a catchy phrase such as:
$$$FAST CASH$$$, ARE YOU THE PERSON WHO..., or the like.
3) Now go to the message part of the box and retype this letter
exactly as it is here. (The only thing you change is adding
your name in the #5 position and moving the other addresses
up 1 position each, thus removing the #1 name).
4) When you are done typing in the WHOLE letter, click on "File"
above the send button, then "Save as..." DO NOT SEND YOUR
LETTER UNTIL YOU SAVE IT!!(this is so you only have to type
this once).
5) Now that you have saved the letter, go ahead and send your
First copy!(click the send button in the top left corner).
6) THIS IS WHERE YOU POST AT LEAST 200 TIMES!!! OK, go to any
newsgroup article and click the "To News" button. Type in
Your catchy phrase in the SUBJECT BOX, then go to the body
part of the message box and place your cursor there.
NOW click on "Attachment" which is right below the SUBJECT BOX.
Click on "attach file", then find the letter you saved, click
once on your saved file, then click "Open", Then click "OK".
If you did this right, you should see your filename in the
attachment box and it will be shaded.
NOW POST AWAY!!!!!!!!!!!!!!!!!!!!!!!!!!!!

IF YOU ARE USING INTERNET EXPLORER:
1) Its just as easy, Holding down the left mouse button,
highlight this entire article, then press the the "CTRL" key
and the "C" key at the same time to copy this letter.
2) Now go to the newsgroups and press "POST AN ARTICLE", Type in
your catchy phrase in the subject box, and click the large
window below. Press "CTRL" and "V" and the article will
appear in the message window. **BE SURE TO MAKE YOUR ADDRESS
CHANGES TO THE 5 NAMES**
3) Now re-highlight the letter and RE-COPY it so you have the
changes...Then all you have to do for each newsgroup is
press "CTRL" and "V" and press "POST" it's that easy!!!!!

Thats it ! All you have to do is jump to different newsgroups
and post away. For both methods it only takes about 30 seconds
to post to each newsgroup. Once you get the hang of it.

REMEMBER THE MORE NEWSGROUPS YOU POST TO THE MORE MONEY YOU MAKE!!
YOU MUST POST TO A MINIMUM OF 200 NEWSGROUPS!!!!!!!!!!!!!!

You should start receiving replies within a week or so (sometimes
they come within days)

BE SURE TO SEND OUT $1 TO THE PEOPLE ON THE LIST PROMPTLY!!!!!!!!!

PERSISTENCE AND HONESTY WILL REAP YOU HUGE REWARDS!!!!!!!!!!!!!

DO NOT TO LET THIS OPPORTUNITY PASS YOU BY!!!!!!!!!!!!!!!!

FOR JUST $5 YOU CAN CHANGE YOUR LIFE!!!!!!!!!!!!!!!

REMEMBER: THE PERSON WHO DARES NOTHING, NEED NOT HOPE FOR ANYTHING.

1448. HALO Rocket Balloon Update

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <336B2807.419D@hiwaay.net>
Source record: 19008

Due to the bad weather forecast for this weekend the launch
has been rescheduled for May 10th.

For additional flight information go to
web site: http://fly.hiwaay.net/~bbrown/

Gene Marcus W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net
w3pm@amsat.org

1449. Re: SatTrack v3.1 distribution?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: Terry Sellick <tsellic@ibm.net>
Message-ID: <336B321B.584E@ibm.net>
Source record: 19009

Christian Void wrote:
>
> Greets... seems I managed to trash the TLE and data files for my SatTrack
> v3.1 install. Now, whenever I update my TLE's using the gettle script, I
> get a whole bunch of errors.
>
> Anyways, I can't seem to find a generic source distribution anywhere in
> order to acquire a fresh set of data files. Used to be available via
> Bester's web site, but it has dissapeared.
>
> Anyone know where I can find a copy? Not the HP/UX port, either...
>
> Thanks in advance!
>

Try www.amsat.org. I got my original SatTrack version there.

Terry WA9TTY

1450. WeFAX, weather satellites (help)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: albloc@aol.com
Message-ID: <19970503210701.RAA03820@ladder01.news.aol.com>
Source record: 19010

I am looking into seting up a station capable of receiving WeFAX and other weather satellite images, how much is this going to cost and what all is needed for such an operation. Thanks,

Austin Block
Albloc@aol.com

1451. Re: WeFAX, weather satellites (help)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970503223800.SAA10556@ladder01.news.aol.com>
Source record: 19011

you can get a lot of info and good info links from:

http://members.aol.com/jkktl/ham.htm

1452. Re: Wisp and Dove

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <336B23FD.78DBFF51@sat.cide.upm.es>
Source record: 19012

Eduardo Jacob wrote:
>
> I am playing at present with Wisp, a 2nd hand 736R and a lent KCT. I have
> been able to configure the whole in order to correct the doppler shift and
> receive information (no good antennas yet, no preamplifier yet) from UO-22,
> and KO-23 and KO-25. I am trying to configure the DO-17 sat. I have defined
> the U/L and D/L freqs to be 145.825 but when the pass begins, it still use
> mode J and doesn't use the freq's I have put.

You *cannot* choose both same up/dwown frequencies to drive FT-736 via
CAT port (and virtually any satellite transceiver).

Try to put 145.825 MHz as a downlink and select a dumb uplink
freqeuncy, eg, 430.000 MHz. I'm not familiar with WiSP, but I have a lot
of experience with TrakBox and my FT-736R, so I suppose such program now
will be doing the right work for you.

Best,

--
Rafael,
Madrid (Spain)

1453. $$$Get Rich Fast$$$

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: Ming Leung <jjl@intergate.bc.ca>
Message-ID: <336BE457.1F38@intergate.bc.ca>
Source record: 19013

should've done this sooner! It really does work!!!

A little while back, I was browsing these newsgroups, just
like you are now, and came across an article similar to
This that said you could make thousands of dollars within
weeks with only an initial investment of $5.00! So I
thought,"Yeah, right, this must be a scam",but like most of
us, but I was curious, so I kept reading. Anyway, it said
that you send $1.00 to each of the 5 names and address
stated in the article. You then place your own name and
address in the bottom of the list at #5, and post the
article in at least 200 newsgroups.(There are thousands) No
catch, that was it.

So after thinking it over, and talking to a few people
first, I thought about trying it. I figured what have I got
to lose except 5 stamps and $5.00, right?

Like most of us I was a little skeptical and a little
worried about the legal aspects of it all. So I checked it
out with the U.S. Post Office (1-800-725-2161)and they
confirmed that it is indeed legal!

I told my friend about it. Since she's a lot more adventurous than I,
she
tried it first.

Well GUESS WHAT!!... with in 7 days, she started getting
money in the mail! I was shocked! I still figured it would
end soon, and didn't give it another thought. But the money
just kept coming in. In her first week, she made about $20.00
to $30.00 dollars. By the end of the second week she had made
a total of over $1,000.00!!!!!! In the third weekshe had
over $10,000.00 and its still growing. This is now her
fourth week and she says she has made a total of just over
$42,000.00
and its still coming in ....

So with that I've given it a try. This is now my first week & Im
very
encouraged! I should've done this a lot sooner!!!!

Its certainly worth $5.00, and 5 stamps, I spent more than
that on the lottery!!

Let me tell you how this works and most importantly, Why
it works....also, make sure you print a copy of this

article NOW, so you can get the information off of it as you need it. The process is very simple and consists of 3 easy steps:

STEP 1: Get 5 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 5 $1.00 bills and place ONE inside EACH of the 5 pieces of paper so the bill will not be seen through the envelope to prevent thievery. Next, place one paper in each of the 5 envelopes and seal them. You should now have 5 sealed envelopes, each with a piece of paper stating the above phrase and a $1.00 bill. What you are doing is creating a service by this. THIS IS PERFECTLY LEGAL!

Mail the 5 envelopes to the following addresses:

#1 Robert Russell
1721 Corning Lane
Midland, Mi 48642

#2M. Lichen
P.O. Box 451105
Ft. Lauderdale Fl. 33345-1105

#3 Amanda Sollecito
108 Haystack Rd.
Manchester, CT. 06040

#4 Ben Ku
1943 Grist Stone Ct.
Atlanta, GA 30307-1185

#5 Jason Leung
1102 Canyon Blvd.
North Vancouver
V7R 2K4 CANADA

STEP 2: Now take the #1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you need is 200, but remember, the more you post, the more money you make!

Don't know HOW to post in the newsgroups? Well do exactly the following:

FOR NETSCAPE USERS,

1) Click on any newsgroup, like normal. Then click on
"To News, which is in the top left corner of the newsgroup
page. This will bring up a message box.

2) Fill in the SUBJECT with a flashy title, like the
one I used, something to catch the eye!!!

3) Now go to the message part of the box and retype
this letter exactly as it is here, with exception of your
few changes. (remember to add your name to number 5 and
move the rest up)

4) When your done typing in the WHOLE letter, click on
FILE above the send button. Then, SAVE AS.. DO NOT SEND
YOUR ARTICLE UNTIL YOU SAVE IT. (so you don't have to type
this 200 times :-)

5) Now that you have saved the letter, go ahead and
send your first copy! (click the SEND button in the top
left corner)

6) This is where you post all 200! OK, go to ANY
newsgroup article and click the TO NEWSbutton again. Type
in your flashy subject in the SUBJECT BOX, then go to the
message and place your cursor here. Now click on
ATTACHMENT" which is right below the SUBJECT BOX. Click
on attach file then find your letter wherever you saved it.
Click once on your file then click OPEN then click OK.
If you did this right , you should see your filename in the
ATTACHMENT BOX and it will be shaded.

NOW POST AWAY!!

IF YOUR USING INTERNET EXPLORER:
Its just as easy, holding down the left mouse button,
highlight this entire article, then press the CTRL key
and C key at the same time to copy this article. Then
print the article for your records to have the names of
those you will be sending $1.00 to.

NEXT
Go to the newsgroups and press POST AN ARTICLE type
in your flashy subject and click the large window below.
Press CTRL and V and the article will appear in the
message window. **BE SURE TO MAKE YOUR ADDRESS CHANGES TO
THE 5 NAMES.** Now re-highlight the article and re-copy itre-copy
it
so you have the changes.... then all you have to do for
each newsgroup is CTRL and V and press POST . Its
that easy!!

THATS IT! All you have to do is jump to different
newsgroupes and post away, after you get the hang of it ,
it will take about 30 seconds for each newsgroup!

REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200

Thats it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you receive. If you wish to stay anonymous, you con invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**

Now the WHY part:

Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #5 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #4 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM postswith my name at #3 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200with my name at #2 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #1 and they each only receive 5 replies, that just made me $3,125.00!!! With a original investment of only $5.00! AMAZING! And as I said 5 responses is actually VERY LOW! Average is probable 20 to 30! So lets put those figures at just 15 responses per person. Here is what you will make:

at #5 $15.00

at #4 $225.00

at #3 $3,375.00

at #2 $50,625.00

at #1 $759,375.00

When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $5.00 to names on the list, putting your name at number 5 again. And start posting again. The thing to remember is, do you realize that thousands of people all over the world are joining the internet and reading these articles everyday, JUST LIKE YOU are now!! So can you afford $5.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday

and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember, play FAIRLY and HONESTLY and this will work. You just have to be honest. Make sure you print this article out RIGHT NOW, also. Try to keep a list of everyone that sends you money and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make the money!!

GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. **By the way, if you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 5 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future dollars.

Please remember to declare your extra income. Thanks once again...
Reply: ben@koolab.me.gatech.edu

1454. ARLK034 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-03 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk034.1997@arrl.org>
Source record: 19014
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK034
ARLK034 Keplerian data

ZCZC SK34
QST de W1AW
Keplerian Bulletin 34 ARLK034
From ARRL Headquarters
Newington, CT May 3, 1997
To all radio amateurs

SB KEP ARL ARLK034
ARLK034 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97115.22456393 .00000099 00000-0 10000-3 0 04760
2 14129 25.8404 151.1006 6072672 111.6370 321.0832 2.05881198076290
RS-10/11
1 18129U 87054A 97122.89597987 .00000024 00000-0 96501-5 0 3488
2 18129 82.9220 272.2031 0012201 355.2498 4.8542 13.72377565494023
UO-11
1 14781U 84021B 97122.00528593 .00000114 00000-0 27041-4 0 09803
2 14781 97.8313 105.0963 0011962 145.5524 214.6448 14.69546398704479
RS-12/13
1 21089U 91007A 97122.05284925 .00000042 00000-0 28723-4 0 09849
2 21089 82.9209 312.8639 0030960 65.6815 294.7567 13.74080622312822
UO-14
1 20437U 90005B 97122.05688901 .00000060 00000-0 39823-4 0 02738
2 20437 98.5196 204.7208 0011420 349.2693 10.8238 14.29958112379624
RS-15
1 23439U 94085A 97121.68653113 -.00000039 00000-0 10000-3 0 2158
2 23439 64.8163 228.0327 0150776 141.2388 219.9469 11.27526608 96696
AO-16
1 20439U 90005D 97122.07317189 .00000009 00000-0 20269-4 0 00699
2 20439 98.5357 207.5638 0011929 349.7434 10.3507 14.30005910379642
RS-16
1 24744U 97010A 97122.02952911 .00002067 00000-0 71076-4 0 00528
2 24744 97.2791 27.9541 0005465 257.3473 102.7192 15.31197528009022
```

```
DO-17
1 20440U 90005E 97122.20362627 .00000017 00000-0 23481-4 0 646
2 20440 98.5388 208.5207 0011676 348.7310 11.3612 14.30148644379697
WO-18
1 20441U 90005F 97122.13049460 .00000010 00000-0 20526-4 0 00804
2 20441 98.5397 208.3564 0012244 348.8895 11.2016 14.30116187379686
LO-19
1 20442U 90005G 97122.73110530 .00000060 00000-0 40011-4 0 646
2 20442 98.5434 209.5890 0012481 346.3562 13.7276 14.30230929379799
FO-20
1 20480U 90013C 97120.94188867 -.00000033 00000-0 -96294-5 0 09631
2 20480 99.0413 91.4291 0541146 124.3676 240.9838 12.83237437338646
AO-21
1 21087U 91006A 97121.97842214 .00000094 00000-0 82657-4 0 08197
2 21087 82.9368 85.7760 0037573 38.3211 322.0501 13.74581240313805
UO-22
1 21575U 91050B 97122.08357037 -.00000004 00000-0 12919-4 0 07763
2 21575 98.3081 184.2462 0008472 34.8998 325.2744 14.37067187303861
KO-23
1 22077U 92052B 97121.71657016 -.00000037 00000-0 10000-3 0 06654
2 22077 66.0781 242.5297 0011558 223.7591 136.2509 12.86302563221779
KO-25
1 22828U 93061F 97121.68745527 .00000014 00000-0 22794-4 0 05365
2 22828 98.5443 197.2511 0010840 6.4156 353.7164 14.28176252155578
IO-26
1 22826U 93061D 97122.13253702 -.00000017 00000-0 10517-4 0 05592
2 22826 98.5441 197.6027 0009870 21.4268 338.7326 14.27833744187519
AO-27
1 22825U 93061C 97121.66998945 .00000052 00000-0 38454-4 0 05557
2 22825 98.5477 196.9185 0009612 22.2042 337.9554 14.27724946187435
FO-29
1 24278U 96046B 97122.13121477 -.00000052 00000-0 -14169-4 0 754
2 24278 98.5454 169.6321 0351378 305.7076 51.1833 13.52629625 34899
Mir
1 16609U 86017A 97122.74061737 -.00009323 00000-0 -10969-3 0 2406
2 16609 51.6543 314.1491 0009676 323.0148 37.0301 15.59264627639931

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
May 6, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1455. BPSK

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: WA8CLT <wheller.1@osu.edu>
Message-ID: <336CA16C.2E90@osu.edu>
Source record: 19015

Does the MFJ 1270 data controller do 1200 baud BPSK? If so, how does one set it up? I am new to satellites and packet. Appreciate any comments.

John WA8CLT

1456. Old satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <E9o4x5.AJ8@cix.compulink.co.uk>
Source record: 19016

Old satellites

Just out of interest, does anyone know what the oldest satellites are
still transmitting telemetry, that can be picked up by radio amateurs?

Steve

G7VFY

1457. Re: Watching the Shuttle launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E9nrDr.AFz@pe1chl>
Source record: 19017

In <3369f7ef.177377046@news.erols.com> wmeara@erols.com (Bill Meara) writes:

>I've watched the Shuttle go over head many times but I've never seen
>it during its launch and ascent phase. I see that the next launch
>is set for 15 May and that this is MIR rendevous mission. Luanc is
>set for around 4 am.

>I wonder if there's any possibility of observing the ascent from the
>Washington D.C. area? Comments, suggestions?

Of course it is best to go to Florida and watch it from closeby...
Last year I watched a launch from the "static test road" viewing site
on the kennedy space center. It was great, but you need a special pass
for that. I don't know the official way to get those passes, but you
can buy passes for another (larger and slightly more distant) viewing
site on KSC from the visitor center. On the viewing sites there are
loudspeakers with the usual status messages so you know when it is
really going to happen and if there are delays.

However, I would not recommend travelling there for the 15May launch,
last time I looked on the Internet site it said that the date was likely
to shift back (probably because of the fuelcell problem?)

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1458. * Amateur CW/Voice Satellite Frequencies FAQ 05.05.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0405971815050001@cqtlm-pm2-066.dowco.com>
Source record: 19018
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ05.05
Amateur CW/Voice Satellite Frequencies for May 5, 1997.

BID: $FREQ0505
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.800 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

The chances of damaging AO-10 by uplinking during "FMing" are probably remote. The caution mainly stems from a theoretical consideration. AO-10's latching relays are set to the omni antenna and the transponder is on in Mode-B configuration. This all turns out to be perfect since we can't control the attitude, etc. Each time there's a power spike the chance exists that the IHU could have a "seizure" and blurt out a pulse to switch the antennas to higain, switch the transponder off or whatever. Of course these spikes occur every time we come out of eclipse, but the idea is to do what we can to minimize the number of power spikes. Occasionally spikes have "activated" the IHU in the past and caused the beacon to send out nonsensical data rather than the current constant carrier for short periods of time. ..and it isn't clear when AO-10 switched to the omni antenna, so I guess such things may have happened in the past.

I suppose there are also some considerations regarding the effects on the transponder of operating it so far off its normal voltage/current curve, but, again, this doesn't seem to have caused a problem after many years. <thanks to Stacey E. (Chuck) Mills W4SM for this explanation>

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. The 435.504 beacon is the only one currently being copied. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

May 2(Fri) 10:26z JD 1200bps
9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex is still offline as of time of writing due to ongoing
problems on board the space station, any QSO reports would be appreciated.

* Space Shuttle Frequencies when in orbit.
Next SAREX mission tentatively set for July 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 2M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1459. Re: QST Hams with Macs

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: scott@allnetinc.com
Message-ID: <scott-0405972024590001@allnet.pr.mcs.net>
Source record: 19019
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Thank you, Thank You, THANK YOU!!!
It is about time!!!

Scott

In article <john-0105970655410001@wd1v.mv.com>, john@wd1v.mv.com (John D.
Seney) wrote:

> Announcing New WWW Site for Macintosh Ham Radio Enthusiasts
>
>
> http://www.mv.com/ipusers/wd1v
>
>
> Mac Ham Software including:
>
> Macnet Roster:
> a database of all hams in the world using Mac computers
>
> WD1V's Ham Radio EXAM Simulators:
> the fast path for upgrading your ham license with a Mac
>
> Plus more Mac information - come see!
>
> 73,
>
>
> John D. Seney |_|_|_|_| john@wd1v.mv.com
> 144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
> Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
> Voice Mail 617.686.9882 | | | | | Fax 603.627.1623
>
> http://www.mv.com/ipusers/wd1v

1460. Re: BPSK

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <336cf1e4.83225570@news.atl.bellsouth.net>
Source record: 19020

On Sun, 04 May 1997 10:47:08 -0400, WA8CLT <wheller.1@osu.edu> wrote:
>Does the MFJ 1270 data controller do 1200 baud BPSK? If so, how does
>one set it up? I am new to satellites and packet. Appreciate any
>comments.

The MFJ 1270 doesn't include a PSK modem, but like all TAPR clones it does have a modem disconnect header which will allow you to install one. TAPR sells a kit, and PacComm and others offer wired and tested PSK modems which can be fitted to the 1270. If you want a TNC with the PSK modem already fitted, PacComm will sell you one. Or you can get a DSP unit which has software to do PSK.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1461. Re: AO-10

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <336D4C63.4989@amsat.org>
Source record: 19021

Richard Bascom wrote:
>
> I am having problems with A0-10, For the last month or so i canot make any
> contacts on the bird.I always had good luck with that bird in the pass.
> Is any one having the same problem?
>
> 73 KB4SVP

Hi Richard!

It's been awhile but I've worked you on AO-10 a couple of times when I was in North Dakota. I suspect that you are experiencing the same problem that many other amateurs have run across. AO-10 isn't getting good sunlight on it's solar panels this time of the year due to it's orientation to the sun.

Be patient and we'll see you on the bird later this Fall. (I'm in Minnesota now, so another contact means a new state and grid!)

73
Mark

1462. Web Page Updated http://www.qsl.net/k7on

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D72C2.7085@primenet.com>
Source record: 19022

Web Page Updated http://www.qsl.net/k7on

1463. Mailing Lists

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D626E.6D4@primenet.com>
Source record: 19023

HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

1464. ** WTB: ** Packet Radio Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D7C19.15AB@primenet.com>
Source record: 19024

```
Looking for high speed packet equipment:
-9k6 and up modems/TNCs
-GRAPES, PI, Gracillis
-Data Engines
-Data Radios
-Transverters
-Other?

What do you have available?

ke7gh@primenet.com
```

1465. ATLANTA RADIO CLUB'S HAMFESTIVAL JUNE 21-22 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: rychard@atl.mindspring.com
Message-ID: <5kjdu9$v0v@camel1.mindspring.com>
Source record: 18925

THE 69TH ANNUAL ATLANTA RADIO CLUB'S HAMFESTIVAL

The Atlanta Radio Club's Hamfestival on June 21-22,1997 is
the Southeast's premier hamfest.This hamfest is brought to you
by the Atlanta radio club,with the help of many of the local
radio clubs here in the metro atlanta area.This is our club's
69th annual hamfest,and with your attendance we hope it will be
our biggest and best to date.
This years event on June 21-22,1997 will be held at the
Atlanta City Hall East-Exhibition Center,675 Ponce de Leon Ave.This is
the same great site as last year's hamfest,which is near the downtown
area,and very easy to get to,and plenty of free parking.
On the days of the hamfest,we will be usings our clubs repeater
(W4DOC 146.82 Mhz minus 600Khz offset) on top of the Nations Bank for
talk-in.This repeater is used every Sunday night 8:00 pm for the
Atlanta Radio Club's net.If you are in the area your presence on the
net is welcomed.
For much more information about our Club and Hamfest plese check
out our web page at http://www.saf.com/arc.The club's BBS at
770-850-0546 has a lot of info also, or send email to dickb@akorn.net
our regular address is ATLANTA HAMFESTIVAL
P.O. BOX 942150,Atlanta Ga. 31141-2150
No matter what your interest in the radio hobbies are,you will find
you came to the right place.Amateur Radio,Shortwave radio,Scanners,
Satellite radio,Emergency radio,Marine radio,Military surplus
radios,etc.AM,FM,SSB,CW,PACKET,RTTY,SLOWSCAN,FAX,DX,ATV,AMTOR,EME,whatever
your interest this is the place to be.If your into building or
homebrewig equipment,radio or computer this is the place to find those
hard to find parts and gizmos.
The computer hobbies are doing better than ever and these interest
will be well covered at the Hamfest.
Buying,Selling,Trading,Swapping,Dealing,Bartering,Giving will all
be happening at the hamfest,probably some begging also.Whether your
coming with money to buy,a load of goods to sell,or just looking
around this is going to be a great hamfest.

The Atlanta Radio club has our regular meetings the first Thursday
of each month.These meetings are at 7:30 PM,located at the Georgia
Power Fedral Credit Union, 4900 Ashford-Dunwoody Rd.this is near the
I-285 loop on the north side of the city.
The Atlanta Radio Club is a non-profit organization wishing to
promote Amateur radio to all interested.
Our club president is Bill Bass W4LFC ph# 770-493-8438,his email
address is BillW4LFC@juno.com ,our vice-president is John Talipsky,Jr
KA4VQH ph#770-925-7110 his email address is johnka4vqh@juno.com ,our

club Secretary is Penn McClatchey K4PE ph#404-605-0742 his email is pmm@saf.com our Treasurer is Charles Golsen N4TZM ph#404-252-3303 his email address is cgolsen@atlanta.com ,our clubs activities manager is myself Richard Dean Young KR4IU ph#404-622-8433 my email address is rychard@atl.mindspring.com ,the opinions expressed are my own and are probably bias due to my love of the radio hobbies.
Hope to see you at the hamfest soon.
Richard Dean Young KR4IU
rychard@atl.mindspring.com

1466. Re: STS-83R and Orbit questions

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E9pBx8.FA6@pe1chl>
Source record: 18926

In <336AA4C0.4876@ix.netcom.com> KD1YV <jimkd1yv@ix.netcom.com> writes:

>Which brings me to my next question. What criteria determines which
>inclination is picked for a particular mission? And while I'm at it,
>here's another. Is a typical orbit anywhere close to the plane that
>intersects the center of the earth, or is that plane somewhere between
>the center and the edge? If so, which of the Keplerian elements
>describes the angle or distance between the center and/or edge?

The earth is not flat, it is (in first approximation) a sphere.
What do you mean with "the edge"?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1467. Re: Watching the Shuttle launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: n4zo@sccoast.net
Message-ID: <336d3704.15483754@news.sccoast.net>
Source record: 18927

>
>>I wonder if there's any possibility of observing the ascent from the
>>Washington D.C. area? Comments, suggestions?

That would not be a problem in Wash, DC. If the weather is clear you
will be able to see the launch after it heads northward. I have seen
several launches from the northern coast of SC on the beach. I can
easily see it a few seconds after lift off and watch it pass offshore
heading north. A recent launch that had live coverage on the NASA web
page had sightings further north than DC.
Give it a try, its very impressive.

Gus
n4zo@sccoast.net

1468. Re: New nanosat needs UPlink - help on receivers

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <336D8F56.A64DC6CE@acm.org>
Source record: 18928

Thanks for the info!

Dana Gould wrote:
> Do you have a name for your project yet? I propose LodeStar (Low Orbit Drag
> Experiment - Satellite Tracking by Amateur Radio :).

Yup! The satellite is called DragSat. But given its small size, and
the StarWars names like "Smart Rocks" and "Brillian Pebbles", I was
thinking something like "Sentient Softball" might be better...

-BobC
KE6RGA

1469. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <336D926B.16B9E45D@acm.org>
Source record: 18929

Larry L. Ledlow, Jr. wrote:
>
> Robert W. Cunningham wrote:
>
> > Well, we need to operate the transmitter for about three months using
> > only 4 alkaline "D" cells!
>
> [snip]
> Components in space can get extremely hot and cold. General purpose
> batteries are designed to operate at about 70 deg F. High temps (over
> 110 deg F) can and will significantly degrade battery life, although
> this is less of a problem for alkalines than zinc-carbon. The rapid
> cycling between high and low temp extremes can quickly kill your
> batteries, too. Have you estimated internal temps yet?

Yes. We expect to vary only a few degrees from "room temperature" due to careful selection of external material and coatings. We expect to use the Duracell data as-is, though there are some newer alkalines from other manufacturers (most notably Panasonic) that beat Duracell capacity by 25%.

We had also looked at lithium cells, but despite their higher capacity, they were rejected for two reasons:

1) They have a proven tendency to explode under certain conditions.
2) They have very high internal resistance that makes them unusable for high-current pulse-mode transmitter operation.

> > 10. The antenna must fit entirely within the sphere (though it may by
> > flush with the surface if it conforms to the spherical shape).
>
> Say, what's the surface of this sphere supposed to me made of?

If it helps with antenna design, it can be anything needed to solve the problem. Any recommendataions?

> > From other discussions on and off this newsgroup, I expect I will need
> > at least 0.5W from LEO (400 Km orbit)...
>
> That's about right. Mileage may vary. :-) Results will depend on the
> modulation scheme, too.

It looks like 100mw lets us escape all international red-tape. Is this workable?

Regards,

-Bob Cunnigham
KE6RGA

1470. Re: STS-83R and Orbit questions

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: cgregory@uiuc.edu
Message-ID: <336E06C3.40D5@uiuc.edu>
Source record: 18930

KD1YV wrote:
> Which brings me to my next question. What criteria determines which
> inclination is picked for a particular mission? And while I'm at it,
> here's another. Is a typical orbit anywhere close to the plane that
> intersects the center of the earth, or is that plane somewhere between
> the center and the edge? If so, which of the Keplerian elements
> describes the angle or distance between the center and/or edge?

The orbit plane, to a very good approximation, always passes through the center of the earth (center of mass, actually). The angle between the orbit plane and the earth's equatorial plane is the INCLINATION. The satellite therefore passes equal distances north and south of the equator (this angular distance is the same as the inclination, for a circular orbit like the shuttle).

The choice of inclination for shuttle flights probably depends on how much of the earth's surface is to be covered, whether and how often eclipses are tolerated, how much fuel is to be expended, and, ultimately, what kind of experiments are to be done.

73! de K8CG
Carl

1471. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E9q645.I7z@pe1chl>
Source record: 18931

In <336D926B.16B9E45D@acm.org> "Robert W. Cunningham" <rcunning@acm.org> writes:

>Yes. We expect to vary only a few degrees from "room temperature" due
>to careful selection of external material and coatings. We expect to
>use the Duracell data as-is, though there are some newer alkalines from
>other manufacturers (most notably Panasonic) that beat Duracell capacity
>by 25%.

Did you look at the recent Philips announcement? I think they beat
Duracell by 100% or so.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1472. Re: BPSK

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <336e2b60.732083@news.monad.net>
Source record: 18932

On Sun, 04 May 1997 10:47:08 -0400, WA8CLT <wheller.1@osu.edu> wrote:

>Does the MFJ 1270 data controller do 1200 baud BPSK? If so, how does
>one set it up? I am new to satellites and packet. Appreciate any
>comments.
>
>John WA8CLT

Hi, John.
No, the 1270 (and MOST 1200 baud TNCs do NOT do BPSK (binary phase-shift keying). The standard 1200 baud TNCs like the MFJ 1270 have an AFSK (audio frequency-shift keying) modem built in. BPSK is used for some of the 1200 baud birds because it provides a 3-8 dB advantage over AFSK signals (that is, weaker signals can be decoded properly).

The 1270 MAY be used with an external modem, however, to do BPSK. there is a 20 pin header on the pc board (or a double row of holes in the pc board, depending on the version), where an external modem may be connected to "take the place of" the internal AFSK modem.
TAPR produced a kit some years ago, I am not sure if they still sell it. I picked one up at a flea market a couple of years ago, and have been working on wiring it up to a 1270, on and off again. Also, I believe PacComm makes the PSK-1 modem for the same purpose.

Another requirement of operating the 1200 baud PSK birds is the ability to put the TNC in the KISS mode. Older 1270s require a new EPROM, newer ones come with this capability. The KISS mode is required because you must run special software to access these birds (eg: WiSP, from AMSAT). This is the same software we use to access the 9600 baud satellites. I have been active on the 9600 baud birds for a couple of years now, using an MFJ 1278, and an add-on internal 9600 baud modem.

So, in summary, no, the 1270 won't do it "out of the box". Some extra work is required. Getting on the PSK satellites also requires an ALL-MODE radio (or radios) because the uplink is FM, and the downlink is USB. Getting on these satellites is harder than plug-and-play terrestrial packet, but the thrill of your first connect is great, and you can't help learning a lot on the way. Good Luck!

-Bruce Beford, N1RX

1473. NORAD Two-Line Orbital Element Sets (TLE990)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5kllnl$eg6@blackbird.afit.af.mil>
Source record: 18933

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #990 -
Alouette 1
1 00424U 62049A 97124.83611582 .00000043 00000-0 40237-4 0 2864
2 00424 80.4644 326.3714 0022546 288.2314 71.6376 13.67893255726319
ATS 1
1 02608U 66110A 97118.91202950 -.00000100 00000-0 10000-3 0 182
2 02608 14.5291 349.4442 0007000 104.5807 255.4674 1.00288237 28039
ATS 3
1 03029U 67111A 97123.27345250 -.00000130 00000-0 10000-3 0 6514
2 03029 14.8995 356.3358 0010820 273.3463 304.7210 1.00273104107973
Starlette
1 07646U 75010A 97120.66053738 -.00000239 00000-0 -76212-4 0 510
2 07646 49.8268 335.9084 0205853 199.0777 160.2321 13.82191376122873
LAGEOS
1 08820U 76039A 97124.86899865 .00000025 00000-0 00000+0 0 2837
2 08820 109.8239 136.2277 0043751 59.0878 301.4044 6.38664467234372
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97124.59537001 .00000038 00000-0 10000-3 0 8294
2 10061 12.7797 33.4746 0011960 129.0336 97.9377 1.00274054 17666
IUE
1 10637U 78012A 97124.43942978 -.00000248 00000-0 10000-3 0 3863
2 10637 35.9836 78.4353 1359007 65.8220 18.3454 1.00080570 23158
GOES 3
1 10953U 78062A 97121.45039200 -.00000098 00000-0 10000-3 0 8030
2 10953 11.7889 36.4886 0000436 284.9351 312.3120 1.00266344 22242

```
SeaSat 1
1 10967U 78064A 97124.86111204 -.00000037 00000-0 32344-4 0 5711
2 10967 107.9978 120.3669 0002546 249.2528 110.8343 14.38167430987698
Nimbus 7
1 11080U 78098A 97121.15166810 -.00000053 00000-0 -10328-4 0 6669
2 11080 98.9051 333.2364 0008556 186.9498 173.1540 13.83683409935145
GOES 5
1 12472U 81049A 97119.85973751 .00000000 00000-0 10000-3 0 9972
2 12472 8.6545 46.9253 0004725 100.8460 259.2136 1.00328155 16282
Cosmos 1383
1 13301U 82066A 97124.46688346 .00000038 00000-0 26642-4 0 5832
2 13301 82.9283 258.2129 0029016 73.8249 286.6093 13.68083177741305
LandSat 4
1 13367U 82072A 97122.18864410 .00000033 00000-0 17024-4 0 649
2 13367 98.0318 168.6016 0005847 222.4974 137.5772 14.57204461786998
DMSP B5D2-1
1 13736U 82118A 97121.54203626 .00000049 00000-0 38804-4 0 2249
2 13736 98.6214 310.7846 0008093 173.4761 186.6526 14.25831245746433
IRAS
1 13777U 83004A 97124.56326185 -.00000177 00000-0 -91773-4 0 6523
2 13777 98.9712 309.3094 0012179 288.6337 71.3503 13.99266025398314
Cosmos 1447
1 13916U 83021A 97124.57064735 .00000014 00000-0 -57184-6 0 6763
2 13916 82.9416 313.3297 0038285 338.9027 21.0541 13.74355739707888
TDRS 1
1 13969U 83026B 97121.34668753 -.00000304 00000-0 10000-3 0 7371
2 13969 9.4407 40.6189 0002610 10.4351 244.4391 1.00272489 24573
GOES 6
1 14050U 83041A 97124.53650973 .00000033 00000-0 10000-3 0 6578
2 14050 7.5569 50.6683 0003503 49.4984 186.7837 1.00239823109414
AO-10
1 14129U 83058B 97124.45006217 -.00000146 00000-0 10000-3 0 4743
2 14129 25.8538 149.5249 6071356 114.2115 318.8203 2.05880979 76485
LandSat 5
1 14780U 84021A 97124.74126997 .00000010 00000-0 12501-4 0 6095
2 14780 98.2860 187.7580 0003435 32.6367 327.5041 14.57075595700785
UO-11
1 14781U 84021B 97124.93312978 .00000173 00000-0 37032-4 0 9698
2 14781 97.8315 107.9058 0012019 136.4408 223.7752 14.69547834704904
Cosmos 1574
1 15055U 84062A 97124.55003170 .00000073 00000-0 61966-4 0 8766
2 15055 82.9582 8.9375 0026962 163.6765 196.5279 13.73648255645102
Cosmos 1602
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Glonass 59
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2 22513 65.2936 73.3636 0005695 212.9936 146.9413 2.13102587 32722
Glonass 61
1 22514U 93010C 97123.50284011 -.00000019 00000-0 00000+0 0 700
2 22514 65.3145 73.3906 0009349 197.2099 162.7330 2.13101667 32712
ASTRO-D
1 22521U 93011A 97124.53872207 .00000950 00000-0 59483-4 0 5806
2 22521 31.1023 175.3028 0055035 116.4252 244.2062 15.03492176230866
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2 22657 55.1297 334.9094 0084792 229.7989 129.4549 2.00557615 25395
RADCAL
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2 22698 89.5447 254.8254 0092992 8.1602 352.1078 14.21396928199745
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2 22700 54.1213 215.2648 0058522 9.1690 350.9680 2.00565205 28167
NOAA 13
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2 22739 99.0912 88.6018 0010698 44.7417 315.4616 14.10991164192359
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2 22779 54.1967 274.1383 0012166 286.4639 73.3663 2.00563900 26891
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1 22782U 93055A 97124.91602143 .00000070 00000-0 50503-4 0 5611
2 22782 82.5459 92.1669 0022509 152.6839 207.5510 13.83072836185602
UFO F2
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2 22787 3.8554 329.3333 0012573 313.0686 272.7239 1.00269004 12045
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2 22823 98.7203 198.1453 0017144 193.9111 166.1593 14.16989941186672
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AO-27
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2 22877 55.8268 36.4460 0046182 302.9951 56.5656 2.00552736 25791
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2 23396 65.2248 73.3865 0028090 194.4668 165.4238 2.13102383 19081
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1 23533U 95015A 97124.61731832 .00000061 00000-0 56756-4 0 9642
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OSC 1
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2 23546 69.9833 143.0947 0010071 87.7507 271.9819 14.45518906110193
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1 24769U 97016B 97123.58207147 -.00000380 00000-0 10000-3 0 208
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2 24787 27.1692 117.5434 7607114 184.7077 157.7020 1.92317182 187
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
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1474. Re: 145.825 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: "John A. Magliacane" <magliaco@email.njin.net>
Message-ID: <336E6E0B.3148CFC6@email.njin.net>
Source record: 18934

Tom@astro.net wrote:
>
> In article <3363afec.3162554@news.bctel.ca>, masa@writeme.com wrote:
> >I got the digital signal from 145.825. which satellite is this ?
>
> >Masataka Noda
> >Masa@WriteMe.com
> >http://www.geocities.com/Yosemite/1325/
>
> The DOVE - 17 satellite. No uplink. Telemetry only. Fun to listen to and
> decode. Put up for educational purposes. Excellent little sat!
>
> Tom

Could also be UoSAT-OSCAR-11. :-)

73, de John, KD2BD

1475. Make Money With Your Computer!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-05 00:00:00 UTC
From: inet97@ameritech.net
Message-ID: <5l2sbnipl10163@nntp0.cleveland.oh.ameritech.net>
Source record: 18935

E-Mail Your Way To Riches!

Dear Friend,

We all know E-mail is here to stay. It's fun, easy and exciting! Would you be interested if we could show you a way to make well over $1,000 per week doing it?

This is not a joke. You may have seen many people trying to tell you that you can make money by joining this or that scheme! Guess what, you decide to go for it and then you get nothing but frustration and disappointment! We are here to take your frustration and disappointment into an Electrifying Adventure!

We have been marketing on-line for almost 2 years now! We have never spent one red penny on advertising and made nothing but profits. We can show you how to make money every day of the year. Many people may think this is untrue or it just can't be done. We are here to tell you that it is absolutely not true. The biggest mistake people make about marketing on-line is that they sit and wait for people to contact them. You will never make it if this is your approach and we'll tell you why. There are over 60 MILLION people on-line right now, and seven new people logging on every minute of the day world-wide and everyone is offering something. So how do you get a potential client or a new customer before your competition does? The answer is simply " Creative E-mailing" and it WORKS! I'll tell you why. You're taking your product, service or idea directly to the market instead of waiting for the market to come to you!

Here are a few testimonials we'd like to share with you (They're all 100% TRUE!):

Internet Communications, my wife and I owe you so much. We ordered your Creative E-mail System and within the first week we received over $1,150 in orders for my Internet Consulting business!
--Charles -- California

I have bought two so-called E-mail programs that cost me over $600.00 when I received them. They were extremely difficult to operate and it took me about two weeks to figure them out. Once I did, they were so time consuming it just wasn't worth my time. When I received your course it took me about four minutes to install and I was in business! Within the first 24 hours of my first E-mailing I received over $580.00 in sales over the phone. That first week I grossed over $2,000.00! I really can't believe how easy you made this, anyone can do it! Thanks!
--Dennis -- Illinios

Hello, I'm a divorced mother of two children. I wanted to thank you for helping me out. This was my first time buying anything on the Internet. I was skeptical at first but I figured I'd take a chance. This was the best chance I've ever took! My part-time business is now a full-time home-business, thanks to your

Creative E-mail System. I had to hire my two family members to help me out!
This is GREAT, thanks so much! I'd recommend this for anyone!
--Ellen -- Florida

You may have seen other people offering products "E-mail Programs, E-mail Addresses, Extractors, Etc." The vast majority of these products are very over-priced and very difficult to even use. None of them even supply you with current, up-to-date, FRESH & RESPONSIVE E-mail addresses! Our Creative E-mail System puts everything into one package to make your profits soar immediately! Even if you do not have a product or service to offer, we are going to give you over 500 how-to reports that you will have full reprint rights to! What makes our course different from anything else being offered anywhere is that we're dedicated to your success! We do not succeed unless you succeed! All of our E-mail Address Databases are created in house. We do not trade our databases with anyone because people are selling extremely bad lists on the Internet. Many of other people's databases are filled with duplicate addresses and many of them are undeliverable. We keep our own database so we know exactly what we have and we keep nothing but the best. There's no other way. We believe in producing high quality products that should be priced reasonably for your success! Read on to see the special bonuses you will receive.

******** SPECIAL 10 DAY BONUS ********

If you order within the next 10 days we will include:

1) 500 How-To Reports (You may resell these at any price)

2) Your Personal Complete Guide To The Internet -- This 175 page e-book covers every single aspect of the internet. You will never have to buy another internet book! When you complete this book, you will know more about the internet than 90% of the people online right now.

3) When you purchase our 8 MILLION SUPER responsive E-mail list we will include Mega-Mailer. It sends 250,000 E-mails per hour! All other orders will receive Pegasus Mail. It mails about 30,000 per hour.

Here's how to get the Creative E-Mail System:

All orders are delivered on CD-ROM or 100mb Zip Disk (Iomega).

============> E-Mail Databases <================

2 Million FRESH E-mail Addresses only $ 99.95
4 Million FRESH E-mail Addresses only $179.95
6 Million FRESH E-mail Addresses only $249.95
8 Million FRESH E-mail Addresses only $299.95

You will be sending your Marketing Letter to 2, 4, 6 or 8 MILLION People! To mail to 2 MILLION People by U.S. Mail at $.32 per stamp would cost $640,000.00, not including envelopes or paper! The price of 2 MILLION E-mail Addresses isn't even a fraction of the cost. And the great thing is that if you have 10 products, you can E-mail to your list as many times as you want to! Your profits will never stop soaring! Don't pay someone else to send your

advertisement out, do it yourself and save big money! The average cost right now to send your ad one time to ONE MILLION people is $1,400.00. You can send it 100 times to EIGHT MILLION people for only $299.95 and that includes Mega-Mailer that sends 250,000 per hour!

==========> Order Form <==========

Yes, Internet Communications Inc., I wish to take you up on your SPECIAL 10 DAY OFFER FOR YOUR CREATIVE E-MAIL SYSTEM, INCLUDING THE TWO SPECIAL BONUSES: "Complete Internet Guide Book" and "500 How-To-Reports". I understand I have to completely fill out the order form so you can fulfill my order.

Name:_____

Address:_____

City:_____

State:_____

Zip Code:_____

Country:_____

E-mail Address:_____

Phone Number:_____

I wish to pay by: (Check One)

Check:____ Money Order:_____

(Check One)

2 Million_____ 4 Million_____ 6 Million_____ 8 Million_____
*Remember the 8 MILLION Includes Mega-Mailer!

Zip Disk:_____ CD-ROM:_____Total:_____

Pegasus Mail (WIN 3.1) (WIN 95) (MAC) (Circle One)

==========

We Accept Checks By Fax Simply Tape Your Check Here With
The Above Order Form And Fax It To: 1-216-895-1930

If you have any questions please call customer service at: 1-216-895-1919

Fax: 1-216-895-1930 Phone: 1-216-895-1919

==========

Make check or money order payable to: Internet Communications

Mail check or Money Order to:

Internet Communications
30628 Detroit Ave. Suite 295
Westlake, Ohio 44145

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1476. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <336EDC5B.8F0599DB@acm.org>
Source record: 18936

Rob Janssen wrote:
>
> In <336D926B.16B9E45D@acm.org> "Robert W. Cunningham" <rcunning@acm.org> writes:
>
> >Yes. We expect to vary only a few degrees from "room temperature" due
> >to careful selection of external material and coatings. We expect to
> >use the Duracell data as-is, though there are some newer alkalines from
> >other manufacturers (most notably Panasonic) that beat Duracell capacity
> >by 25%.
>
> Did you look at the recent Philips announcement? I think they beat
> Duracell by 100% or so.

Do you have a link to the specs? All I found on their site was the
press release.

-BobC

1477. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <336EDB99.C9E7B8C4@acm.org>
Source record: 18937

Rob Janssen wrote:
>
> In <336D926B.16B9E45D@acm.org> "Robert W. Cunningham" <rcunning@acm.org> writes:
>
> >Yes. We expect to vary only a few degrees from "room temperature" due
> >to careful selection of external material and coatings. We expect to
> >use the Duracell data as-is, though there are some newer alkalines from
> >other manufacturers (most notably Panasonic) that beat Duracell capacity
> >by 25%.
>
> Did you look at the recent Philips announcement? I think they beat
> Duracell by 100% or so.

Are they alkaline (NOT lithium)?
Do you have a link? I found nothing on their site.

-BobC

1478. Space related stamps

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: maury <i121171@amsat.org>
Message-ID: <5kn3tvgfl1@menelao.polito.it>
Source record: 18938

I'm lookin' for space related stamps, used or mint, to trade or buy.
E-mail me.
Maurizio Bertolino
i121171@amsat.org

1479. Space related stamps

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: maury <i121171@amsat.org>
Message-ID: <5kn5k1$g88$1@menelao.polito.it>
Source record: 18939

I'm lookin' for space related stamps, used or mint, to trade or buy.
E-mail me.
Maurizio Bertolino
i121171@amsat.org

1480. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <336f4c1d.10661699@news.atl.bellsouth.net>
Source record: 18940

On Mon, 05 May 1997 00:55:23 -0700, "Robert W. Cunningham" <rcunning@acm.org> wrote:
>It looks like 100mw lets us escape all international red-tape. Is this
>workable?

You'd better research that again. *Any* artificial Earth satellite carrying an intentional RF emitter is subject to Federal licensing and international notification requirements. There is no power limit below which you are exempt. This is a matter of international treaty, there is no equivalent of Part 15 for space operation.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1481. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <ledlow@codem.com>
Message-ID: <336FA42F.31EB@codem.com>
Source record: 18941

Gary Coffman wrote:
>
> On Mon, 05 May 1997 00:55:23 -0700, "Robert W. Cunningham" <rcunning@acm.org> wrote:
> >It looks like 100mw lets us escape all international red-tape. Is this
> >workable?
>
> You'd better research that again. *Any* artificial Earth satellite carrying an
intentional
> RF emitter is subject to Federal licensing and international notification requirements.
> There is no power limit below which you are exempt. This is a matter of international
> treaty, there is no equivalent of Part 15 for space operation.
>

Licensing the sat in the amateur radio satellite service avoids a lot of
the trouble anyway.

Larry L.

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1482. ARLK035 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk035.1997@arrl.org>
Source record: 18942
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK035
ARLK035 Keplerian data

ZCZC SK35
QST de W1AW
Keplerian Bulletin 35 ARLK035
From ARRL Headquarters
Newington, CT May 6, 1997
To all radio amateurs

SB KEP ARL ARLK035
ARLK035 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97124.45006217 -.00000146 00000-0 10000-3 0 4743
2 14129 25.8538 149.5249 6071356 114.2115 318.8203 2.05880979 76485
RS-10/11
1 18129U 87054A 97124.93737856 .00000036 00000-0 22675-4 0 3502
2 18129 82.9225 270.6951 0012119 349.4098 10.6800 13.72377696494308
UO-11
1 14781U 84021B 97125.00121910 .00000172 00000-0 36777-4 0 09707
2 14781 97.8315 107.9711 0012024 136.2310 223.9850 14.69547849704914
RS-12/13
1 21089U 91007A 97125.03833808 .00000028 00000-0 13529-4 0 09785
2 21089 82.9207 310.6488 0030975 57.6715 302.7433 13.74080619313238
UO-14
1 20437U 90005B 97125.13565991 .00000017 00000-0 23304-4 0 02675
2 20437 98.5195 207.7334 0011098 340.7239 19.3524 14.29958168380062
RS-15
1 23439U 94085A 97125.76644345 -.00000039 00000-0 10000-3 0 2169
2 23439 64.8187 221.4330 0150539 140.5459 220.6544 11.27526816 97157
AO-16
1 20439U 90005D 97125.15183833 -.00000023 00000-0 76971-5 0 00664
2 20439 98.5361 210.5836 0011663 340.5288 19.5450 14.30005799380085
RS-16
1 24744U 97010A 97125.16633404 .00003124 00000-0 10608-3 0 00516
2 24744 97.2790 31.0353 0005446 239.5398 120.5306 15.31219169009509
```

```
DO-17
1 20440U 90005E 97124.72228372 .00000007 00000-0 19423-4 0 00834
2 20440 98.5396 210.9933 0011593 341.3399 18.7358 14.30148756380057
WO-18
1 20441U 90005F 97124.71917310 -.00000002 00000-0 15969-4 0 00692
2 20441 98.5393 210.8952 0011924 341.2513 18.8232 14.30116358380055
LO-19
1 20442U 90005G 97125.17965965 .00000031 00000-0 28551-4 0 00853
2 20442 98.5437 211.9937 0012375 339.5130 20.5555 14.30231022380140
FO-20
1 20480U 90013C 97124.99622803 -.00000016 00000-0 27202-4 0 09646
2 20480 99.0423 94.7196 0541082 115.1727 250.6470 12.83237636339160
AO-21
1 21087U 91006A 97124.96282260 .00000094 00000-0 82657-4 0 08211
2 21087 82.9369 83.5671 0037406 30.3001 330.0306 13.74581454314212
UO-22
1 21575U 91050B 97125.14713285 .00000005 00000-0 15851-4 0 07706
2 21575 98.3078 187.2036 0008229 27.0822 333.0808 14.37067527304303
KO-23
1 22077U 92052B 97124.82657045 -.00000037 00000-0 10000-3 0 6594
2 22077 66.0780 236.0178 0011432 222.8646 137.1480 12.86302682222171
KO-25
1 22828U 93061F 97125.19041816 -.00000002 00000-0 16593-4 0 05352
2 22828 98.5443 200.6789 0010551 357.1485 2.9639 14.28176411156077
IO-26
1 22826U 93061D 97125.14580630 -.00000009 00000-0 13865-4 0 05544
2 22826 98.5447 200.5511 0009693 12.8818 347.2609 14.27834055187947
AO-27
1 22825U 93061C 97125.73471231 -.00000027 00000-0 66651-5 0 5557
2 22825 98.5477 200.8944 0009414 11.5091 348.6304 14.27724428188010
FO-29
1 24278U 96046B 97125.08993265 -.00000052 00000-0 -14413-4 0 00991
2 24278 98.5380 172.1848 0351274 298.0333 58.5691 13.52629570035292
MO-30
1 24305U 96052B 97125.73810558 .00000204 00000-0 20364-3 0 992
2 24305 82.9194 25.9435 0030550 328.2004 31.7241 13.73092321 33239
Mir
1 16609U 86017A 97125.49644725 .00002497 00000-0 37520-4 0 2513
2 16609 51.6561 300.3082 0009734 336.5784 23.4698 15.59298766640362

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday, May
10, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1483. Radio Meteor Obs. Bull. April 1997 Lyrids

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.115.336F83F4@vvs.innet.be>
Source record: 18943

Radio Meteor Observation Bulletin No. 45 May 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

March 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Apr 1997	20h	21	22	23	00	01	02	03	04	05	06	07	08
6- 7	12	22	44	39	46	52	55	60	69	73	67		
7- 8	16	29	31	48	38	67	62	56	89	97	72		
8- 9													
9-10													
10-11													
11-12	18	14	30	36	34	55	49	58	57	78	53		
12-13	18	30	26	37	42	45	47	52	68	80	68		
13-14	26	39	41	62	42	52	70	63	78	115	143		
14-15	33	27	32	51	42	52	56	80	63	73	61		

```
15-16 | 20 34 39 50 46 48 50 60 71 85 81
16-17 | 12 29 46 48 31 43 59 68 63 85 66
17-18 |
18-19 | 5 31 39 32 48 55 47 76 70 80 85
19-20 | 9 24 31 34 34 38 50 72 78 73 71
20-21 | 19 20 39 49 48 60 53 70 106 88 54
21-22 | 25 59 38 55 46 81 71 100 133 184 144 205 144
22-23 | 23 41 46 54 73 81 81 109 103 100 70 74 94
23-24 | 23 40 59 57 55 81 75 96 121 87 107
24-25 | 22 49 46 78 73 83 74 92 111 127 108
25-26 |
26-27 | 16 52 43 61 65 64 67 78 94 132 107
27-28 | 20 31 57 50 55 55 72 102 109 121 96
28-29 | 24 36 52 38 57 49 58 84 104 108 134
29-30 | 14 22 33 44 57 68 71 100 99 128 116
30- 1 | 19 51 37 53 68 69 69 122 107 180 166
------+------------------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06 07 08
Apr |
```

Notes:
. Lyrids on April 21-23. Radiant rises at 18h UT and sets at 13h30 UT.
Best forward scatter conditions for this setup between 20h - 0h UT,
and 4h - 11h UT.
. local time = UT + 2 hours.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic E.

```
-------------------------------------------------------------
| Apr 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---------------------------------------------------------------
0 | 18 19 17 19 24 16 18 18 13 9 11 14 10 13 12
1 | 29 26 21 24 21 28 24 27 17 18 22 17 13 13 13
2 | 24 27 31 40 35 30 32 28 27 18 29 32 24 23 22
3 | 56 44 43 28 44 42 38 27 44 28 30 52 32 30 32
4 | 30 33 40 44 67 53 40 33 43 32 32 33 21 18 24
5 | 24 30 31 39 53 57 26 27 35 90 41 25 24 18 32
6 | 23 35 37 38 34 44 60 35 32 25 39 27 40 34 44
7 | 23 28 31 30 56 53 18 26 14 15 41 33 43 12 15
8 | 14 32 34 28 47 48 20 11 17 27 33 39 40 13 29
9 | 24 34 28 10 59 43 18 11 22 18 34 31 52 7 22
10 | 14 28 25 11 45 43 11 14 29 17 35 36 37 10 24
11 | 15 27 32 23 41 44 25 17 16 13 28 26 30 11 21
12 | 12 15 18 10 31 37 6 15 7 10 15 18 23 13 7
13 | 7 17 10 14 24 18 3 16 7 8 9 13 13 6 8
14 | 6 10 5 19 15 14 6 19 7 14 6 8 16 3 5
15 | 3 7 7 6 10 11 8 17 5 3 11 8 10 2 6
16 | 8 7 6 5 7 12 4 5 5 4 6 6 11 8 4
17 | 8 6 9 10 9 5 3 4 7 7 7 4 5 7 3
18 | 5 6 10 7 13 8 8 5 17 8 6 5 10 6 4
19 | 10 13 14 12 11 5 11 6 7 8 8 8 8 6 8
20 | 16 13 14 17 19 12 17 8 11 7 11 8 14 11 6
21 | 12 11 14 18 15 16 8 13 8 14 18 7 11 9 11
22 | 13 14 15 17 15 20 9 10 8 6 10 7 12 10 10
23 | 11 16 14 10 17 13 11 11 9 10 10 9 10 10 6
---+---------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

-------------------------------------------------------------
| Apr 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+---------------------------------------------------------------
0 | 11 14 11 18 32 20 44 37 23 25 25 23 21 34 23
1 | 12 18 13 26 34 23 67 43 28 25 37 31 29 42 26
2 | 13 25 18 30 35 44 63 57 30 25 38 37 48 41 39
3 | 31 44 29 52 52 71 95 113 52 50 46 72 66 89 88
4 | 24 27 29 52 56 95 128 81 43 59 56 67 82 90 50
5 | 31 25 24 47 38 39 93 132 57 47 62 69 100 81 60
6 | 36 24 25 73 60 45 101 65 54 49 59 92 59 110 76
7 | 21 16 6 49 83 31 116 61 47 66 65 78 74 66 108
8 | 27 22 12 57 79 48 73 101 46 47 87 75 75 77 82
9 | 38 27 26 78 69 30 49 60 46 50 88 75 58 81 68
10 | 15 28 12 56 68 22 27 80 28 24 68 67 56 95 77
11 | 8 17 10 48 61 23 27 29 22 20 56 49 46 45 62
12 | 13 4 6 34 37 34 23 18 22 16 39 35 19 17 21
13 | 5 3 7 25 23 7 7 9 19 9 24 25 13 12 9
```

```
14 | 5 5 4 25 18 7 4 7 12 6 15 17 7 9 13
15 | 3 8 3 14 10 6 6 10 5 11 16 16 11 9 11
16 | 10 5 7 8 10 6 8 7 9 11 10 10 9 11 6
17 | 8 6 6 8 12 10 10 7 5 8 11 17 14 10 9
18 | 4 4 7 11 18 8 17 7 11 8 10 10 12 12 12
19 | 4 8 9 9 12 9 14 6 11 9 10 12 17 16 15
20 | 9 6 13 14 17 33 32 19 10 18 16 11 13 14 12
21 | 9 9 16 10 17 17 46 12 20 15 12 14 18 21 10
22 | 8 6 17 20 17 19 37 13 11 15 20 19 16 24 12
23 | 12 10 14 19 18 30 23 19 18 16 12 19 24 20 25
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

Notes:
. Lyrid activity on April 21-23.
. increased activity at the end of the month between 4h and 9h UT
(eta Aquarids?).
. local time = UT + 2 hours.

Pierre De Groote

Observer : Kimio Maegawa
Transmitter : JA9BOH/b beacon for RMO (50 W CW 53.7500 MHz)
Antenna: 2 element Cross Yagi 4 dBi aiming to Zenith .
Location: Sabae city (136.2 E, 35.9 N)
Receiver : IC726 + LNA (NF = 3 dB) 2400 Hz BW SSB, sensitivity -150 dBm
Antenna: 3el Yagi 7 dBi (El 70deg ,Az SE direction) height 10 m
Location: Ohno city (136.5 E, 36.0 N)
Data processing: Receiver output is fed into DX2-66 MHz PC and analyzed by
AF9Y's FFTDSP42 software.
Then stored every 10.5 min automatically with GIF format.
Play back GIF files and count meteor echoes manually by
rejecting tropo signal or airplane echoes.

1997 Lyrids hourly echo counts

A: all echoes L1: long echoes (T > 5 s)

```
| 20-Apr 21-Apr 22-Apr 23-Apr 24-Apr 25-Apr 26-Apr |
UT | A L1 A L1 A L1 A L1 A L1 A L1 A L1 | UT
----+-----------------------------------------------------------+----
00h | 81 0 70 0 57 0 48 0 48 0 88 0 66 1 | 00h
01 | 67 0 67 0 58 2 48 0 60 0 72 0 53 0 | 01
02 | 69 1 77 0 69 1 43 0 56 2 66 1 53 0 | 02
03 | 53 0 56 0 56 1 38 0 55 0 38 0 60 0 | 03
04 | 46 0 74 0 77 2 36 1 63 0 46 1 52 0 | 04
05 | 33 0 47 0 39 0 21 0 35 1 50 0 29 0 | 05
06 | 25 0 41 0 25 0 21 0 24 0 21 0 18 0 | 06
07 | 25 0 30 0 28 0 21 0 19 0 27 1 14 0 | 07
08 | 14 0 21 0 20 0 15 0 11 0 18 1 15 0 | 08
09 | 12 0 16 0 14 0 16 0 14 0 21 0 15 0 | 09
```

```
10 | 24 0 17 0 10 0 22 0 20 0 17 0 13 0 | 10
11 | 28 0 35 0 27 0 27 0 29 0 18 1 23 0 | 11
12 | 38 2 53 0 34 1 28 0 57 0 53 0 48 1 | 12
13 | 77 0 77 1 54 2 40 0 65 0 75 0 60 0 | 13
14 | 87 0 79 4 61 2 48 1 64 0 68 0 80 0 | 14
15 | 84 2 76 3 91 1 70 0 74 0 78 1 85 0 | 15
16 | 82 0 63 2 82 5 64 0 93 2 60 2 96 1 | 16
17 | 90 2 90 4 76 6 74 3 74 0 75 0 102 0 | 17
18 | 79 2 87 2 84 5 68 1 77 3 91 2 80 0 | 18
19 | 85 2 101 3 58 7 71 4 105 2 85 0 84 2 | 19
20 |@110 @2 @105 5 @92@10 @66 @4 @119 @3 @89 @3 @95 5 | 20
21 |@114 0 @91 @3 71 4 97 1 @112 @4 @108 @2 @118 @6 | 21
22 | 114 3 114 6 86 4 101 3 118 3 102 2 117 5 | 22
23 | 111 0 92 4 87 2 82 2 84 0 84 1 108 3 | 23
----+-------------------------------------------------------------+----
UT | 20-Apr 21-Apr 22-Apr 23-Apr 24-Apr 25-Apr 26-Apr | UT
```

Observer : Kimio Maegawa
Transmitter : JA6YBR/b 50 W CW (morse coded) on 50.017 MHz
Antenna: 1 Lambda Crossed Loop , Az Omni 20 m H
Location: Miyazaki city (31.8 N, 131.4 E)
Receiver : FT655 BW 600 Hz
Sensitivity: -150 dBm or lower, detect 3 dB galaxy noise variation
Antenna: 8el Yagi 12 dBi (AZ 225 deg, EL 0 deg) height 12 m
Location: Ohno city (136.5 E, 36.0 N) PM86FA
Data processing: Receiver output is fed into DX2-66 MHz PC and analyzed by
AF9Y's FFTDSP42 software.
FFT Images stored every 10.5 min automaticaly in GIF
format. Only 10 dB over noise level echoes were counted.
No tropo signal or airplane echoes were observed.

1997 Lyrids hourly echo counts

A: all echoes L2: long echoes (T > 20 s)

```
| 20-Apr 21-Apr 22-Apr 23-Apr 24-Apr 25-Apr 26-Apr |
UT | A L2 A L2 A L2 A L2 A L2 A L2 A L2 | UT
----+-----------------------------------------------------------+----
00h | 74 1 58 0 65 1 81 1 71 3 62 2 61 0 | 00h
01 | 58 1 25 0 55 1 52 0 46 1 70 1 51 0 | 01
02 | 36 1 24 0 49 1 22 0 32 1 23 1 14 0 | 02
03 | 27 0 25 0 30 0 18 1 20 0 14 0 17 0 | 03
04 | 22 0 32 0 35 0 22 1 21 0 14 0 23 0 | 04
05 | 18 0 50 0 45 1 17 0 28 0 21 0 23 0 | 05
06 | 23 0 44 0 43 0 29 0 26 0 28 0 27 0 | 06
07 | 32 0 38 0 37 0 28 0 26 0 20 0 10 0 | 07
08 | 14 0 27 0 20 0 22 0 14 0 13 0 21 0 | 08
09 | 13 1 18 0 21 0 15 0 27 0 10 0 18 0 | 09
10 | 21 1 30 0 27 0 27 0 19 0 25 0 27 0 | 10
11 | 22 0 33 0 34 0 34 0 29 0 29 0 36 0 | 11
12 | 45 2 52 0 47 0 51 0 53 0 45 0 56 0 | 12
```

```
13 | 52 0 61 0 62 0 72 0 66 0 76 0 71 0 | 13
14 | @79 0 @84 0 @77 0 @69 0 @83 0 @90 0 @68 0 | 14
15 | 73 0 - - @70 1 - - - - @77 0 | 15
16 | 66 0 - - 52 2 - - - - 75 0 | 16
17 | 51 0 - - 67 5 - - - - 60 0 | 17
18 | 61 0 - - 75 1 - - - - 65 0 | 18
19 | 53 0 - - 55 0 - - - - 70 0 | 19
20 | 85 4 - - 74 5 @67 @1 @75 0 63 2 | 20
21 | 67 2 @62 @1 79 2 71 3 71 0 72 0 | 21
22 | 75 0 74 7 81 2 77 3 79 0 70 0 | 22
23 | 64 0 66 3 79 0 73 0 83 5 77 0 | 23
----+-------------------------------------------------------------+----
UT | 20-Apr 21-Apr 22-Apr 23-Apr 24-Apr 25-Apr 26-Apr | UT
```

Notes:
. - means no data was taken due to timer error.
. @ means converted Hourly rate (less than 60 min observed)
. local time = JST = UT + 9 hours
. More information on HRO (Ham band Radio meteor Observation) is available at
URL http://www.tcp-ip.or.jp/~kaze/rmd.htm
URL http://www.fukui-nct/~kmaegawa

Kimio Maegawa

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

```
Apr | UT
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
-----+-----------------------------------------------+-----------
2 | 6 6 14 13 23 16 8 11 12 15 14 13 | 13.0 12.2
3 | 6 9 14 16 22 10 7 20 11 18 18 13 | 12.8 14.5
4 | 6 10 19 20 26 16 19 12 10 14 14 19 | 16.2 14.7
5 | 6 9 24 20 24 13 10 13 14 12 21 12 | 16.0 13.7
6 | 8 17 19 19 16 20 16 18 11 16 26 | 16.5 17.4
7 | 7 16 15 12 10 12 13 14 8 16 15 17 | 12.0 13.8
8 | 12 16 19 16 15 16 16 11 16 12 12 25 | 15.7 15.3
9 | 11 13 14 12 16 14 13 15 11 13 15 21 | 13.3 14.7
10 | 10 8 19 8 14 17 15 20 15 15 23 10 | 12.7 16.3
11 | 15 18 11 19 21 19 8 15 15 18 16 13 | 17.2 14.2
12 | 10 20 17 13 23 17 17 18 14 18 24 14 | 16.7 17.5
13 | 7 7 16 19 21 15 19 12 10 14 23 15 | 14.2 15.5
14 | 3 9 11 24 15 25 18 10 14 16 16 25 | 14.5 16.5
15 | 8 11 19 15 16 15 24 11 12 14 11 17 | 14.0 14.8
```

```
16 | 8 14 11 17 24 16 14 15 11 16 24 18 | 15.0 16.3
17 | 10 13 18 25 17 12 18 8 12 11 25 11 | 15.8 14.2
18 | 8 9 19 14 17 20 17 9 9 14 19 17 | 14.5 14.2
19 | 8 10 14 14 12 18 26 16 12 12 13 19 | 12.7 16.3
20 | 6 11 16 21 12 27 20 11 16 25 22 19 | 15.5 18.8
21 | 12 3 19 22 14 20 35 22 24 27 22 21 | 15.0 25.2
22 | 11 14 11 27 25 20 25 15 22 22 25 21 | 18.0 21.7
23 | 9 14 26 23 25 12 19 16 17 14 14 24 | 18.2 17.3
24 | 8 20 23 17 16 17 22 10 16 18 13 22 | 16.8 16.8
25 | 11 16 22 17 26 15 18 16 15 18 19 29 | 17.8 19.2
26 | 7 13 18 25 17 23 10 13 23 23 26 23 | 17.2 19.7
27 | 6 9 22 17 20 18 14 12 17 22 25 25 | 15.3 19.2
28 | 10 18 17 17 26 18 10 14 22 12 29 27 | 17.7 19.0
29 | 8 18 16 24 19 20 16 13 19 23 29 29 | 17.5 21.5
30 | 6 8 12 21 12 18 21 19 27 28 19 27 | 12.8 23.5
------+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Apr | UT
```

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

- local time = JST = UT + 9 hours

Chikara Shimoda

2. ANNOUNCEMENT

From: John Peters <pe1ogf@iaehv.nl>
>>>> info meteor-scatter [Last updated on: Tue Apr 15 14:19:11 1997]

Meteor-scatter Mailing List

This list has the following purposes:

1) To provide a forum to encourage discussion on 50 MHz and up meteor scatter propagation and operation.

2) Announcing Meteor-scatter DX-Peditions, arranging skeds and sending your activity reports.

Membership of this list is open to all interested parties; to join, send a message to:

majordomo@qsl.net

with the following in the BODY of the message:

subscribe meteor-scatter

Once you have subscribed, you may post to the list by addressing mail to the list address:

meteor-scatter@qsl.net

A copy of your email will be sent to all the subscribers.

3. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

4. CONTRIBUTORS / USEFUL ADDRESSES

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Kimio Maegawa
Fukui National College of Technology, Electro-Information Course
67-9 Shimo Asojima Ohno Fukui 912 JAPAN
E-mail: kmaegawa@ip.fukui-nct.ac.jp (weekdays), HAG00032@niftyserve.or.jp
tel/fax: +81-779-65-6059
Call: JA9BOH Grid PM86fa

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

--
Christian Steyaert (RMOB9704) 6 May 1997
--

1484. * SpaceNews 05-May-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0505.1997@ampr.org>
Source record: 18944
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0505
* SpaceNews 05-Apr-97 *

BID: $SPC0505

=========
SpaceNews
=========

MONDAY MAY 5, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* STS-84 LAUNCH DATE SET *
==========
NASA managers set May 15 as the official launch date for Space Shuttle
Atlantis' sixth docking with Russia's Space Station Mir following completion
of the Flight Readiness Review at the Kennedy Space Center (KSC), FL.

The STS-84 launch window opens at about 4:08 a.m. EDT (0808 UTC) and extends
for approximately seven minutes. The actual opening of the window may vary
by a couple of minutes based on the Shuttle's rendezvous requirements and
Mir's precise location in space at the time of launch. An on-time launch
May 15 will result in Atlantis landing at about 7:49 a.m. EDT (1149 UTC),
Saturday, May 24, at KSC, completing nine days in space.

"We have just completed a comprehensive review of the STS-84 mission,"
said Johnson Space Center Director George Abbey, who chaired the meeting.
"Together with our Russian partners, we reviewed the status of Atlantis
and the Mir station and have agreed that everything is ready to proceed
with the next docking mission. We look forward to welcoming Jerry Linenger
home after his stay on Mir and also look forward to watching Mike Foale
continue our cooperative efforts and joint science experiments on the
station."

STS-84 is the sixth in a series of docking missions between the Shuttle
and Mir and the third involving the exchange of American astronauts.
Linenger, who has been a Mir crew member since January 15, will be
replaced by Foale, who then will spend more than four months on the
station before returning to Earth on the STS-86 Atlantis/Mir docking
mission in September.

[Info via NASA]

* AMSAT-OSCAR-16 NEWS *
======================
AMSAT-OSCAR-16 continues to perform well providing store-and-forward
"Pacsat" communications around the world. The satellite OBC is posting
an uptime of over 960 days since it's last software reload. The current
beacon message reads as follows:

PACSAT-1>AMSAT <UI>:
May 1997
PACSAT AO-16
Owned and Operated by AMSAT-NA
Command Team WJ9F, WD0E, VK7ZBX, KB5MU
AO16 Command Team <WJ9F>

* FUJI-OSCAR-29 NEWS *
======================
Fuji-OSCAR-29 was in Mode JD (1200 bps) early this week running mailbox
software version 1.01. Current mailbox commands are as follows:

------ JAS-2 Mailbox Availlable commands ------

B : List file headers addressed to ALL
F : List file headers from latest
F<MM/DD> : List file headers since posted day<MM/DD>
H : Show help message
K<nnnn> : Kill a file number<nnnn>
M : List file headers addressed to current user
Q : Disconnect(quit) JAS-2 mailbox
R<nnnn>+ : Read a file number<nnnn>+
U : List current user(s)
Y : More display
W : Write a file

The current operating schedule is as follows:

May 2 (Fri) 10:26z(19:26) JD 1200bps
9 (Fri) 00:57z(09:57) JD 9600bps
16 (Fri) 01:35z(10:35) JA
23 (Fri) 00:29z(09:29) JD 1200bps
30 (Fri) 01:07z(10:07) JD 9600bps

* MIR NEWS *
============
The Alaiedon Elementary School has established Amateur Radio communications
with the Cosmonauts on the Mir space station. On 14-Apr-97, Alaiedon
Elementary school students made a direct contact with Jerry Linenger
on Mir. The students were very excited about making the contact.

[Info via Rudy, IW2BSF and Marian, N8RBB from Michigan]

* RUDAK PHOTOS ON THE WEB *
===========================
Bdale, N3EUA, updated the Phase 3D RUDAK Web Page on amsat.org using
images generated by Lyle, WA7GXD. The images show various RUDAK modules

undergoing turn-on and testing in his lab in late March. The RUDAK page may be accessed at the following URL:

http://www.amsat.org/amsat/sats/phase3d/rudak-u/

[Info via Bdale, N3EUA]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-=-=-=-=- Linux: For IQs higher than 95 -=-=-=-=-=-=-=-=-=-=-=-

1485. Gratification at bargain prices!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-06 00:00:00 UTC
From: Angel <Angel@TripleXtra.com>
Message-ID: <5knpdn$33m@sequoia.idir.net>
Source record: 18945

Want the hottest sex on the web but don't want to spend a fortune for it? Cum on over and check out our thousands of
hot women, nude celebrities, bondage, asians, interracial couples, orgies, STAR TREK STARS NUDE, Big Beautiful Women, spanking, masturbation, shemales,
movies (avi's, quicktimes, mpegs and vivo!) and more with the lowest access fee going!
Head on over to http://www.triplextra.com and get some right now!

This message is being brought to you by Dynamic Mail software - the powerful
online marketing tool to explode your business easier and faster. For more
information please visit our web site at :
http://www.australia.net.au/~apexpi/dynamail.htm

1486. TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-05-07 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0605972106550001@wd1v.mv.com>
Source record: 18946
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

I spoke with Kenwood's Technical Representative today and he related that within a week or so - perhaps in time for the Dayton Hamfest, Kenwood will have a Windows 95 program that will allow file uploads and downloads from the TM-V7A. It will enable alpha numerics for and load the memories with frequency and PL tones. No other remote programmability is planned. The program is supposed to sell for $39.95 and use the data port & PG5A connector.

This will certainly take the pain out of loading memories - especially after a CPU reset!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1487. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-05-07 00:00:00 UTC
From: Rick Bates <rbates@wco.com>
Message-ID: <336FFA5C.12F5@wco.com>
Source record: 18947
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

John D. Seney wrote:
>
>
> I spoke with Kenwood's Technical Representative today and he related that
> within a week or so - perhaps in time for the Dayton Hamfest, Kenwood will
> have a Windows 95 program that will allow file uploads and downloads from
> the TM-V7A. It will enable alpha numerics for and load the memories with
> frequency and PL tones. No other remote programmability is planned. The
> program is supposed to sell for $39.95 and use the data port & PG5A connector.
>
> This will certainly take the pain out of loading memories - especially after
> a CPU reset!

I had email to/from the company that is actually doing the work on this project. I put a bug in their ear that since they had the interface to communicate with the V7, gee, wouldn't it be a great way to make a cheap remote base? A single card computer talking to the V7 and all you would have to do is plug in a control receiver... simple and cute.

Major hint. The control head is just that, a control head. Four wires (ground, power, data in and data out) are all that will be used. Someone want to figure out how to interface it? Or make new software other than the cloning software?

Rick

1488. Re: New Nanosat needs downlink: Is Ham the way to go?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-07 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E9tLHK.J4@pe1chl>
Source record: 18948

In <336FA42F.31EB@codem.com> "Larry L. Ledlow, Jr." <ledlow@codem.com> writes:

>Licensing the sat in the amateur radio satellite service avoids a lot of
>the trouble anyway.

I'm not so sure about that.
Maybe it avoids trouble with the authorities, but you can get a big
flamewar with the amateur world by trying to license a satellite as
an amateur radio satellite when there is no amateur radio aspect in
the whole project. And rightly so.

But, I think it can be done with this project.
The topic itself probably is interesting to many radio amateurs active
in the satellite field. SO, you only need to make sure that they can
make an active participation in the project, and they will be thrilled.

This means: publication of the mission objectives, frequencies, transmission
schedule, data formats, and some suggestions for further processing of
data.
Also, publication of derived information from the data by the coordinating
station itself.

When you do that, it should be OK.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1489. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-05-07 00:00:00 UTC
From: Jan Marius Evang <jane@ifi.uio.no>
Message-ID: <xmlwwpb3srf.fsf@hridil.ifi.uio.no>
Source record: 18949
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
>> Rick Bates writes:

RB> Major hint. The control head is just that, a control head. Four
RB> wires (ground, power, data in and data out) are all that will be
RB> used. Someone want to figure out how to interface it? Or make
RB> new software other than the cloning software?

This has been discussed for the TM733 as well, but nobody has done
it... It seems like all restrictions as to out-of-band operation,
xband repeater, 1750Hz tone etc. Is only present in the "control head"

MArius (LC1MAT/LB4PE/9H3WF)
```

--
<nickj> marius: du sogner til den ny-naivistiske retning innen
livsbeskuelse. ganske vanlig blant s�kalte "studenter", statsst�ttede
livsnytere og intellektuelle sjarlataner som de er

1490. Re: mir to be abandoned

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970507192006.26315A-100000@spacelink>
Source record: 18950

Frank:
I recall the Cosmonauts going out to revive Salyut 7. THey were
hoping to maintain dual presences but had a Hellish time getting Salyut
to maintain it's environment. Eventually, it was de-orbited into the
Indian Ocean. Salyut had suffered a serious electrical fire and was as
cold as anything can get in space when the Cosmonauts boarded her. They
had to retreat into the Soyuz to warm their hands while rewiring the
station. I believe at least man maintained a presence aboard
MIR during that time. I may be wrong, but that is my recollection.

Dick

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1491. G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: Chris Elmquist <chrise@cyberoptics.com>
Message-ID: <3371E82E.1476@cyberoptics.com>
Source record: 18951

I'm wondering if anyone has implemented a G3RUH 9600bps FSK modem
on an Analog Devices ADSP2181 ?? Specifically, I'd like to use
one of these eval boards that Analog Devices has been offering
with their seminar. I'm not looking for the whole modem+TNC implemented
on the DSP... just the modem. I'd hook the eval card to a real
TNC to do the protocol work.

Any pointers appreciated.

Chris
--
Chris Elmquist, N0JCF chrise@cyberoptics.com
CyberOptics Corporation
Minneapolis, MN

1492. ARLS014 STS-84 launch May 15

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls014.1997@arrl.org>
Source record: 18952
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS014
ARLS014 STS-84 launch May 15

ZCZC AS14
QST de W1AW
Space Bulletin 014 ARLS014
From ARRL Headquarters
Newington, CT May 8, 1997
To all radio amateurs

SB SPACE ARL ARLS014
ARLS014 STS-84 launch May 15

NASA has set May 15 as the official launch date for space shuttle Atlantis sixth docking with the Russian Mir space station and a trip back home for ham-astronaut Jerry Linenger, KC5HBR. The STS-84 launch window opens at about 4:08 AM EDT on May 15. STS-84 is the sixth in a series of docking missions between the shuttle and Mir and the third involving the exchange of American astronauts. Linenger, a Mir crew member since January 15, will swap places with Michael Foale, KB5UAC, who will spend more than four months on the station before returning to Earth on the STS-86 Atlantis/Mir docking mission in September. Astronaut Wendy Lawrence, KC5KII, will replace Foale in September.

Several other hams will be on the STS-84 crew. They include Commander Charles Precourt, KB5YSQ, and Mission Specialists Edward Lu, KC5WKJ, Carlos Noriega, KC5WKK, and Jean-Francois Clervoy, KC5WKG.

Late last month, Linenger--more than 100 days into his four-month research mission aboard Mir--conducted his first spacewalk. He was joined by Mir Commander Vasily Tsibliev. It was the first time a US astronaut conducted a spacewalk while wearing a Russian space suit.

Dave Larsen, N6CO, reports that Foale has received FCC approval to speak with unlicensed third parties via ham radio during his stay on Mir. Foale also has permission to use the German Space Amateur Funk EXperiment (SAFEX) equipment on Mir in addition to the 2-meter gear. The other STS-84 ham-astronauts also may use the Mir equipment during the docking mission.

Matt Bordelon, KC5BTL, at Johnson Space Center, said Foale has promised to keep the packet system on as much as possible. ''He enjoys talking with people and looks forward to experimenting with

ham equipment onboard Mir,'' Bordelon said. Jay Apt, N5QWL, shares an office with Foale, and Bordelon says Apt shared his experiences of visiting the Mir station with Foale. ''Mike will be busy the first few weeks onboard Mir, but after that he will be on-the-air,'' Bordelon said.

For more information on STS-84 (and pictures of Foale and Linenger), check out NASA's shuttle Web site at http://shuttle.nasa.gov/index.html/.
NNNN
/EX

1493. Mailing List

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3372305A.20FA@primenet.com>
Source record: 18953

BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP
-Packet, Pactor, GTOR, Clover, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for
email service by the byte you may want to consider carefully
before subscribing.

To submit materials:
TO: bitbucket@primenet.com

---

bit bucket /n./

1. The universal data sink (originally, the mythical receptacle
used to catch bits when they fall off the end of a register
during a shift instruction). Discarded, lost, or destroyed data
is said to have `gone to the bit bucket'. On Unix, often used
for /dev/null. Sometimes amplified as `the Great Bit Bucket in
the Sky'.

2. The place where all lost mail and news messages eventually go.
The selection is performed according to Finagle's Law;
important mail is much more likely to end up in the bit bucket
than junk mail, which has an almost 100% probability of getting
delivered. Routing to the bit bucket is automatically performed
by mail-transfer agents, news systems, and the lower layers of
the network.

3. The ideal location for all unwanted mail responses: "Flames
about this article to the bit bucket." Such a request is
guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bit bucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

If you have any questions or problems, please contact:
k7on@qsl.net
http://www.qsl.net/k7on

1494. **HUGE** Collection of Radio Mods on WWW

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <33728E94.3579@primenet.com>
Source record: 18954

HUGE Collection of Radio Mods on WWW
Just installed a huge collection of equipment
modifications on my web site:
http://www.qsl.net/k7on/radmods.htm

Or, from the main page: www.qsl.net/k7on

Mods for all brands equipment below:
AEA Alinco AOR Argosy Bearcat GE Grundig
Heathkit Icom Kantronics Kenwood MFJ Misc
Motorola Paccom Ramsey Ranger Regency Sangean
Sony Standard Tandy TAPR Uniden Yaesu

Brian k7on@qsl.net >or< http://www.qsl.net/k7on

1495. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: mbv@flash.net
Message-ID: <2B6D7043D2011A84.1FD077A358038F2F.E7E18A4718EAC58E@library-proxy.airnews.net>
Source record: 18955

>
>I'm wondering if anyone has implemented a G3RUH 9600bps FSK modem
>on an Analog Devices ADSP2181 ??
>
>Chris
>--
%%%

1496. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: gerhard@ats.xs4all.nl
Message-ID: <5kst9q$i5c@ats.xs4all.nl>
Source record: 18956
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

mbv@flash.net (Ken Durham) writes:

>DOS programs are OK, but since there are Win95 programs
>available to perform the same functions (and auto-install too)
>I'll stick with them.

Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !

1497. UPDATE

Newsgroup: rec.radio.amateur.space
Date: 1997-05-08 00:00:00 UTC
From: mr@totally_useless.com
Message-ID: <5l0c5j$cpg@camel3.mindspring.com>
Source record: 18957

```
The May update is in.
73 - Mike/kf4hyb
Visit my "ham" webpage :
http://www.geocities.com/SouthBeach/Sands/1961
LOTS of info and links
```

1498. HALO Rocket Balloon May 10th

Newsgroup: rec.radio.amateur.space
Date: 1997-05-09 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <33733931.1F32@hiwaay.net>
Source record: 18958
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

The HALO Rocket Balloon is GO for launch at 6:15 am EDT for May 10th
or May 11th. A possibity for May 12th exists if weekend mornings are
bad.
Check http://fly.hiwaay.net/~bbrown/ for updates.

Gene W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net
w3pm@amsat.org

HALO Rockoon Flight

Location: Hampstead, NC (20 miles northeast of Wilmington, NC)
Date: May 10th
Time: 6:15 am EDT (Balloon liftoff)
Time: any time after 8:15 am EDT (Rocket Launch from 105,000 feet)

Transmitters:

On Rocket:

Callsign: KE4ROC
1280 MHz FM ATV (3 watts into vertical antenna)
441.050 MHz FM (packet radio with APRS formatted GPS data)

Coverage range: 700 miles from apogee (entire East Coast, Southeast and
part
of Midwest)

On Launch Gondola:

Callsign: WB8ELK
434.00 MHz AM ATV:(live color camera view of rocket liftoff)
Horizontally
polarized.

Coverage range: 400 miles at launch altitude.
(Southeastern states and on up to New Jersey and Pennsylvania.)

HF coordination nets:

3.871 and 7.155 MHz... W4HTB and WA3USG net controls.

Raindate: May 11th or 12th.

web site: http://fly.hiwaay.net/~bbrown/

email: bbrown@hiwaay.net (Bill WB8ELK)

1499. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-09 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc5c94$54104980$4ce06e97@pc3527.bev.etn.com>
Source record: 18959

Ken Durham <mbv@flash.net> wrote in article
<2B6D7043D2011A84.1FD077A358038F2F.E7E18A4718EAC58E@library-proxy.airnews.ne
t>...
>
> >
> >I'm wondering if anyone has implemented a G3RUH 9600bps FSK modem
> >on an Analog Devices ADSP2181 ??
> >
> >Chris
> >--
>
> Chris, wouldn't it be even better if the thing were implemented
> via a soundblaster card? Nothing but a shielded line to the TX
> modulator and another to the RX discriminator! If it can be done for
> a Win95 SSTV program it should be possible to write one for a 9600bps
> modem.
> (May take a pretty fast computer though.)
>
> Ken K5MBV
>
I'd be interested if anyone has implemented a G3RUH 9600bps modem on an
ADSP21xx _or_ soundblaster card. :)

Dana, WA1UIW

1500. mfc web site and om links !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-09 00:00:00 UTC
From: Avatar@endoxa.IT
Message-ID: <3373A549.D4C@endoxa.it>
Source record: 18960

MFC WEB Site http://www.geocities.com/CapeCanaveral/Lab/2579/
hi om! this is the "new" web site with over 300 ham-radio web links and more
link with other mir web site and nasa ..... 73 de rudy [mfc founder]
p.s. remember register is for all and free!

/ACK

1501. Satellite Web Page

Newsgroup: rec.radio.amateur.space
Date: 1997-05-09 00:00:00 UTC
From: John - N4OKL <n4okl@amsat.org>
Message-ID: <5kvnfe$kqf@snews5.zippo.com>
Source record: 18961

Hello all,
I have been busy lately, my mother broke her hip,
(How much does Titanium cost anyway?!?)
anyway i have been working on my page again (N4OKL's Amateur Radio and
Satellite Site of WV) and have updated the listings.
Check it out and let me know what you think...

Thanks and 73, John - N4OKL
--
Reply via E-mail: n4okl@amsat.org
Homepage: http://www.newwave.net/~jharmon

1502. HALO Rocket Balloon Update

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <33745489.449E@hiwaay.net>
Source record: 18962
Cross-posted to: rec.radio.amateur.space,rec.radio.misc

SATURDAY LAUNCH POSTPONED due to high winds, but is GO
for a launch at 6:15 am EDT Sunday May 11th or Monday May 12th.

Check http://fly.hiwaay.net/~bbrown/ for updates.

Gene W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net
w3pm@amsat.org

HALO Rockoon Flight

Location: Hampstead, NC (20 miles northeast of Wilmington, NC)
Date: May 10th
Time: 6:15 am EDT (Balloon liftoff)
Time: any time after 8:15 am EDT (Rocket Launch from 105,000 feet)

Transmitters:

On Rocket:

Callsign: KE4ROC
1280 MHz FM ATV (3 watts into vertical antenna)
441.050 MHz FM (packet radio with APRS formatted GPS data)

Coverage range: 700 miles from apogee (entire East Coast, Southeast and
part
of Midwest)

On Launch Gondola:

Callsign: WB8ELK
434.00 MHz AM ATV:(live color camera view of rocket liftoff)
Horizontally
polarized.

Coverage range: 400 miles at launch altitude.
(Southeastern states and on up to New Jersey and Pennsylvania.)

HF coordination nets:

3.871 and 7.155 MHz... W4HTB and WA3USG net controls.

Raindate: May 11th or 12th.

web site: http://fly.hiwaay.net/~bbrown/

email: bbrown@hiwaay.net (Bill WB8ELK)

1503. Re: STS-83R and Orbit questions

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33748E77.4D9A@ix.netcom.com>
Source record: 18963

Rob Janssen wrote:
>
> In <336AA4C0.4876@ix.netcom.com> KD1YV <jimkd1yv@ix.netcom.com> writes:
>
> >Which brings me to my next question. What criteria determines which
> >inclination is picked for a particular mission? And while I'm at it,
> >here's another. Is a typical orbit anywhere close to the plane that
> >intersects the center of the earth, or is that plane somewhere between
> >the center and the edge? If so, which of the Keplerian elements
> >describes the angle or distance between the center and/or edge?
>
> The earth is not flat, it is (in first approximation) a sphere.
> What do you mean with "the edge"?
>
> Rob

Rob,

The concept that I was trying to describe (but apparently did not do very well), was as follows. Let's assume that a given orbit lies within a single plane, and that plane intersects the sphere of the earth. If it did not intersect the center of the earth, then it would be possible to draw a line from the center of the earth to the edge (a point on the surface of the sphere, so that such line intersected the plane in a perpendicular fashion.

However, that whole discussion is now moot, since in a subsequent message, Carl pointed out that the plane of the orbit does intersect the center (of mass) of the earth's sphere. Thanks anyway, for your interest.

>The orbit plane, to a very good approximation, always passes through the
>center of the earth (center of mass, actually). The angle between the
>orbit plane and the earth's equatorial plane is the INCLINATION. The
>satellite therefore passes equal distances north and south of the
>equator (this angular distance is the same as the inclination, for a
>circular orbit like the shuttle).
>
>73! de K8CG
>Carl

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1504. ARLK036 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk036.1997@arrl.org>
Source record: 18964
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK036
ARLK036 Keplerian data

ZCZC SK36
QST de W1AW
Keplerian Bulletin 36 ARLK036
From ARRL Headquarters
Newington, CT May 10, 1997
To all radio amateurs

SB KEP ARL ARLK036
ARLK036 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97129.30562075 .00000171 00000-0 10000-3 0 4771
2 14129 25.8716 148.6734 6071104 115.5956 317.6024 2.05878594 76589
RS-10/11
1 18129U 87054A 97129.89506100 .00000020 00000-0 50841-5 0 3542
2 18129 82.9225 267.0289 0011594 335.2542 24.8055 13.72377844494983
UO-11
1 14781U 84021B 97128.95040080 .00000133 00000-0 30264-4 0 9704
2 14781 97.8319 111.7602 0012467 125.1199 235.1180 14.69548849705499
RS-12/13
1 21089U 91007A 97129.04325868 .00000038 00000-0 24494-4 0 09786
2 21089 82.9205 307.6780 0030839 47.2154 313.1572 13.74080897313786
UO-14
1 20437U 90005B 97128.84417788 -.00000009 00000-0 13201-4 0 2673
2 20437 98.5196 211.3624 0011001 329.3904 30.6611 14.29958349380594
RS-15
1 23439U 94085A 97128.69333663 -.00000039 00000-0 10000-3 0 02320
2 23439 64.8175 216.7001 0150494 140.0341 221.1774 11.27526870097488
AO-16
1 20439U 90005D 97129.14011011 .00000018 00000-0 23633-4 0 00642
2 20439 98.5329 214.4924 0011461 329.0049 31.0491 14.30006550380656
RS-16
1 24744U 97010A 97129.02194595 .00002538 00000-0 86594-4 0 00378
2 24744 97.2789 34.8180 0005711 221.4950 138.5860 15.31238857010090
```

```
DO-17
1 20440U 90005E 97128.78011974 .00000006 00000-0 19199-4 0 00820
2 20440 98.5398 214.9754 0011435 329.4804 30.5711 14.30149206380637
WO-18
1 20441U 90005F 97128.77710022 .00000018 00000-0 23565-4 0 689
2 20441 98.5359 214.8748 0011977 329.1103 30.9370 14.30117083380630
LO-19
1 20442U 90005G 97129.09734602 -.00000008 00000-0 13719-4 0 00787
2 20442 98.5437 215.8398 0012261 327.4223 32.6183 14.30230970380701
FO-20
1 20480U 90013C 97128.97256615 -.00000025 00000-0 81858-5 0 9640
2 20480 99.0423 97.9458 0541134 106.1855 259.9473 12.83237859339674
AO-21
1 21087U 91006A 97128.89349271 .00000094 00000-0 82657-4 0 08235
2 21087 82.9378 80.6593 0037316 20.2695 339.9932 13.74581694314758
UO-22
1 21575U 91050B 97129.18546178 .00000064 00000-0 35688-4 0 7704
2 21575 98.3075 191.1020 0008368 14.3691 345.7725 14.37068764304889
KO-23
1 22077U 92052B 97129.33607057 -.00000037 00000-0 10000-3 0 6605
2 22077 66.0776 226.5736 0011354 221.9395 138.0751 12.86302796222755
KO-25
1 22828U 93061F 97129.11373479 .00000038 00000-0 32699-4 0 05332
2 22828 98.5442 204.5184 0010654 345.7667 14.3212 14.28177177156633
IO-26
1 22826U 93061D 97129.21021618 -.00000033 00000-0 39929-5 0 5538
2 22826 98.5453 204.5276 0009449 2.1626 357.9596 14.27834149188526
AO-27
1 22825U 93061C 97128.81829368 -.00000017 00000-0 10770-4 0 05725
2 22825 98.5473 203.9095 0009224 2.7847 357.3378 14.27724714188451
FO-29
1 24278U 96046B 97129.08422084 -.00000046 00000-0 -75544-5 0 00942
2 24278 98.5380 175.6358 0351256 287.6781 68.6303 13.52629556035833
Mir
1 16609U 86017A 97129.46992377 .00003596 00000-0 51114-4 0 2610
2 16609 51.6546 280.3478 0009814 348.4048 11.6673 15.59327004640983

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
May 13, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1505. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: nico.pal@ud.nettuno.it
Message-ID: <5l2ts4$3ed$1@qualcuno.nettuno.it>
Source record: 18965

In article <3371E82E.1476@cyberoptics.com>, chrise@cyberoptics.com says...
>
>I'm wondering if anyone has implemented a G3RUH 9600bps FSK modem
>on an Analog Devices ADSP2181 ?? Specifically, I'd like to use
>one of these eval boards that Analog Devices has been offering
>with their seminar. I'm not looking for the whole modem+TNC implemented
>on the DSP... just the modem. I'd hook the eval card to a real
>TNC to do the protocol work.
>
>Any pointers appreciated.
>
>Chris
>--
>Chris Elmquist, N0JCF chrise@cyberoptics.com
>CyberOptics Corporation
>Minneapolis, MN

I've just developped a 1200bps AFSK modem (Bell-202) on the ADSP2181 EVB.
The modem implements also the HDLC part of the data-link layer and interfaces
to the host (KISS protocol) via the RS-232 port of the evaluation board.

The software is still to be fine tuned, even if it is already working with JNOS,
and this will take me some more time.

I'm also evaluating the performance of a ADSP2181-EVB implementation of
the G3RUH modem and probably will start to write some code in the next weeks.

All the best.
Nico Palermo
IV3NWV

1506. Re: STS-83R and Orbit questions

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <338cd0b9.3478633270@news.sci.fi>
Source record: 18966

KD1YV <jimkd1yv@ix.netcom.com> wrote:

>Which brings me to my next question. What criteria determines which
>inclination is picked for a particular mission?

You can launch the largest payload when you launch due east from the equator, since you can take advantage of the earth rotational speed (460 m/s) to get a "flying start" for the satellite. That is why ESA launches from the French Guyana, which is just south of the equator.

Launching into a polar orbit from anywhere on earth does not give this initial speed, so the rocket has to generate the extra 460 m/s, thus reducing maximum payload.

If you are not on the equator, some of speed gained from the earth rotational speed can still be used when launching due east. The latitude of the launch site also determines the _minimum_ inclination, thus the minimum inclination from Cape Canaveral is 28.5 degrees and 48 degrees from Baykonur (Soyuz and Mir).

Shuttle flights that do not need a special orbit (such as micro gravity, life science etc.) or have a heavy payload or need a high orbit (Hubble) are launched at 28 degree orbits to get maximum gain from the rotational speed of the earth.

However, if you are doing earth science, you want to cover as much area as possible, you launch at an high inclination. The limit is about 55 degrees, since if you use a higher inclination, used rocket stages would drop into New York and other cities on the coast and someone might protest :-). The Mir is at 51.5 degrees inclination, so if you are going to dock with it, you better launch at the same inclination.

Paul OH3LWR

1507. **OVER 2700 Ham Radio WWW Links**

Newsgroup: rec.radio.amateur.space
Date: 1997-05-10 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <337533C8.527D@primenet.com>
Source record: 18967

OVER 2700 Ham Radio WWW Links

Just added a collection of ~2740 amateur radio WWW links:
http://www.qsl.net/k7on/index24.htm

Or, "OTHER Internet Resources" from the main page:
http://www.qsl.net/k7on

Please copy them, use them, etc...

73, Brian

1508. HALO Rocket Balloon Launched

Newsgroup: rec.radio.amateur.space
Date: 1997-05-11 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <3375DF31.150E@hiwaay.net>
Source record: 18968
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

The following was copied from WB8ELK's webpage:

ROCKOON FLIGHT A SUCCESS! Although the balloon
failed (burst) at about 60,000 ft instead of the planned
upon 100,000 ft, WB8ELK caught the balloon burst on
video and the "FIRE" command was issued. The rocket
fired and traveled to an altitude of (and this is only a guess)
30 miles. The exhaust blast hit the camera on the balloon
gondola, but the video kept on working. The
gondola/APRS/GPS/ATV package splashed down into the
ocean and a recovery boat is attempting to find it. The rocket
sent back spectacular photos from the very edge of space.
Please watch ABC World News Tonight and CNN, there should
be stories on both programs.

Refer to http://fly.hiwaay.net/~bbrown/ for updates and photos
when they become available.

Gene W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net
w3pm@amsat.org

1509. Kenwood TS-850 SAT,Reading of ALC meter

Newsgroup: rec.radio.amateur.space
Date: 1997-05-11 00:00:00 UTC
From: nsallay@200.241.112.2
Message-ID: <337607EF.2E17@200.241.112.2>
Source record: 18969

Gentleman,I have a almost new Kenwood TS-850SAT TX,wich I mostly used
on Packet BBS work.
On start up of the transceiver,I adjust the mic-gain to 75% of the ALC
scale.After 40 minutes more or less of TX work,the indication of
modulation amount starts to drift over the end of the ALC red line.
As I have no scope to measure flattoping,I would apreciate to know from
other Kenwood TS-850 users on their experience.
The main points are:
-Does the amount of modulation really varies with the meter indication
-Or,is this variation observed,result of "heating" of the metering
circuitry and therefore a false indication.

In SSB transmission no variation naturally was observed and no complains
on modulation qualitie have been received.
I tried out older serial numbers the the same model and found the same
bar graf meter problem.
At Kenwood FTP no information has been found on this matter.
Any information/instruction will be greatly apreciated.

Best regards and 73
Nicolau Sallay - PP8DA

PP8DA@Amsat.org
nsallay@internext.com.br
+

1510. *Amateur CW/Voice Satellite Frequencies FAQ 5.12.97*

Newsgroup: rec.radio.amateur.space
Date: 1997-05-11 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1105972220320001@cqtlm-pm2-051.dowco.com>
Source record: 18970
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ05.12
Amateur CW/Voice Satellite Frequencies for May 12, 1997.

BID: $FREQ0512
-------------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

The chances of damaging AO-10 by uplinking during "FMing" are probably remote. The caution mainly stems from a theoretical consideration. AO-10's latching relays are set to the omni antenna and the transponder is on in Mode-B configuration. This all turns out to be perfect since we can't control the attitude, etc. Each time there's a power spike the chance exists that the IHU could have a "seizure" and blurt out a pulse to switch the antennas to higain, switch the transponder off or whatever. Of course these spikes occur every time we come out of eclipse, but the idea is to do what we can to minimize the number of power spikes. Occasionally spikes have "activated" the IHU in the past and caused the beacon to send out nonsensical data rather than the current constant carrier for short periods of time. ..and it isn't clear when AO-10 switched to the omni antenna, so I guess such things may have happened in the past.

I suppose there are also some considerations regarding the effects on the transponder of operating it so far off its normal voltage/current curve, but, again, this doesn't seem to have caused a problem after many years. <thanks to Stacey E. (Chuck) Mills W4SM for this explanation>

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. The 435.504 beacon is the only one currently being copied. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

May 9(Fri) 00:57z JD 9600bps
16(Fri) 01:35z JA
23(Fri) 00:29z JD 1200bps
30(Fri) 01:07z JD 9600bps

* Mir Simplex is still offline as of time of writing due to ongoing
problems on board the space station, any QSO reports would be appreciated.

* Space Shuttle Frequencies when in orbit.
Next SAREX mission scheduled for July 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1511. -= Your favourite amateur quotes =-

Newsgroup: rec.radio.amateur.space
Date: 1997-05-12 00:00:00 UTC
From: ptitze@astron.physics.usyd.edu.au
Message-ID: <33769f53.879494@news.usyd.edu.au>
Source record: 18971
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.space,aus.radio.packet,aus.radio.amsat,aus.radio.amateur.misc,aus.radio.amateur.digital,rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.ham-radio,rec.ham-radio.packet,rec.radio.amateur.antenna,alt.ham-radio.packet

Quote of the Day,
But Barry I thought cw could get through when nothing else can.
Very scientific! Much better than lies and statistics.
-- VK2MNA, "Response to VK2AAB", Stardate 15099.6
*
Quote of the Day,
It is a well known principle of Law in this country that no person
shall be judged guilty of a crime until the nature (or possibly
evidence
that a crime has been committed ie. a witness statement) has been
placed before him and he is given an opportunity to give a reply to
that
charge. The Principle is known far and wide as "Natural Justice".
-- VK2DN, "RE: COMPLAINT 6", Stardate 15099.6
*
Quote of the Day,
Hey, does that Pommy buffoon Flossey run the damn thing?
-- VK2XBR, "* YAWN? HOW TIRESOME! *", Stardate 01109.6
*
Quote of the Day,
You cannot - REPEAT CANNOT - catch a virus by reading any e-mail
message.
You can only catch a virus by executing an infected program or by
booting
from a diskette with an infected bootsector.
-- VK2DXV, "Re: WARNING Irina virus", Stardate 03119.6
*
Quote of the Day,
So multiplying 12 Million by 100,000, we have 1,200,000,000,000 Hmm,
Joe that
looks a bit bigger than the 360,000,000 people that live there. 3,333
times
bigger if I am not mistaken. Do you mean that each household in North
America
has 3,333 computers attached to the Internet?.
-- VK2GJB, "Re: SNIP IS THE ANSWER !", Stardate 01019.7
*
Quote of the Day,
Seems like the debate has ended in vk4!!!!!!
What are they going to do now ??????? Have a XXXX??????

-- VK2TGB, "Re: Debates rejected", Stardate 01019.7
*
Quote of the Day,
In summary, I suggest that:
amateur radio is good,
the Internet is also good,
the combination of amateur radio and the Internet is mostly good,
as for other topics involving timely change, there are some who
do not seem to be happy with amateur radio advancing.
-- ZL2CA, "Amateur radio & Internet & trunking", Stardate 28129.6
*
Quote of the Day,
Personally offensive and discriminating messages such as the ones I
have
recieved from this person are certainly not at all needed on the
Packet
network, and should be stopped.
-- ZL2UGF, "Reject", Stardate 28129.6
*
Quote of the Day,
I'm not THE critic. I'm just the one every Amateur knows. There are
hundreds
or thousands of others who voted with their feet while saying nothing.
-- VK2XBR, "* NO CENSOR, MY BUTTOCKS! *", Stardate 27089.6
*
Quote of the Day,
Have you ever noticed that "real amateurs" are only those amateurs who
like
what we like? ;->
-- VK5ZAF, "re: REAL RADIO AMATEURS", Stardate 10129.6
*
Quote of the Day,
A good debate is a healthy debate and no doubt it can be learned
from but
this is gone past the point of no return.
-- VK5IE, "Insanity", Stardate 01019.7
*
Quote of the Day,
If the network can't hack the mail, then the problem is in the network
and not in the mail (!)
It is up to the User(s) to determin what type of mail they want to
send
or read (eg "7+"). Sysop(s) task is to *carry* mail.
-- VK2FEX, "Re: AGE's comment on 7+", Stardate 05089.6
*
Quote of the Day,
The thing to do is to accept it, to DO things (experiment, develop,
upgrade,
assist others and be seen to do so) rather than engage in Canute-ian

considerations of whether we should contaminate our elite enclave with
the
vulgar Internet!
-- VK2BZC, "Re: Future concern", Stardate 27079.6
*
Quote of the Day,
OK boys, I'm fair game. Tell me what's wrong with me!!!
-- VK6BE, "What value? REALLY!!", Stardate 28069.6
*
Quote of the Day,
Bob,we can only hold your hand for so long, you've got to use some of
that
grey matter, you CAN'T READ IT WITHOUT PGP !!!
-- VK2YX, "Is this sensible asks Bob ??", Stardate 08079.6
*
Quote of the Day,
The PGP hornets nest seems to have been stirred again.
-- VK6YGQ, "Why use PGP?", Stardate 22069.6
*
Quote of the Day,
Having thrown all that into the ring, I will now run for cover !
-- VK2AAB, "Amateur Radio/Internet etc", Stardate 20089.6
*
Quote of the Day,
Amateurs are progressive
-- VK2AIA, "Wormholes and all that.", Stardate 29129.6
*
Quote of the Day,
Can someone tell me why this contemptible microbe saw fit to post such
an
idiotic piece of bullshit?
Is it simply representative of his miniscule mental status, despite
his own
assertions about rational debate without involving personalities?
I cannot comment on HIS personality. He doesn't have one.
-- VK2XBR, "* MARK AITKEN, HYPOCRITE *", Stardate 01019.7
*
Quote of the Day,
All in all it was a rotten debate.
Technical details.
Standard of debate....1 out of 10
IQ of contestants .... -40db
Bandwidth and Scope ...-60db
-- VK2AIA, "The debate verdict.", Stardate 27089.6
*
Quote of the Day,
I saw this in a message from VK5RQ. I guess he can't be all bad if
he's managed to teach his dog how to park a car. Do you think if we
asked him nicely he'd teach our dogs?

-- VK4XYL, "Re: VK5RQ's diatribe", Stardate 21089.6
*
Quote of the Day,
If Liolio stays with that pack of sharks, I hope they eat him for
breakfast.
-- VK2XBR, "* LIOLIO'S RESIGNATION Pt 2 *", Stardate 19099.6
*
Quote of the Day,
As from today VK2DN will not be allowed to use VK2WI. He was warned.
-- VK2AAB, "Re: RELIGIOUS BIGOT", Stardate 19099.6
*
Quote of the Day,
We should never allow ourselves to become complacent, we should
always
stretch to be right up there with the $$$$boys!
-- VK3JMA, "RE: IS IT STILL WORTHED ???", Stardate 10129.6
*
Quote of the Day,
As predicted, little Jack Robinson VK2XY rushed into print to re-live
his past glories, much like an old bull-moose who realises that an
upstart is about to challenge him for the leadership of the herd, and
that perhaps he's not servicing the females as well as he used to.
-- VK2KFU, "Re: Comments about Free Software.", Stardate 01019.7
*
Quote of the Day,
The Debate is driving the ZL's crazy, that will teach them All Blacks
not
to beat us at footy.....well, its sending us all round the bend
so
stop complaining.
-- VK2AIA, "Crazy", Stardate 01019.7
*
Quote of the Day,
and we will beat you at cricket as well, once you learn to bowl
properly.
-- ZL2TMQ, "Re: Crazy.", Stardate 02019.7
*
Quote of the Day,
Without discipline, society degenerates into anarchy. With anarchy
the needs of the many are swept aside with the few gaining self
satisfaction at their expense. With RIGHTS MUST come responsibility.
Self discipline TEACHES responsibility.
-- VK2XB, "In Reply to THN #2 !", Stardate 21089.6
*
Quote of the Day,
Chalk it up,boys! The ancient mariner has made it!
-- VK6BE, "Re: Come off it Paul!-", Stardate 20089.6
*
Quote of the Day,

*** Australian Hams at the edge of the known Universe ***
-- VK1DSN, ".....", Stardate 22099.6
*
Quote of the Day,
come on you blokes, remember the Amateur is progressive he keeps
himself abreast of the latest technology, or so the old AR screed
used to go etc etc, what changed that?????.I wonder!
-- VK6ER, "what a load of rubbish", Stardate 12099.6
*
Quote of the Day,
Good on you Joe, Keep telling those Eastern guys a few home truths!
-- VK6DM, "Re cut the cable to VK6!", Stardate 10089.6
*
Quote of the Day,
Stir em up Paul, these old boys have been asleep for too long...and
exited
nearly blowen their finals..good on you. Amateur radio needs someone
to
liven things up..and keep it clean..its a pity there are not more like
Paul.
-- VK2AIA, "Exciting is'nt it.", Stardate 10089.6
*
Quote of the Day,
Disclaimer. Please note, this message in no way represents any true
thoughts of the writer, in any way shape or form.
-- VK3TK, "PGP, Disclaimers and Tags", Stardate 18069.6
*
Quote of the Day,
Let's try and leave personalities out of this.
-- VK2DAA, "RE: -=&#65533; WIA, AAPRA & ROSE &#65533;=-", Stardate 31079.6
*
Quote of the Day,
The only thing degrading about HAM Radio is the INSISTANCE of a
minority
that we must conform to their views.
-- VK2CPI, "Re: AR BEING DEGRADED !", Stardate 15129.6
*
Quote of the Day,
I would hope for a reply and copies of relevant messages concerning me

before you convict me by secret STAR CHAMBER.
-- VK2DN, "RE: COMPLAINT 1", Stardate 08099.6
*
Quote of the Day,
To all bush lawers, including sma employees;
Please do a law degree before you put pen to paper.
-- VK2DOT, "pecuniary", Stardate 07109.6
*
Quote of the Day,
May I suggest you leave the keyboard alone for a while and communicate

with someone/something that has nothing to do with Amateur Radio and
GET A
LIFE !!!!
" May the sphincters of the BOFARTS become constipated and allow
nothing
to pass !!!"
-- VK2YX, "Why bother???", Stardate 15099.6
*
Quote of the Day,
I say, "more power" to those who are prepared to contribute to matters
which are worthwhile and to the general good of Amateur Radio.
-- VK5QX, "re:re: Claims & Counterclaims", Stardate 30099.6
*
Quote of the Day,
As that septic general said "I shall return!"
-- VK4XYL, "VK4XYL off air!!!", Stardate 03099.6
*
Quote of the Day,
Constitutional matters always engender groans and eyes rolled to
the
heavens.
-- VK2AAB, "Re: ALIANATION or COHESION", Stardate 13079.6
*
Quote of the Day,
73's De JOE VK5RQ, do not boder to reply as i give up with Guys like
you ..
-- VK5RQ, "JUST INFO", Stardate 17089.6
*
Quote of the Day,
What will be Paul's next target one wonders...
First, it was AAPRA
Then it was the SMA and WIA
Followed by the 'wormholes'
And his latest...CW
At least he is consistent... everything is wrong
-- VK2JAI, "REALLY?", Stardate 23089.6
*
Quote of the Day,
Imbecile. I can think of two cases that contradict your statement.
Better still:
/From:.*barry.*fastlink.com.au/h:j
There; I feel much better, now that I don't have to see your
vomitus...
-- VK2KFU, "Re: Alternative to the WIA", Stardate 17129.6
*
Quote of the Day,
I'll stop posting them when Corbin stops giving me the ammunition.
-- VK2XBR, "* DON'T READ IT, BOB! *", Stardate 06069.6
*
Quote of the Day,

Joe, until you understand that we live in a democratic society where
the
rights and where we are not dictated to by people like yourself, I
will
continue to write these packets in response to any message you make
about
denying the rights of individuals to participate in "niche" digital
modes
that some of us enjoy..
-- VK2YX, "The RUBBER ROOM!!!", Stardate 22089.6

Paul, VK2THN.

==
ptitze@astron.physics.usyd.edu.au
http://www.physics.usyd.edu.au/~ptitze
==

1512. closed loop additive system

Newsgroup: rec.radio.amateur.space
Date: 1997-05-12 00:00:00 UTC
From: wide@angle
Message-ID: <3376b315.0@lagoon.idirect.com>
Source record: 18972

Hi, we'll get right to the point. We operate one of the finest
quality custom color labs in the USA. To introduce you to our
service we're offering the following Internet enlargement special:

Your color negatives hand printed on Kodak Supra Professional
16x20 inch paper. All negatives printed full frame.
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P.O. Box 248
Lake Village, IN 46349 USA
phone 219-992-2413 fax 219-992-2644

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http://www.centralcontrolsystems.com/saylordesign/photo/prolab.htm

1513. * SpaceNews 12-May-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-12 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0512.1997@ampr.org>
Source record: 18973
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0512
* SpaceNews 12-May-97 *

BID: $SPC0512

=========
SpaceNews
=========

MONDAY MAY 12, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* WEBERSAT NEWS *
=================
WEBERSAT-OSCAR-18 is currently in MBL (Microsat Boot Loader) mode. There
are no picture transmissions taking place at the present time. The primary
downlink (437.102 MHz) is currently active with strong BPSK signals.

* LUSAT-OSCAR-19 NEWS *
=======================
LUSAT-OSCAR-19 is currently active on its secondary downlink of 437.125 MHz.
The satellite is reporting an uptime of over 690 days. The beacon text reads
as follows:

LUSAT-1>AMARG <UI>:
22 de Enero de 1997.
7 a&#65533;os !
7 years !
Gracias a todos los amigos que lo hicieron posible.

Amsat - LU8DYF.

* ITAMSAT-OSCAR-26 NEWS *
=========================
ITAMSAT-OSCAR-26 is currently transmitting telemetry and OBC status
information on 435.822 MHz. Over the past weekend, the beacon was
transmitting the following text message:

IY2SAT-1>AMSAT <UI>:
IHT97 software loaded. WOD enabled
IO-26 Command Team.

* DOVE-OSCAR-17 NEWS *
======================
DOVE-OSCAR-17 is also in MBL mode. Telemetry is being sent in an

abbreviated format. The following packets were copied on 10-May-97:

DOVE>MBLCTL <UI>:
V:9J EC:B0 ST:0804 IL:2F00:0CE9 IV:1800 EL:0D96 AH:0000 WS:2900

21:0E 2E:9B 31:AE 32:AE 0A:A3 0D:BC 10:AE

DOVE-OSCAR-17 controller Jim White, WD0E explained several months ago that new software is being uploaded to the satellite. The format and content of the current data transmissions reflect the latest attempt in troubleshooting the satellite and uploading new operating software. The satellite is presently sending data from a RAM based version of the Microsat Boot Loader program. The first line in packet above contains data about the operation of this software. The first characters in each item are the ID. Data values in hex follow the colon.

V is the software version number. EC is the EDAC error counter, and is accurate data. ST represents status data whose meaning changes with the interaction between MBL software and ground control software.

IL represents the memory address at which the current software is running followed by the offset to the IV value. This is an assembly language module written by Bob Diersing, N5AHD. The satellite has 256k bytes of EDAC memory in which programs and data are stored. The load address of 2000 hex is in 16 byte paragraphs. The program is loaded 131072 bytes above the bottom of memory (2F00h = 12032d X 16d = 192512d). The next value (0CE9h) is the offset in bytes to the location of the value (IV) that controls how often telemetry is sent. Knowing this value allows controllers to safely change it with a patch command. In January, controllers were using a version of MBL loaded at 2F00h to load the first two modules of the normal software. The first one (the kernel) loads in low memory. The second loads just above MBL at 3000h. The area of memory from 2F00h to 3000h isn't used by the operational software so controllers are able keep a copy of MBL there to use when the satellite is reset.

This version of software sends acknowledgements and occasional telemetry on 2 meters, eliminating the need to use the S-band transmitter whose modulator failed after launch. When the satellite resets to the ROM MBL, controllers can simply use it to execute the RAM MBL copy at 2F00h and use it to load other software.

IV represents the value of the telemetry timer. 1000h roughly corresponds to 10 seconds, 1800h is about 1 minute. However in space, the software must listen to and try to make sense of all the stuff it hears on its uplinks. That activity takes priority over everything else the software does. If the satellite copies many signals, it doesn't get a chance to gather and send telemetry as often. As a result, it sends telemetry at an interval that varies from a few seconds to a couple of minutes depending on what it copies on its control link receivers.

EL is the length of the module, D96 hex (3478 decimal) bytes. AH is a counter that represents the number of times the routine in the software that communicates over the AART bus timed out waiting for a response from

another hardware module. This counter has shown there is no problem with the bus. WS indicates the segment of memory being washed at the time this data was gathered. It changes randomly because all of EDAC is being washed at a fairly rapid rate and there is no timed sequence for gathering the data.

The remaining data is analog telemetry in the same format as the 'normal' DOVE software, channel number followed by raw value in hex. This is converted into engineering units by converting the hex data to decimal and applying the appropriate calibration coefficients that have been published. Most of this data, however, is not accurate.

* STS-84 NEWS *
==========
Ken Ernandes reports that STS-84 pre-launch nominal OMS-2 orbital data is now available on the AMSAT Web page at the following URL:

http://www.amsat.org/amsat/sarex/orbit.html

This data includes the time-independent TDR/EFG nominal state vector and the AMSAT and Two-Line Keplerian elements. The Keplerian elements were computed from the State Vector and the scheduled launch time using VEC2TLE. The scheduled launch time is 15-May-97 at 08:07:51 UTC.

The corresponding Two-Line Keplerian elements are as follows:

STS-84
1 99984U 97135.36851925 .00383797 60709-6 72207-4 0 14
2 99984 51.6579 251.1201 0103915 4.3240 184.3216 16.17747945 15

If the launch date or time changes, updated Keplerian elements can be computed from the State Vector and the new time using VEC2TLE. Note that the 99984 Catalog Number is temporary. A permanent Catalog Number and International Designator will be assigned after STS-84 is launched.

As with previous missions, the AMSAT Web page will be maintained with current orbital data for STS-84 during the mission. The STS-84 Nominal Mission Orbit Profile and State Vectors are also available on the AMSAT Web page at the following URL:

http://www.amsat.org/amsat/sarex/vectors.html

This file has a text summary of the major orbital events for the STS-84 mission and time-independent TDR/EFG state vectors for each event. The corresponsing Keplerian elements can be computed from the vectors (and providing a launch date and time) using VEC2TLE. VEC2TLE Version 9648 may be downloaded from: http://www.amsat.org/amsat/sarex/orbit.html

[Info via Ken Ernandes, N2WWD]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-=-=-=-=-=- Linux: For IQs higher than 95 -=-=-=-=-=-=-=-=-=-=-=-=-

1514. NORAD Two-Line Orbital Element Sets (TLE995)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-12 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5l84u7$7p3@blackbird.afit.af.mil>
Source record: 18974

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #995 -
Alouette 1
1 00424U 62049A 97129.07842484 .00000043 00000-0 40237-4 0 2873
2 00424 80.4647 322.1854 0022496 276.9110 82.9470 13.67893698726897
ATS 1
1 02608U 66110A 97126.88864304 -.00000109 00000-0 10000-3 0 194
2 02608 14.5252 349.3589 0007000 104.8919 255.1324 1.00288551 28111
ATS 3
1 03029U 67111A 97127.32901730 -.00000132 00000-0 10000-3 0 6528
2 03029 14.8972 356.2835 0010217 274.1534 327.9454 1.00272282108014
Starlette
1 07646U 75010A 97128.90264772 .00000026 00000-0 13053-3 0 534
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METEOSAT 3
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1 24772U 97017A 97129.86177791 -.00000012 00000-0 -30568-4 0 161
2 24772 82.9194 53.1561 0024506 198.3148 161.7125 13.71021555 3050
1997017B
1 24773U 97017B 97132.24132110 .00006831 00000-0 74084-2 0 166
2 24773 82.9211 51.3543 0019395 184.5923 175.5049 13.72724087 3384
1997012D
1 24777U 97012D 97131.92022937 .00002499 00000-0 13606-2 0 163
2 24777 98.9376 176.2805 0010407 153.9861 206.1791 14.13096645 3373
1997012E
1 24778U 97012E 97129.23070103 .00000515 00000-0 30024-3 0 164
2 24778 98.9464 173.6184 0010859 158.7556 201.4062 14.12975745 2990
MINISAT-01
1 24779U 97018A 97130.20158801 .00001579 00000-0 56804-4 0 90
2 24779 150.9671 244.0851 0013984 150.3802 209.7586 14.98281486 2817
CELESTIS
1 24780U 97018B 97132.24884707 .00001411 00000-0 40049-4 0 133
2 24780 150.9725 257.6023 0020352 168.6792 191.4263 14.99560579 3125
GOES 10
1 24786U 97019A 97131.79166667 -.00000124 00000-0 00000+0 0 417
2 24786 0.4718 278.1859 0015051 54.9606 75.6554 1.00429152 197
1997019B
1 24787U 97019B 97131.07891524 .00023941 13496-5 89006-3 0 175
2 24787 27.1984 115.6773 7601873 187.7994 143.4651 1.92603303 302
IRIDIUM 1
1 24792U 97020A 97130.94349409 .00000745 00000-0 10000-3 0 120
2 24792 86.3908 146.9486 0009686 213.9327 146.1188 14.77875197 784
IRIDIUM 2
1 24793U 97020B 97132.09437513 .00000530 00000-0 70072-4 0 110
2 24793 86.3929 146.4265 0008843 204.6265 155.1235 14.77842752 953
IRIDIUM 3
1 24794U 97020C 97132.09395648 .00000545 00000-0 72119-4 0 135
2 24794 86.3939 146.4208 0009727 209.4172 150.2227 14.77901128 954
IRIDIUM 4
1 24795U 97020D 97132.09368699 .00000615 00000-0 81795-4 0 152
2 24795 86.3942 146.4237 0008833 204.2805 155.3679 14.77955730 959
IRIDIUM 5
1 24796U 97020E 97130.94250214 .00000750 00000-0 10000-3 0 170
2 24796 86.3928 146.9491 0011430 209.2097 150.8448 14.78153492 787
1997020F
1 24797U 97020F 97128.10066170 .00000183 00000-0 38857-4 0 61
2 24797 86.8982 148.3829 0247960 202.7123 156.2946 14.35793596 355
DFH-3
1 24798U 97021A 97131.91573976 .00000900 00000-0 10000-3 0 25
2 24798 28.4617 103.4403 7305219 179.6422 181.7876 2.27445699 09
1997021B
1 24799U 97021B 97131.91644078 -.00000066 00000-0 10000-4 0 12
2 24799 28.6383 103.5382 7303510 179.5357 182.2291 2.27324041 12
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

1515. RE: Sale RF AMplifier http://www.awt.com.tw

Newsgroup: rec.radio.amateur.space
Date: 1997-05-13 00:00:00 UTC
From: AWT <awt@ms2.hinet.net>
Message-ID: <01bc5d6e$9d5c7840$b7955fa8@awt>
Source record: 18775

see the homepage
http://www.awt.com.tw

1516. Via Packet

Newsgroup: rec.radio.amateur.space
Date: 1997-05-13 00:00:00 UTC
From: konus@tin.IT
Message-ID: <3.0.32.19970513152404.0069e4f4@mbox.vol.it>
Source record: 18776

```
********************* A T T E N T I O N **********************
* This is a message from an email gateway between Packet Radio *
* Network and Internet. You must not Reply to konus@tin.it but *
* you must read the instructions at the end of this message. *
****************************************************************
********************* A T T E N Z I O N E ********************
* Questo e' un messaggio proveniente da un gateway di posta *
* tra il Packet Radio Network ed Internet. Non devi rispondere *
* a konus@tin.it ma devi leggere le istruzioni alla fine di *
* questo messaggio. *
****************************************************************
**To: ham-space@ucsd.edu
**Title: mfc web sites

MFC WEB Site http://www.geocities.com/CapeCanaveral/Lab/2579/

hi om! this is the "new" web site with over 300 ham-radio web links and
more
link with other mir web site and nasa ..... 73 de rudy [mfc founder]

p.s. remember register is for all and free!

>--------------------------------------------------------------------<
Internet <-> Packet IW7CHV Link v2.0
Se vuoi rispondere a questo messaggio scrivine uno in questo modo:
Indirizzato a: konus@tin.it
Con soggetto : Via Internet
Corpo del msg: SP Indirizzo_Packet_del_corrispondente
Vero titolo del messaggio
**From: il_tuo_indirizzo_E-mail
--- spazio ---
Vero testo del messaggio
...
/EX
Per migliori informazioni scrivi a Raffaello: konus@tin.it
>--------------------------------------------------------------------<

Greetings from Raffaello Di Martino
-----------------------------------------------------------------
To get some information about me write to: respdim@isorgente.com
writing in the body of the message:
GET pgpkey ------> to get my PGP KEY
GET address ------> to get my addresses and WEB sites
GET info ------> to get info about me
-----------------------------------------------------------------
Linux Users Group Bari Member (LUGBari) and
```

Linux Gazette Italian Edition (LGEI) graphic coordinator.

1517. Re: QST Hams with Macs

Newsgroup: rec.radio.amateur.space
Date: 1997-05-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1305970740370001@news.vcnet.com>
Source record: 18777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <scott-0405972024590001@allnet.pr.mcs.net>, scott@allnetinc.com (Scottso) wrote:

> Thank you, Thank You, THANK YOU!!!
> It is about time!!!
>
> Scott
>
I agree, Scott.
-editorial-
Dollar Bill's clunky OS has a bit too much in common with a quagmire for me.
I see that the world's fastest laptop is currently an Apple Power Macintosh. CISC technology is old hat. RISC is where it's at.
>
> In article <john-0105970655410001@wd1v.mv.com>, john@wd1v.mv.com (John D.
> Seney) wrote:
>
> > Announcing New WWW Site for Macintosh Ham Radio Enthusiasts
> >
> >
> > http://www.mv.com/ipusers/wd1v
> >
> >
> > Mac Ham Software including:
> >
> > Macnet Roster:
> > a database of all hams in the world using Mac computers
> >
> > WD1V's Ham Radio EXAM Simulators:
> > the fast path for upgrading your ham license with a Mac
> >
> > Plus more Mac information - come see!
> >
> > 73,
> >
> >
> > John D. Seney |_|_|_|_| john@wd1v.mv.com
> > 144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
> > Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
> > Voice Mail 617.686.9882 | | | | | Fax 603.627.1623
> >
> > http://www.mv.com/ipusers/wd1v

--
--Rich-- ---805-386-3734, ag6k

1518. Meteosat/GOES pictures

Newsgroup: rec.radio.amateur.space
Date: 1997-05-13 00:00:00 UTC
From: Agustin Estrada-Pena <Aestrada@posta.unizar.es>
Message-ID: <33783D3C.237FBAEF@posta.unizar.es>
Source record: 18778

Hi all,

I am a complete newbie in the topic, and I wish to obtain Meteosat/GOES pictures to read temperature and humidity. I can not buy a complete receiving station (expensive). Furthermore, I lack the knowledge to build my own equipment.

My questions:
- are there preassambled cards-receivers at relatively low cost?
- are there software packages (shareware if possible) to display the picture and obtain direct readout of temperature and troposphere humidity?
- what is Wefax service?

Thanks a lot.

--
Agustin Estrada-Pena

University of Zaragoza (Spain)
aestrada@posta.unizar.es

1519. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.space
Date: 1997-05-13 00:00:00 UTC
From: Rick Bates <rbates@wco.com>
Message-ID: <3378F0DD.E5C@wco.com>
Source record: 18779
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Jan Marius Evang wrote:
>
> >> Rick Bates writes:
>
> RB> Major hint. The control head is just that, a control head. Four
> RB> wires (ground, power, data in and data out) are all that will be
> RB> used. Someone want to figure out how to interface it? Or make
> RB> new software other than the cloning software?
>
> This has been discussed for the TM733 as well, but nobody has done
> it... It seems like all restrictions as to out-of-band operation,
> xband repeater, 1750Hz tone etc. Is only present in the "control head"
>
> MArius (LC1MAT/LB4PE/9H3WF)

So if you can replace the control head with a computer, the limits
should only be in the software... <:

Rick

1520. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-14 00:00:00 UTC
From: jreuter@lykos.oche.de
Message-ID: <5lcf8pji1@lykos.oche.de>
Source record: 18780

In article <33797034.6097@muenster.de>,
Oliver Welp <welp@muenster.de> writes:
> Hi,
>
> Dana Gould wrote:
> [snip]
>> I'd be interested if anyone has implemented a G3RUH 9600bps modem on an
>> ADSP21xx _or_ soundblaster card. :)
>
> The German Flexnet group did (for soundblaster). Have a look at their
> URL:
> http://home.pages.de/~flexnet

Thomas HB9JNX, the author of the soundcard MODEM drivers for PC/Flexnet
and Linux, also wrote a 9k6 FSK/1k2 AFSK MODEM implemention for the ADSP2181
EZ-KIT DSP board. It is available from http://www.ife.ee.ethz.ch/~sailer/
Currently supported by PC/Flexnet only as it needs a special protocol
on the serial port.

--
Joerg Reuter ampr-net: dl1bke@db0pra.ampr.org
Internet: jreuter@poboxes.com
www : http://www.rat.de/jr/

Fur? I'd rather grow my own!

1521. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-05-14 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-1405971811540001@host03.clr.cyberg8t.com>
Source record: 18781

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

1522. Colorado ATV/GPS PAcket Balloon Launch May 17

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5leco9$nkr@news.ysu.edu>
Source record: 18782

For this and other balloon announcements, please check out
the High Altitude Balloon Launch Information Center (HABLIC)
website at:

http://www.geocities.com/CapeCanaveral/3161/hablic.htm

Hank Riley, N1LTV

COLORADO ATV/GPS PACKET BALLOON LAUNCH
EOSS-30

Region: North Central Colorado/Ft. Collins

Date/Time: Saturday, May 17/8:00 AM Mountain Time,
14:00 UTC

Location: Windsor area about 10 miles southeast of
Ft. Collins

Other states where Kansas, Nebraska, Wyoming, Utah,
the signals will New Mexico, northern Texas, and western
reach easily: Oklahoma.

Site Coordinates: for initial antenna heading -
40 degrees 28.493' North Latitude
104 degrees 57.756' West Long.

ATV: EOSS Shuttle Video - 426.25 MHz AM NTSC
video (1 watt)

Beacons: 147.555 MHz; also 144.34 MHz Morse ID audio
on FM (periodic; frequency shared with packet
telemetry)

Telemetry: 144.34 MHz FM (1 Watt output) - AX.25, 1200
baud mostly plain english text; includes APRS
position data string

HF Net: 7.235 MHz

VHF nets: Foxhunt net the day before launch at 8:00 PM
147.225 (Colorado Repeater Association)

Foxhunting -- 449.450 MHz (Rocky Mountain Radio
League Repeater); 146.58 MHz Simplex Field Frequency

Launch data courtesy EOSS via Rick von Glahn.
rickvg@usa.net

For additional launch data and general Edge of Space Sciences (EOSS) information, please see the EOSS website:

http://www.usa.net/~rickvg/eoss.htm

1523. Schematic needed for crossed dipole

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: Gerald Laver <glaver@toolcity.net>
Message-ID: <01bc6148$4aae2e80$d5bc00d0@unit1>
Source record: 18783

Hi
I am trying to receive satellite transmission for weather on the 137 Mz range.
I came upon this photo and wanted to build one but I don't know the dimensions
or where to attach the wire. The source that I got this photo at said that the
crossed dipole consists two horizontal half wave dipoles mounted at right angles
to each other on a short mast.

Any help will be welcome.

Feel free to email me.

glaver@toolcity.net or
Gelaver@aol.com

Thanks

1524. Microwave Gear at Dayton Hamvention

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: Walter Dail-KT4JA <dail@jlab.org>
Message-ID: <337B30D5.2F15@jlab.org>
Source record: 18784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.swap,alt.radio.pirate,comp.robotics.misc,sci.electronics.repair,rec.radio.amateur.misc

ATTENTION MICROWAVE ENGINEERS
Dayton Hamvention in booth #2675-76

1.8- 18 GHz Microwave Laboratory

PRD 236 VSWR Measuring Set Includes:
=B7 SWR/Attenuation Meter PRD 277-D w/ Battery Pack
=B7 Adjustable Probe Carriage
=B7 3 Slotted Lines:
Coaxial "N" 1.8-18GHz
RG51/U 7-10 GHz Waveguide (aka WR 112)
RG52/U 8-12 GHz Waveguide (aka WR 90)
=B7 Coax to Waveguide Adapters:
N to RG51/U =

N to RG52/U
=B7 RG51/U to RG52/U Adapter
=B7 HP 444A Broadband Detector
=B7 Cables =

=B7 Spare 1N76 Detector Diode and tips
=B7 Manual (With GREAT measurement tutorial)
=B7 Transit Case
Great companion system to Struthers, Bird, etc.
$175.00
=3D=3D=3D

Manual Also Included=85=85.
Will test 811A, 6146B, etc.
$100.00
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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We are in booth #2675-76

1525. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc614d$fc483d20$4ce06e97@pc3527.bev.etn.com>
Source record: 18785

Mmm, I looked couldn't find it. Oh well.

Dana, WA1UIW

Oliver Welp <welp@muenster.de> wrote in article
<33797034.6097@muenster.de>...
>
> Dana Gould wrote:
> [snip]
> > I'd be interested if anyone has implemented a G3RUH 9600bps modem on an
> > ADSP21xx _or_ soundblaster card. :)
>
> The German Flexnet group did (for soundblaster). Have a look at their
> URL:
> http://home.pages.de/~flexnet
>
> 73 de Oliver
> (DL9QJ, N3NSF)

1526. Re: Schematic needed for crossed dipole

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: Gerald Laver <glaver@toolcity.net>
Message-ID: <01bc6149$60a0f780$d5bc00d0@unit1>
Source record: 18786

```
This is a multi-part message in MIME format.

------=_NextPart_000_01BC6127.D996F8A0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gerald Laver <glaver@toolcity.net> wrote in article
<01bc6148$4aae2e80$d5bc00d0@unit1>...
> Hi
> I am trying to receive satellite transmission for weather on the 137 Mz
> range.
> I came upon this photo and wanted to build one but I don't know the
> dimensions
> or where to attach the wire. The source that I got this photo at said
that
> the
> crossed dipole consists two horizontal half wave dipoles mounted at right
> angles
> to each other on a short mast.
>
>
>
> Any help will be welcome.
>
> Feel free to email me.
>
> glaver@toolcity.net or
> Gelaver@aol.com
>
> Thanks
>
I forgot to add the photo
------=_NextPart_000_01BC6127.D996F8A0
Content-Type: application/octet-stream; name="xdip.gif"
Content-Transfer-Encoding: base64
Content-Description: xdip.gif (GIF Image)
Content-Disposition: attachment; filename="xdip.gif"

<encoded_portion_removed>
gVdkeEOgyEKHQUODpF2spgFOOsYqAgIAOw==

------=_NextPart_000_01BC6127.D996F8A0--
```

1527. HELP!!! FT-736 vs TS-790 vs IC-821

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: Juha Rantanen <rantjuh@jytol.fi>
Message-ID: <337B2CF9.682@jytol.fi>
Source record: 18787

I'm about to purchase a new rig and I would like to get some comments about these three rigs FT-736, TS-790 and IC-821. I have working experiments only of ft-736 and it was on a terrestial contest. I have no kind of experiments of satellite working so if you would so kind and reply to me on this newsgroup. The rigs are about the same price so that makes no difference between them. I'm about to use rig mostly on tropo, ES and aurora working, maybe in the future via satellite, that should also be considered.

73's de OH6KSR Juha Rantanen

1528. ARLS015 Ham-astronaut Mike Foale to be active from Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls015.1997@arrl.org>
Source record: 18788
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS015
ARLS015 Ham-astronaut Mike Foale to be active from Mir

ZCZC AS15
QST de W1AW
Space Bulletin 015 ARLS015
From ARRL Headquarters
Newington, CT May 15, 1997
To all radio amateurs

SB SPACE ARL ARLS015
ARLS015 Ham-astronaut Mike Foale to be active from Mir

Ham-astronaut Mike Foale, KB5UAC, took off on the space shuttle Atlantis Thursday, May 15, to swap places with colleague Jerry Linenger, KB5HBR, aboard the Russian Mir space station. Foale was one of several hams aboard Atlantis for the STS-84 mission, the sixth docking with Mir. He is scheduled to remain aboard Mir until September.

Other hams on the STS-84 crew include Commander Charles Precourt, KB5YSQ, and Mission Specialists Edward Lu, KC5WKJ, Carlos Noriega, KC5WKK, and Jean-Francois Clervoy, KC5WKG. The Atlantis is carrying badly needed replacement equipment for the Mir space station, including a new oxygen-generation unit.

During the STS-84 pre-flight press conference, Foale talked about ham radio and his stay aboard Mir. Foale said he took his ham radio exam in preparation for the STS-56 shuttle mission. ''My commander then (Ken Cameron, KB5AWP) was a pretty serious radio ham, and he encouraged the whole crew to do it,'' Foale said. ''Since then, I've enjoyed taking part in those activities, and I do look forward very much to using the ham radio on the Mir throughout my stay there to talk to anybody who can speak to me in either English, American, or Russian.''

Foale said he's open to talk about anything and with anybody. ''I really enjoy having slightly longer contacts than just the brief collections of QSOs we do on shuttle. As a long-duration crew member, I'm hoping that (hams) will allow me to talk longer with them, so I can have some contact with them and their countries and understand the people's conditions where they live as I fly over them.''

NASA says its Shuttle Web will provide continuous audio and video coverage of the STS-84 shuttle-Mir mission in a second test of the latest technology for streaming video over the Internet. Links to the video stream are available on the NASA Shuttle Web, http://shuttle.nasa.gov.
NNNN
/EX

1529. Re: Microwave Gear at Dayton Hamvention

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: keng@techlock.com
Message-ID: <337b803e.37061643@news.erinet.com>
Source record: 18789
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.swap,alt.radio.pirate,comp.robotics.misc,sci.electronics.repair,rec.radio.amateur.misc

I look forward to seeing you there. I've got some SP6T and SP8T
SMA switches if you're interested. Let me know. I'm in Dayton.

Excellent weather will be had by all -- for a change !!!!!!!!!!!!!!!!

On Thu, 15 May 1997 11:50:45 -0400, Walter Dail-KT4JA <dail@jlab.org>
wrote:

>ATTENTION MICROWAVE ENGINEERS
>Dayton Hamvention in booth #2675-76
>
>1.8- 18 GHz Microwave Laboratory
>

Ken Gunton WB6QWF Microwave & RF Components
http://www.techlock.com Techlock Distributing
Phone 937-434-5078, Fax 937-434-5079

1530. FreeNetAccessWorldwide

Newsgroup: rec.radio.amateur.space
Date: 1997-05-15 00:00:00 UTC
From: interbbs@hotmail.com
Message-ID: <337b3927.4794952@bang-olufsen.dk>
Source record: 18790

Free internet connection worldwide via our BBS.
Please visit as much as possible our sponsor pages,
it's how we are paid...
Follow the link and enjoy...

http://www.cybercity.hko.net/LA/interbbs/index.htm

aababcabcd1121231234

1531. Re: G3RUH modem on ADSP2181 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-16 00:00:00 UTC
From: mbv@flash.net
Message-ID: <05E71402E8282EEC.F8EF00F8633AEFAC.A64827DEBC4B5C2F@library-proxy.airnews.net>
Source record: 18791

I looked at the URLs listed and don't find any reference to
soundcard packet implementation. Flexnet doesn't seem to have
any connection with the soundcard. It says it is a TCP/IP
Win95 program for computer to computer interface via RS232
port or some other obscure gadget.

If this is not correct, please educate me.

Ken K5MBV

1532. Spy people on the Net

Newsgroup: rec.radio.amateur.space
Date: 1997-05-16 00:00:00 UTC
From: benh@hotmail.com
Message-ID: <337b9d40.5358043@bang-olufsen.dk>
Source record: 18792

I present here my two most recent software which I hope they interest you.
they are progammed by Turbo C++ and run under Windows(3.11 and 95).
here is a short description of these two software.

1-Robot Spy 1.0
at my knowledge, this software is the first and the unique of its kind.
This software allow you to spy your friends who are on the net at the same time
of you, it permits to see exactly what they do on their screen, pixel by pixel,
anywhere, in the world, at the condition they are connected to the internet.
how does-it work?
it's simple, you send a file to the person you want to spy telling to him it's a
game or everythings else, the objectif is this person run the file. from this time,
a batch file is installed on his computor, and everytime this person use internet,
this batch connects him secretly on our server.
on your side, you , after the installation of the other part of the software every time
you want, you can connect on our server with your password and have the list of all the
persons who received your batch and who are connected at this time.
the only thing you have to do is to click on the name of the person you want to spy.
a window opens containing exactly the screen of the person spied, you can have
ten pictures per second with 256 colors, if you switch to balck and white mode you can
onbtain a real time sequence, approximatly 30 pictures by second.

Robot Mailer 1.1
The message you are reading presently is sent to more then 20,000 newsgroups with
this software. This program automates FreeAgent, and reach with a connection of 28,8 Kbauds
5,000 news per hours. It can also find a maximum of 50,000 e-mail adresses from internet
and
send a message in 4 or 5 hours. You can obtain with this sofware the most powerful tool of
mass transmittion on the internet.

Robot Spy 1.0.................20 US$
Robot Mailer 1.1.............20 US$
Both.............................30 US$

I'm sorry i can't accept credit card, but you can send an international money order to:

Ben Hedi Nassef
1481 Ste-Catherine est #7
Montreal, PQ, H2L-2H9
Canada

Don't forget to include your e-mail on a paper, you receice the software ordered in your
e-mail the day we receive the money order.

1533. NORAD Two-Line Orbital Element Set: Space Shuttle (97135.81449085)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-16 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5likil$pjd@blackbird.afit.af.mil>
Source record: 18793

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97135.81449085 .00002918 00000-0 42634-4 0 2837
2 16609 51.6558 248.4872 0010127 14.4205 345.7077 15.59376967641974
STS 84
1 24804U 97023A 97136.33888889 -.00001341 11207-4 53190-5 0 56
2 24804 51.6539 245.9538 0013711 336.6626 41.7675 15.95484646 158
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1534. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-16 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <1705970037311EEFpostmaster@emarkt.com>
Source record: 18794

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox2.ucsd.edu by fmgateb.PhoneLink.COM id aa05744;
17 May 97 0:36 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id LAA08693 for <ham-space-list@mailbox.ucsd.edu>; Fri, 16 May
1997 11:52:11 -0700 (PDT)
Received: by noc.ucsd.edu; id LAA15920
sendmail 8.8.5/UCSD8.3
Fri, 16 May 1997 11:41:25 -0700 (PDT)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id LAA15885
sendmail 8.8.5/UCSD8.3
Fri, 16 May 1997 11:41:14 -0700 (PDT)
Message-Id: <199705161841.LAA15885@noc.ucsd.edu>
Date: Fri, 16 May 97 11:41:13 PDT
From: Ham-Space Mailing List and Newsgroup <Ham-Space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #169
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 16 May 97 Volume 9

...rest of message truncated
```

1535. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-16 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <1705970037321EF1postmaster@emarkt.com>
Source record: 18795

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox2.ucsd.edu by fmgateb.PhoneLink.COM id aa05744;
17 May 97 0:36 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id LAA08693 for <ham-space-list@mailbox.ucsd.edu>; Fri, 16 May
1997 11:52:11 -0700 (PDT)
Received: by noc.ucsd.edu; id LAA15920
sendmail 8.8.5/UCSD8.3
Fri, 16 May 1997 11:41:25 -0700 (PDT)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id LAA15885
sendmail 8.8.5/UCSD8.3
Fri, 16 May 1997 11:41:14 -0700 (PDT)
Message-Id: <199705161841.LAA15885@noc.ucsd.edu>
Date: Fri, 16 May 97 11:41:13 PDT
From: Ham-Space Mailing List and Newsgroup <Ham-Space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #169
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 16 May 97 Volume 9

...rest of message truncated
```

1536. DL0ART/am Balloon Launch on Sun 18-May-1997

Newsgroup: rec.radio.amateur.space
Date: 1997-05-17 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <337D7356.7650@muenster.de>
Source record: 18796
Cross-posted to: nl.radio.amateur,es.rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,uk.radio.amateur

PLEASE FEEL FREE TO SPREAD THIS INFO IN ANY APPROPRIATE WAY!

-----5th Launch of DL0ART/am-----

The Nienberge Amateur Radio Group (NW Germany) plans another balloon
launch on sunday, 05-18-97.

This is our fifth flight and will be the first one carrying a
transponder. 40 kHz of the 70 cm band will be translated to 2 m. All
hams are invited to use this facility.

Still, the launch is not 100 per cent for sure. There is a 50 % chance
of rain / thunderstorms, which would keep us from going.

Final testing will be on Sat 05-17-97, 13:00 UTC.

This will be the last launch of DL0ART/am.

Planned ARTOB launch 05-18-97:

Launch: # 5
Launch date: 05-18-97 (Sunday)
Launch time: 1200 UTC
Launch site: Nienberge near Muenster, Germany, JO32SA

Call sign: DL0ART/am
QRG/mod.: (1) Telemetry beacon: 145.200 MHz (F2D & F2A)
(2) 2nd beacon: 144.987 MHz (F1A)
(3) Transponder: (J3E & A1A preferred)
Uplink: 432.570 MHz \ +/-
Downlink: 144.470 MHz / 20 kHz
+ beacon on 144.470 (A1A)
(4) RX for remote control on 70 cm and 10 m

Power: (1) 2 W
(2) 100 mW
(3) 2.5 W

Antennas: (1) groundplane
(2) turnstile
(3) big wheel - one for 70 cm, one for 2 m
(4) 70 cm: groundplane / 10 m: lamda/2

Diameter ballon: ca. 8 ft

Talk back of DF teams and ground control via repeater Osnabrueck, DB0CO (R 75). Reports are welcome, please call DL3YBQ. Or send QSL to DL9QJ via bureau, via PR or via Internet (preferred). Each report will be confirmed by a special QSL card of the balloon.

DL0ART/am on the Web:
http://buene.muenster.de/darc/artob/hombale.htm

Any suggestion or response is always welcome!
Best 73,
Oliver

--
[Oliver Welp, DL9QJ, N3NSF
Internet: n3nsf@amsat.org or welp@muenster.de
http://www.muenster.de/~welp/homewelp.htm
PR: DL9QJ@DB0EA.#NRW.DEU.EU
Tel./Fax: +49-2533-7312]

1537. Internet for free worldwide

Newsgroup: rec.radio.amateur.space
Date: 1997-05-17 00:00:00 UTC
From: netfree@hotmail.com
Message-ID: <337e1a29.19963205@news.nasionet.net>
Source record: 18797

Free adult internet connection worldwide via our BBS.
Please visit as much as possible our sponsor pages,
it's how we are paid...
Follow the link and enjoy...

http://www.cybercity.hko.net/LA/interbbs/index.htm

1538. Internet for free worldwide+

Newsgroup: rec.radio.amateur.space
Date: 1997-05-17 00:00:00 UTC
From: netfree@hotmail.com
Message-ID: <337e295f.23856948@news.nasionet.net>
Source record: 18798

Free adult internet connection worldwide via our BBS.
Please visit as much as possible our sponsor pages,
it's how we are paid...
Follow the link and enjoy...

http://www.cybercity.hko.net/LA/interbbs/index.htm

1539. ARLK038 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-17 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk038.1997@arrl.org>
Source record: 18799
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK038
ARLK038 Keplerian data

ZCZC SK38
QST de W1AW
Keplerian Bulletin 38 ARLK038
From ARRL Headquarters
Newington, CT May 17, 1997
To all radio amateurs

SB KEP ARL ARLK038
ARLK038 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-84
1 24804U 97023A 97136.46373843 -.00002501 10735-4 39859-5 0 60
2 24804 51.6567 245.2917 0087494 333.7669 41.7843 15.77779932 171
AO-10
1 14129U 83058B 97135.13208706 -.00000036 00000-0 10000-3 0 4802
2 14129 25.8900 147.6543 6070628 117.3010 316.0014 2.05881604 76704
RS-10/11
1 18129U 87054A 97135.87344466 .00000037 00000-0 23912-4 0 03683
2 18129 82.9227 262.6086 0011089 318.7744 41.2572 13.72377980495800
UO-11
1 14781U 84021B 97135.96359570 .00000056 00000-0 17232-4 0 09894
2 14781 97.8328 118.4913 0012874 103.7719 256.4923 14.69549902706527
RS-12/13
1 21089U 91007A 97135.96084565 .00000032 00000-0 17359-4 0 09988
2 21089 82.9198 302.5445 0030544 29.1113 331.1739 13.74081012314737
UO-14
1 20437U 90005B 97136.05129685 .00000028 00000-0 27624-4 0 02866
2 20437 98.5187 218.4129 0010649 307.5802 52.4414 14.29959510381623
RS-15
1 23439U 94085A 97136.14360922 -.00000039 00000-0 10000-3 0 02259
2 23439 64.8164 204.6534 0150492 138.7334 222.5077 11.27527095098322
AO-16
1 20439U 90005D 97135.71725804 .00000007 00000-0 19694-4 0 00756
2 20439 98.5343 220.9431 0011140 309.2663 50.7539 14.30007137381590
```

```
RS-16
1 24744U 97010A 97136.01422375 .00002010 00000-0 69039-4 0 00791
2 24744 97.2780 41.6787 0006113 192.4600 167.6500 15.31266130011164
DO-17
1 20440U 90005E 97136.05623847 .00000002 00000-0 17386-4 0 00739
2 20440 98.5398 222.1152 0011244 307.7382 52.2775 14.30149881381673
WO-18
1 20441U 90005F 97135.77352645 .00000007 00000-0 19318-4 0 00870
2 20441 98.5374 221.7405 0011709 308.1709 51.8417 14.30117625381633
LO-19
1 20442U 90005G 97136.16317207 .00000025 00000-0 26420-4 0 00704
2 20442 98.5429 222.7744 0011754 305.7587 54.2509 14.30232006381718
FO-20
1 20480U 90013C 97135.98955331 -.00000063 00000-0 -78477-4 0 09814
2 20480 99.0426 103.6388 0541113 90.2870 276.0203 12.83237656340578
AO-21
1 21087U 91006A 97135.88134678 .00000094 00000-0 82657-4 0 08291
2 21087 82.9381 75.4876 0036957 1.1632 358.9603 13.74582096315717
UO-22
1 21575U 91050B 97136.14809601 .00000077 00000-0 40017-4 0 07897
2 21575 98.3060 197.8195 0007546 357.6204 2.4938 14.37069925305883
KO-23
1 22077U 92052B 97136.17807272 -.00000037 00000-0 10000-3 0 06741
2 22077 66.0778 212.2502 0011171 218.6203 141.4021 12.86302721223632
KO-25
1 22828U 93061F 97136.18971499 -.00000000 00000-0 17233-4 0 05475
2 22828 98.5438 211.4410 0010082 325.1830 34.8699 14.28177751157642
IO-26
1 22826U 93061D 97136.14773971 .00000002 00000-0 18309-4 0 05661
2 22826 98.5453 211.3134 0009160 342.1664 17.9197 14.27835141189517
AO-27
1 22825U 93061C 97136.17683786 .00000049 00000-0 37465-4 0 05651
2 22825 98.5467 211.1071 0008548 343.4846 16.6064 14.27726036189504
FO-29
1 24278U 96046B 97136.18523962 -.00000041 00000-0 -28112-5 0 00841
2 24278 98.5398 181.7727 0350860 269.2403 86.8529 13.52629575036796
Mir
1 16609U 86017A 97136.51942878 .00004923 00000-0 67430-4 0 2843
2 16609 51.6542 244.9465 0010352 14.9915 345.1365 15.59387043642083

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
May 20, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1540. Info needed on 25/29 Ghz propagation

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: bart@es.co.nz
Message-ID: <bart.88.0A852722@es.co.nz>
Source record: 18800
Cross-posted to: rec.ham-radio,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.space

Hi all,

I am trying to find any information on the propagation and behavior of QPSK transmisions in the 25 to 29 Ghz band.
Especially maximum range in good weather, rain and fog interference and reflection aspects, that is, does the signal reflect of buildings, trees or is it absorbed.

Any information on these bands is welcome, either amateur experiments or commercial data.

Please reply by EMAIL as I do not normally read these newsgroups :)

Thanks for all help,

Bart Kindt
PA2FOX / ZL4FOX
Dunedin, New Zealand

1541. Alt/Az

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: John McKay <3peaks@daelnet.co.uk>
Message-ID: <01bc63a0$18b714a0$a228f7c2@john>
Source record: 18801

Anyone got any ideas about computer controlled alt/az system for 6 foot dish using stepper motors?

John McKay (G4HOK)

1542. need info on rs-16

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: **drx1001@ibm.net
Message-ID: <337f5eb1.0@news1.ibm.net>
Source record: 18802

I need help finding a homepage for the rs series satellites.I have found some info on rs16 but it is not from the "horses mouth".
thanks tim kf4fco em70 note:remove "**" on my e-mail add.

1543. Re: need info on rs-16

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <337F7E35.D9B@ix.netcom.com>
Source record: 18803

DR.X wrote:
>
> I need help finding a homepage for the rs series satellites.I have found some info on rs16 but it is not from the "horses mouth".
thanks tim kf4fco
--
Hi Tim -- Check the 16 links to Satellites at URL:
http://pw2.netcom.com/~ac6v/pagew.html#SA
Possibly the horse is there!!

Good orbiting
Rod in San Diego
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

1544. Freq. Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: cipriano@nutecnet.com.br
Message-ID: <337f4f34.4698647@news.nutecnet.com.br>
Source record: 18804

Hi all..

My name is Carlos Alberto and my Call is PY4CEL...

I need the freqs of up and down of satelites amateurs or no
amateurs...

Pse... Send for cipriano@nutenet.com.br

Tanks...

Carlos Alberto
PY4CEL

Carlos Alberto Cipriano
cipriano@nutecnet.com.br
if possible in portuguese. Thanks

1545. Re: Info needed on 25/29 Ghz propagation

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <337f06cb.8438639@news.fastlink.com.au>
Source record: 18805
Cross-posted to: rec.ham-radio,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.space

bart@es.co.nz (Bart Kindt) wrote:

:Hi all,
:
:I am trying to find any information on the propagation and behavior of QPSK
:transmisions in the 25 to 29 Ghz band.

Here's the drum. The signal goes out until it contacts a solid object
then it stops. If it encounters a partialy solid object it is attenuated.

Range at that frequency for a practical amateur aplication would be
around 100 metres.

==========
To reply via email please remove the XX from my
return address.

1546. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-05-18 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <337F9035.55A9@mailhost.cyberramp.net>
Source record: 18806

http://www.cyberramp.net/~johnf

1547. Re: DL0ART/am Balloon Launch on Sun 18-May-1997

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <337FFEF3.5E7E@rcru.rl.ac.uk>
Source record: 18807
Cross-posted to: nl.radio.amateur,es.rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,uk.radio.amateur

Oliver Welp wrote:
>

>
> Final testing will be on Sat 05-17-97, 13:00 UTC.
>
> This will be the last launch of DL0ART/am.

I heard some CW on 144.470 in IO91, but it was weak. Might this have
been the device ?

1548. * SpaceNews 19-May-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0519.1997@ampr.org>
Source record: 18808
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0519
* SpaceNews 19-May-97 *

BID: $SPC0519

=========
SpaceNews
=========

MONDAY MAY 19, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* STS-84 NEWS *
===============
Atlantis launched successfully on its journey to the Mir space station on
schedule at 03:07:48 central time (08:07:48 UTC) Thursday morning. The
prime payload on the sixth Shuttle-Mir docking mission is astronaut Mike
Foale, who will take over for Jerry Linenger to extend the American mission
to the Mir for another four-and-a-half months. Foale will spend more than
four months on the orbiting Russian facility. He will return to Earth on
Space Shuttle Mission STS-86, scheduled for launch in late September.

Atlantis will again be carrying the Spacehab module in the payload bay of
the orbiter. The double module configuration will house experiments to be
performed by Atlantis' crew along with logistics equipment to be transferred
to Mir.

The STS-84 mission is scheduled to last 9 days, 3 hours, 44 minutes. Atlantis
is due to land back at Kennedy Space Center on May 24 at about 7:52 a.m. EDT
(11:52 UTC).

The STS-84 mission is part of the shuttle-Mir program, which is a precursor
to the International Space Station and consists of nine shuttle-Mir dockings
and seven long-duration flights of U.S. astronauts aboard the Russian space
station. The U.S. astronauts will launch and land on a shuttle and serve as
Mir crew members while the Mir cosmonauts use their traditional Soyuz vehicle
for launch and landing. This series of missions will expand U.S. research on
Mir by providing resupply materials for experiments to be performed aboard
the station as well as returning experiment samples and data to Earth.

The STS-84 mission and the work performed by Mike Foale during his time
on the Mir station will include investigations in the fields of advanced
technology, Earth sciences, fundamental biology, human life sciences,
International Space Station risk mitigation, microgravity sciences, and

space sciences.

STS-84 will involve the transfer of 7314 pounds of water and logistics to and from the Mir. During the docked phase, 1025 pounds of water, 844.9 pounds of U.S. science equipment, 2576.4 pounds of Russian logistics along with 392.7 pounds of miscellaneous material will be transferred to Mir. Returning to Earth aboard Atlantis will be 897.4 pounds of U.S. science material, 1171.2 pounds of Russian logistics, 30 pounds of ESA material and 376.4 pounds of miscellaneous material.

STS-84 is the 19th flight of Atlantis and the 84th mission flown since the start of the Space Shuttle program in April 1981.

[Info via NASA]

* MIREX NEWS *
==============
The MIREX group will be conducting one school schedule during the STS-84 to Mir mission. STS-84 is not a SAREX mission. The Shuttle will not be carrying any Amateur Radio equipment on board the shuttle. However, there will be one school schedule with the Hellenic American school in Lowell Mass while the Shuttle is docked to the space station Mir. The crew on Mir will be using the Kenwood TM-733 transceiver on board Mir to talk to the children. Shuttle pilot Charles Precourt will be answering questions from a group of 15 children during the 10 minute schedule.

This is only the second time a school schedule have ever been performed while the shuttle is docked to the Mir space station. The first took place during STS-71, when MIREX linked the Peter Noyles school in Sudbury Mass to Astronaut Charlie Preocurt while on Mir.

A temporary 2-meter station was installed at the school this weekend and tested. After the schedule, audio (.wav) files will be posted to the MIREX web page.

The STS-84/Mir combination should be visible during the early morning hours over the United States.

[Info via Miles Mann]

* OSCAR-11 NEWS *
=================
During the period 16-Apr to 14-May, reliable signals have been received from OSCAR-11's 145.826 MHz beacon. The UHF beacon on 435.025 was also heard on Wednesday April 30 at 15:40 UTC, when the satellite was being commanded by ground control. Binary WOD continued after the satellite had been switched back to 145 MHz.

Mirek OK2AKQ has heard the Mode-S beacon. Here is his very detailed report:

Date: 27-Apr-97 Rev #: 70383 Eq. Freq.: 2401500 kHz

UTC LO LA AZ EL Range Dopp | MONITORING

```
HH : MM deg km Hz | RST Freq.
--------------------------------------------------|--------------
15 : 40 7 27 202 2 2758 49403 | 559 2401.549
15 : 41 6 31 207 6 2403 47494 | 4
15 : 42 5 35 214 10 2070 44366 | 3 2401.540
15 : 43 4 38 223 15 1776 39261 | 7 2401.534
15 : 44 3 42 237 19 1544 31033 | 5
15 : 45 2 45 255 23 1405 18541 | 6
15 : 46 1 49 275 23 1389 2203 | 5 2401.501
15 : 47 359 53 294 20 1498 -14664 | 6 2401.475
15 : 48 357 56 308 16 1710 -28235 | 7
15 : 49 355 60 319 11 1990 -37406 | 7 2401.467
15 : 50 353 63 326 7 2313 -43126 | 7 2401.463
15 : 51 350 67 332 3 2662 -46616 | 4 2401.461
```

Mirek's equipment, which uses a 55 cm dish with a two turn helix and low noise converter was described in detail in AMSAT-DL Journal (December 1993), and in OSCAR News 104, December 1994. It is interesting to compare this report with a similar one dated 12 December 1995 (before the beacon partially failed) when the signal levels ranged from S8 to S9 for similar ranges. Thanks Mirek for all your reports.

OSCAR-11 telemetry has been nominal. The battery voltage has recently improved to around 13.9 volts, and the internal temperatures have continued to fall due to solar eclipses. The battery temperature is now 4 degrees C or 18 degrees below the full sunlight condition.

Two WOD surveys have been transmitted of channels 0, 10, 20, 30 (-Y, +Y, -X, +X solar array currents. These show the eclipses, and pulsing of the array currents as the satellite rotates. If one listens to the downlink signal during the WOD transmission, one can hear a sudden additional tone as lines containing the constant block of numbers (eg. 0DF5175175175175F) representing zero current are transmitted.

Three AMSAT bulletins by Richard G3RWL have been uploaded the the satellite. Topics have included the UNAMSAT failure, RS-16 news, shuttle and MIR news. Bulletins always include current Keplerian elements for OSCAR-11, and often for satellites featured in the bulletin.

The operating schedule remains unchanged:

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There have been several recent inquiries about suitable software for decoding the ASCII telemetry received from OSCAR-11. The recommended program is TLM2.EXE by Craig Underwood of the University of Surrey. The program is

fully described in the book "Decoding Telemetry from the Amateur Satellites", by G. Gould Smith, WA4SXM, which is essential reading for telemetry enthusiasts. Both the program and book may be available from your local AMSAT office. In case of difficulties, contact the AMSAT-UK office, e-mail: 100024.614@compuserve.com.

Listeners living in the UK may have an old BBC computer, which may be used for decoding OSCAR-11 without the need for any external interfaces or hardware. The AMSAT-UK BBC library contains several suitable programs. Details are available through Clive Wallis via e-mail at: g3cwv@amsat.org (NOT the AMSAT-UK office!).

Clive Wallis has now put a simple OSCAR-11 telemetry decoding program on his OSCAR-11 web site. It is written in BBC BASIC, but the package includes a small interpreter which enables the program to be run on any PC. Being written in BASIC, the program can easily be changed to suit individual needs, and is recommended to those wishing to experiment. Status decoding is included, and data from several channels may be combined. Examples of this feature are the calculation of total magnetic field, angle, and BCR efficiency. Please note that a capture program such a CTERM will also be required, which may also be downloaded from:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV (g3cwv@amsat.org)]

* AMSAT/ARRL WORKSHOP PLANNED *
==========

Fried Heyn, the ARRL Southwest Division Director reminds us that an AMSAT/ARRL Workshop is planned for the Southwestern Division Convention on 12-14 September 1997 at the Riverside Convention Center, Riverside, California between 1:00 PM and 6:00 PM on Friday the 12th. Anyone needing more information should contact Rosalie White (WA1STO) at ARRL Headquarters.

* AO-27 NEWS *
==========

The AMRAD-OSCAR-27 downlink frequency changed from 436.800 MHz to 436.792 MHz on 01-Apr-97. Further information on AO-27 may be found at:

http://www.umbra.com/sats/

* FEEDBACK/INPUT WELCOMED *
==========

Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-=-=-=-=- Linux: For IQs higher than 95 -=-=-=-=-=-=-=-=-=-=-=-

1549. WORK STUDY ABROAD

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: mats.hansen@reimers.se
Message-ID: <864061537@reimers.se>
Source record: 18809

WORKING or STUDY ABROAD

Now the book is here, (144 pages,more than 1000 addresses) which gives
you detailed information about work permits, wages-, working and loading
conditions, visas, travel expenses etc. abroad. You will also find
addresses to companies in Europe, USA, Canada, West Indies, Australia
and Far East, looking for employees within most professions.

INTERESTED ?

Send us a e-mail so will we send you our free brochure which will give
you further information about the book, don't forget to put in your
e-mail address in your e-mail.

mats.hansen@reimers.se

You can also buy the book directly from us by paying 18 pounds,
or $ 30 US through an international coupon to:

MAKEMA & Co
Box 3008
S-261 03 LANDSKRONA
SWEDEN

 QMPro 1.51 mats.hansen@reimers.se

1550. Re: DL0ART/am Balloon Launch on Sun 18-May-1997

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <3380E4F4.4AA6@muenster.de>
Source record: 18810
Cross-posted to: nl.radio.amateur,es.rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,uk.radio.amateur

Hi,

> > Final testing will be on Sat 05-17-97, 13:00 UTC.
> >
> > This will be the last launch of DL0ART/am.
>
> I heard some CW on 144.470 in IO91, but it was weak. Might this have
> been the device ?

I'd assume that. In IO91, it should have been possible to copy the sigs
at abt 1245 - 1355 UTC. We have a report from IO93 for 1330 h RST 559.

!!!!!!!!!!!!!!!
First Pics are available: See URL
http://buene.muenster.de/darc/artob/homebale.htm

or ./homebal.htm for German version. A short report is also available,
but only in German (./ber_v5.htm) - English version will follow.

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

1551. NORAD Two-Line Orbital Element Set: Space Shuttle (97139.27506184)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5lqjm3$6hn@blackbird.afit.af.mil>
Source record: 18811

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97139.27506184 .00009118 00000-0 11917-3 0 2956
2 16609 51.6580 231.1051 0009610 36.3813 323.7852 15.59424684642518
STS 84
1 24804U 97023A 97139.25000000 -.00000325 00000-0 24394-5 0 152
2 24804 51.6555 231.2329 0008796 41.8560 177.5386 15.59416671 612
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1552. NORAD Two-Line Orbital Element Sets (TLE000)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5lqkgh$6if@blackbird.afit.af.mil>
Source record: 18812

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #000 -
Alouette 1
1 00424U 62049A 97137.56304714 .00000043 00000-0 40237-4 0 2897
2 00424 80.4640 313.8107 0022474 254.2588 105.6077 13.67894381728058
ATS 1
1 02608U 66110A 97126.88864304 -.00000109 00000-0 10000-3 0 194
2 02608 14.5252 349.3589 0007000 104.8919 255.1324 1.00288551 28111
ATS 3
1 03029U 67111A 97132.46627943 -.00000125 00000-0 10000-3 0 6533
2 03029 14.8983 356.2342 0009476 274.0502 22.5820 1.00272952108062
Starlette
1 07646U 75010A 97137.57864076 -.00000616 00000-0 -37358-3 0 553
2 07646 49.8266 269.1491 0206148 254.8750 102.9254 13.82190589125214
LAGEOS
1 08820U 76039A 97137.86607591 .00000030 00000-0 00000+0 0 2863
2 08820 109.8180 140.6752 0043813 56.2259 304.2518 6.38664412235205
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97134.62023058 .00000049 00000-0 10000-3 0 8361
2 10061 12.7889 33.3639 0010413 146.6885 99.3417 1.00276907 17765
IUE
1 10637U 78012A 97137.42579448 -.00000272 00000-0 10000-3 0 3939
2 10637 36.0041 78.2326 1359116 66.3001 16.8906 1.00076759 23283
GOES 3
1 10953U 78062A 97136.37121398 -.00000087 00000-0 10000-3 0 8080
2 10953 11.8079 36.3246 0002771 305.8822 277.4101 1.00267241 22396

```
SeaSat 1
1 10967U 78064A 97137.03349483 -.00000011 00000-0 40968-4 0 5742
2 10967 108.0000 145.5654 0002492 250.5260 109.5615 14.38169443989445
Nimbus 7
1 11080U 78098A 97138.14454333 -.00000066 00000-0 -22846-4 0 6703
2 11080 98.9039 349.3273 0008837 139.2006 220.9812 13.83682217937495
GOES 5
1 12472U 81049A 97136.80200591 -.00000038 00000-0 10000-3 0 19
2 12472 8.7205 46.8908 0004179 68.9157 291.0213 1.00336777 16449
Cosmos 1383
1 13301U 82066A 97136.16861111 .00000015 00000-0 59249-7 0 5854
2 13301 82.9325 249.6367 0028913 43.0860 317.2548 13.68082933742905
LandSat 4
1 13367U 82072A 97138.73699254 .00000028 00000-0 15918-4 0 687
2 13367 98.0303 184.5566 0006517 165.3203 194.8183 14.57207091789407
DMSP B5D2-1
1 13736U 82118A 97139.15579784 .00000044 00000-0 36947-4 0 2359
2 13736 98.6224 328.1133 0008925 122.3914 237.8130 14.25834675748941
IRAS
1 13777U 83004A 97138.57827294 .00000154 00000-0 13578-3 0 6659
2 13777 98.9696 323.0286 0011623 247.3963 112.5972 13.99269893400274
Cosmos 1447
1 13916U 83021A 97136.87420519 .00000006 00000-0 -95105-5 0 6793
2 13916 82.9425 304.2251 0037128 304.4557 55.3096 13.74355911709573
TDRS 1
1 13969U 83026B 97131.60726464 -.00000305 00000-0 10000-3 0 7411
2 13969 9.4504 40.5271 0002071 31.8291 326.9829 1.00268624 24672
GOES 6
1 14050U 83041A 97136.32038750 .00000054 00000-0 10000-3 0 6653
2 14050 7.5749 50.5668 0002500 30.9812 137.9125 1.00243203109535
AO-10
1 14129U 83058B 97135.13208706 -.00000036 00000-0 10000-3 0 4802
2 14129 25.8900 147.6543 6070628 117.3010 316.0014 2.05881604 76704
LandSat 5
1 14780U 84021A 97137.23940649 -.00000109 00000-0 -14022-4 0 6126
2 14780 98.2862 200.1906 0002702 1.9207 358.1985 14.57076214702606
UO-11
1 14781U 84021B 97136.98493311 .00000097 00000-0 24169-4 0 9723
2 14781 97.8328 119.4714 0012915 100.7321 259.5342 14.69550480706677
Cosmos 1574
1 15055U 84062A 97136.71432097 .00000046 00000-0 32647-4 0 8798
2 15055 82.9565 359.9659 0027987 129.9545 230.4073 13.73648327646770
Cosmos 1602
1 15331U 84105A 97135.15019343 .00000139 00000-0 13518-4 0 5601
2 15331 82.5350 161.9985 0018673 295.6456 64.2767 14.84879596682233
ERBS
1 15354U 84108B 97138.40374002 -.00000121 00000-0 10740-4 0 2777
2 15354 56.9957 118.5103 0009730 108.7243 251.4847 14.95039615686974
NOAA 9
1 15427U 84123A 97139.08186069 .00000076 00000-0 63447-4 0 1481
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2 15427 98.9047 209.4381 0016108 81.2743 279.0254 14.13856405641092
Mir
1 16609U 86017A 97139.27506184 .00009118 00000-0 11917-3 0 2956
2 16609 51.6580 231.1051 0009610 36.3813 323.7852 15.59424684642518
SPOT 1
1 16613U 86019A 97138.83019115 -.00000044 00000-0 00000+0 0 705
2 16613 98.7934 211.5022 0001429 56.4957 303.6356 14.20002179267944
Cosmos 1766
1 16881U 86055A 97137.54195953 .00000211 00000-0 22543-4 0 4760
2 16881 82.5190 217.3424 0018468 319.7760 40.2082 14.83850831583423
EGP
1 16908U 86061A 97138.88282955 -.00000083 00000-0 10000-3 0 1796
2 16908 50.0125 44.9314 0011181 148.0926 212.0587 12.44416291158201
NOAA 10
1 16969U 86073A 97139.10796630 .00000052 00000-0 40400-4 0 794
2 16969 98.5427 132.8941 0014198 90.8831 269.3976 14.25030995554440
MOS-1
1 17527U 87018A 97137.66474450 -.00000043 00000-0 00000+0 0 5453
2 17527 98.8939 197.5049 0019382 122.7219 237.5824 14.00449216521800
GOES 7
1 17561U 87022A 97136.47776896 -.00000145 00000-0 10000-3 0 3550
2 17561 3.7080 67.1679 0009075 301.7432 300.5719 1.00258010 20641
Kvant-1
1 17845U 87030A 97138.82646987 .00011048 00000-0 14300-3 0 9974
2 17845 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582576553
DMSP B5D2-3
1 18123U 87053A 97139.07475312 .00000002 00000-0 23232-4 0 9141
2 18123 98.7638 329.7727 0015032 19.0350 341.1385 14.15476917512013
RS-10/11
1 18129U 87054A 97138.20647242 .00000024 00000-0 98310-5 0 3569
2 18129 82.9230 260.8844 0010900 311.8229 48.1990 13.72377981496126
Meteor 2-16
1 18312U 87068A 97135.85646405 .00000067 00000-0 47000-4 0 5643
2 18312 82.5540 88.2197 0013694 12.3751 347.7743 13.84096562492192
Meteor 2-17
1 18820U 88005A 97139.09981659 .00000017 00000-0 19883-5 0 2586
2 18820 82.5428 139.8894 0018627 63.3186 296.9878 13.84774253470018
DMSP B5D2-4
1 18822U 88006A 97139.23782656 -.00000028 00000-0 59896-5 0 5305
2 18822 98.3823 321.2614 0008037 101.9923 258.2154 14.23226521482377
Glonass 34
1 19163U 88043A 97136.23206219 -.00000023 00000-0 10000-3 0 1828
2 19163 65.3891 74.6330 0008946 154.9413 205.0856 2.13102287 69334
Glonass 36
1 19165U 88043C 97136.75875460 -.00000025 00000-0 10000-3 0 5890
2 19165 65.3805 74.5551 0004468 331.0190 28.9353 2.13101885 69966
METEOSAT 3
1 19215U 88051A 97132.59643518 -.00000154 00000-0 00000+0 0 3177
2 19215 3.9244 66.0152 0003875 160.7257 199.0586 0.96948755 20376
OKEAN 1
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1 19274U 88056A 97137.54863353 .00000233 00000-0 25813-4 0 1751
2 19274 82.5132 318.5972 0021158 101.2558 259.1032 14.82616053478917
Meteor 3-2
1 19336U 88064A 97136.90565244 .00000051 00000-0 10000-3 0 5726
2 19336 82.5371 290.2675 0017971 118.3044 241.9895 13.16982378423406
Glonass 39
1 19503U 88085C 97135.38201409 -.00000014 00000-0 10000-3 0 4725
2 19503 65.4703 313.4854 0007851 103.9635 256.1145 2.13102420 67429
NOAA 11
1 19531U 88089A 97139.06046607 .00000012 00000-0 31434-4 0 9666
2 19531 99.1558 171.4298 0012564 22.2445 337.9271 14.13131618445887
TDRS 3
1 19548U 88091B 97134.83170325 -.00000192 00000-0 10000-3 0 2873
2 19548 3.1527 70.1451 0005160 257.8341 289.0220 1.00266216 18856
Glonass 40
1 19749U 89001A 97138.70402063 -.00000028 00000-0 10000-3 0 6800
2 19749 65.3565 74.0357 0007324 251.9907 107.9135 2.13101480 65004
Glonass 41
1 19750U 89001B 97132.18901743 -.00000011 00000-0 10000-3 0 5897
2 19750 65.3638 74.3287 0009197 223.9198 135.9954 2.13101719 64883
GPS BII-01
1 19802U 89013A 97138.19038337 .00000009 00000-0 00000+0 0 4154
2 19802 55.4885 97.2912 0014098 160.9059 199.1393 2.00571431 60430
Akebono
1 19822U 89016A 97138.46519180 .00014317 00000-0 76300-3 0 9184
2 19822 75.1071 288.2254 3716399 211.7836 119.2907 7.97479644193337
Meteor 2-18
1 19851U 89018A 97137.75968137 .00000077 00000-0 55084-4 0 5618
2 19851 82.5208 14.3106 0015096 112.3390 247.9371 13.84432769415129
MOP-1
1 19876U 89020B 97136.09050064 -.00000161 00000-0 00000+0 0 2610
2 19876 2.6673 70.8790 0018947 286.6061 72.8422 0.97110981 9859
TDRS 4
1 19883U 89021B 97134.35983094 -.00000274 00000-0 10000-3 0 3323
2 19883 0.5416 86.8407 0001586 319.6873 274.1416 1.00268662202423
GPS BII-02
1 20061U 89044A 97137.53378952 -.00000056 00000-0 10000-3 0 3971
2 20061 53.9890 272.5832 0167459 224.0437 134.5930 2.00562459 58166
Nadezhda 1
1 20103U 89050A 97138.51151477 .00000034 00000-0 19515-4 0 1249
2 20103 82.9617 221.3640 0036457 197.8532 162.1331 13.73878426394720
GPS BII-03
1 20185U 89064A 97133.24662278 .00000014 00000-0 00000+0 0 4239
2 20185 55.2815 97.8797 0023748 346.4255 13.4763 2.00560116 56651
GMS 4
1 20217U 89070A 97137.68377264 -.00000365 00000-0 10000-3 0 5755
2 20217 2.4679 73.4135 0000697 140.3536 27.6961 1.00261047 28775
INTERCOSMOS 24
1 20261U 89080A 97137.31715461 .00000206 00000-0 59107-4 0 5889
2 20261 82.5941 57.3097 1242279 1.8970 358.6231 12.47412292347562
```

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GPS BII-04
1 20302U 89085A 97135.40242800 .00000123 00000-0 10000-3 0 4188
2 20302 53.1921 212.3698 0030402 193.5088 166.4426 2.00555483 55498
Meteor 3-3
1 20305U 89086A 97137.85554893 .00000044 00000-0 10000-3 0 8143
2 20305 82.5494 253.1837 0005383 209.1534 150.9289 13.04428321361839
COBE
1 20322U 89089A 97136.52433440 .00000289 00000-0 21249-3 0 3055
2 20322 98.9290 151.9299 0008482 184.3682 175.7410 14.03468631383687
Kvant-2
1 20335U 89093A 97138.82646987 .00011048 00000-0 14300-3 0 9018
2 20335 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582425565
GPS BII-05
1 20361U 89097A 97135.92344492 -.00000087 00000-0 00000+0 0 2221
2 20361 56.1863 40.1425 0096993 137.7191 223.0126 2.00567555 44980
COSMOS 2054 (Altair-1)
1 20391U 89101A 97132.57589174 -.00000148 00000-0 00000+0 0 5351
2 20391 4.4564 61.4101 0001030 276.1361 83.6778 1.00266941 27303
SPOT 2
1 20436U 90005A 97138.88579407 -.00000044 00000-0 00000+0 0 2277
2 20436 98.7271 213.9998 0002008 90.2435 269.8969 14.20026553379483
UO-14
1 20437U 90005B 97137.24082085 .00000034 00000-0 29757-4 0 2697
2 20437 98.5187 219.5768 0010637 304.0012 56.0157 14.29959740381793
AO-16
1 20439U 90005D 97137.25658995 .00000020 00000-0 24493-4 0 650
2 20439 98.5344 222.4525 0011100 304.6892 55.3237 14.30007431381819
DO-17
1 20440U 90005E 97135.21668646 .00000011 00000-0 21016-4 0 670
2 20440 98.5398 221.2912 0011367 310.2879 49.7323 14.30149922381556
WO-18
1 20441U 90005F 97137.24277586 .00000003 00000-0 18073-4 0 709
2 20441 98.5376 223.1820 0011717 303.8909 56.1153 14.30117727381846
LO-19
1 20442U 90005G 97135.25370918 .00000031 00000-0 28843-4 0 675
2 20442 98.5430 221.8819 0011824 308.6034 51.4090 14.30231946381581
GPS BII-06
1 20452U 90008A 97136.32329493 .00000076 00000-0 10000-3 0 3161
2 20452 54.0659 153.1871 0063138 94.4627 266.3067 2.00562412 53496
MOS-1B
1 20478U 90013A 97137.25086439 -.00000044 00000-0 00000+0 0 481
2 20478 99.0918 207.9955 0006318 57.4180 302.7589 13.93974616291093
DEBUT
1 20479U 90013B 97137.48371805 .00000015 00000-0 97346-4 0 640
2 20479 99.0438 105.1162 0541158 86.2139 280.0637 12.83353294340784
FO-20
1 20480U 90013C 97137.47090338 -.00000017 00000-0 25228-4 0 9664
2 20480 99.0429 104.8416 0541202 86.9457 279.3405 12.83238037340763
MOS-1B R/B
1 20491U 90013D 97138.68939838 -.00000236 00000-0 -37705-3 0 3476
```

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2 20491 99.0394 181.2849 0469287 228.4801 127.5143 13.03007177345550
LACE
1 20496U 90015A 97137.30739896 .00002618 00000-0 79336-4 0 7557
2 20496 43.1010 94.6659 0009621 65.8598 294.3263 15.36737862405219
Nadezhda 2
1 20508U 90017A 97137.56545423 .00000057 00000-0 44589-4 0 1238
2 20508 82.9544 356.5191 0044413 153.2947 207.0511 13.73521911361791
OKEAN 2
1 20510U 90018A 97137.47152731 .00000076 00000-0 72550-5 0 5839
2 20510 82.5213 275.1992 0017773 308.6478 51.3142 14.78685555389074
GPS BII-07
1 20533U 90025A 97135.54983149 -.00000056 00000-0 00000+0 0 3150
2 20533 54.3381 274.1440 0039997 55.8472 304.4010 1.91039410 52107
PegSat
1 20546U 90028A 97137.31126041 .00012471 00000-0 19863-3 0 694
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Meteor 3-5
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2 23558 51.6494 220.2328 0006270 48.6485 311.5066 15.64655548642422
ERS-2
1 23560U 95021A 97136.86336735 .00000027 00000-0 26135-4 0 3848
2 23560 98.5485 212.1221 0001085 73.7295 286.4006 14.32247391108332
Spektr
1 23579U 95024A 97138.82646987 .00011048 00000-0 14300-3 0 6547
2 23579 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582113876
GOES 9
1 23581U 95025A 97136.37628427 .00000084 00000-0 10000-3 0 4097
2 23581 0.2819 91.5311 0001733 284.6661 218.0840 1.00273768 7260
Helios 1A
1 23605U 95033A 97138.15119592 -.00000004 00000-0 83530-5 0 5262
2 23605 98.1519 75.6143 0001374 71.8795 288.2555 14.63802644 99561
UPM SAT 1
1 23606U 95033B 97137.86909547 .00000240 00000-0 51142-4 0 2741
2 23606 98.1340 77.5131 0006551 203.1566 156.9343 14.67396800 99797
CERISE
1 23607U 95033C 97135.82803482 .00000103 00000-0 27130-4 0 1755
2 23607 98.1353 75.2231 0005390 206.9293 153.1633 14.67022833 99508
TDRS 7
1 23613U 95035B 97134.61587294 .00000091 00000-0 00000+0 0 3367
2 23613 1.3651 81.4096 0002952 314.3824 246.9996 1.00275512 6705
Glonass 74
1 23620U 95037A 97138.49645974 .00000066 00000-0 00000+0 0 2863
2 23620 64.8153 192.7541 0017907 172.7650 187.3387 2.13102889 14155
Glonass 75
1 23621U 95037B 97138.67473203 .00000068 00000-0 00000+0 0 2961
2 23621 64.8290 192.7581 0018343 183.5727 176.4962 2.13102565 14151
Glonass 76
1 23622U 95037C 97138.26328159 .00000063 00000-0 00000+0 0 3041
2 23622 64.8140 192.7682 0036115 168.0724 192.0897 2.13102783 14142
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Prognoz-M2
1 23632U 95039A 97137.16519970 -.00001656 00000-0 00000+0 0 1335
2 23632 72.2640 246.8850 7399210 330.4930 10.9920 0.26362953 1722
SICH-1
1 23657U 95046A 97137.50343053 .00000158 00000-0 20654-4 0 1680
2 23657 82.5319 252.8125 0029476 45.4835 314.8754 14.73552169 92067
RADARSAT
1 23710U 95059A 97138.84976402 .00000142 00000-0 72025-4 0 2731
2 23710 98.5789 146.7544 0001296 51.1211 309.0089 14.29985953 80216
Glonass 79
1 23734U 95068A 97138.38162670 .00000065 00000-0 00000+0 0 2856
2 23734 64.8178 192.6776 0018786 319.1836 40.7615 2.13102201 11113
Glonass 78
1 23735U 95068B 97137.61992979 .00000055 00000-0 00000+0 0 2719
2 23735 64.8154 192.6941 0008351 219.7818 140.2334 2.13125031 11091
Glonass 77
1 23736U 95068C 97138.14673936 .00000062 00000-0 00000+0 0 2626
2 23736 64.8077 192.6902 0008143 207.8776 152.1622 2.13102338 11102
XTE
1 23757U 95074A 97137.54781978 .00000647 00000-0 24956-4 0 1477
2 23757 22.9837 295.5065 0013586 103.4275 256.7724 14.97828280 75659
Polar
1 23802U 96013A 97136.73901067 .00000056 00000-0 00000+0 0 1355
2 23802 86.3638 22.4258 6516678 269.9723 21.1878 1.35763214 6107
1996010E
1 23824U 96010E 97137.17000551 .00008827 00000-0 60952-2 0 2409
2 23824 47.4942 148.1746 6803299 125.0837 318.6482 2.85797211 10875
GPS BIIA-25
1 23833U 96019A 97138.44120922 -.00000052 00000-0 00000+0 0 1838
2 23833 54.6048 334.3153 0025666 131.4565 228.7822 2.00565461 8402
Priroda
1 23848U 96023A 97138.82646987 .00011048 00000-0 14300-3 0 3431
2 23848 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582 60966
MSX
1 23851U 96024A 97137.09342644 -.00000047 00000-0 00000+0 0 2320
2 23851 99.4141 129.9277 0007467 326.9394 33.1290 13.97395001 54135
SAX
1 23857U 96027A 97135.66344324 .00001039 00000-0 27593-4 0 754
2 23857 3.9533 204.7137 0013689 146.4689 213.6262 14.91815195 56871
MSTI 3
1 23868U 96031A 97135.23302871 .00002721 00000-0 55530-4 0 1465
2 23868 97.1196 325.9394 0010678 42.3028 317.9046 15.47007213 56133
TOMS-EP
1 23940U 96037A 97136.76669216 .00003735 00000-0 16431-3 0 1147
2 23940 97.4165 44.1170 0010837 256.0935 103.9091 15.22446443 48367
GPS BIIA-26
1 23953U 96041A 97138.86197218 .00000001 00000-0 00000+0 0 1433
2 23953 55.1447 94.7801 0027906 46.3541 313.8114 2.00551160 6205
ADEOS
1 24277U 96046A 97138.81712952 -.00000044 00000-0 00000+0 0 1765
```

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2 24277 98.5979 216.7985 0000878 132.6905 227.4351 14.27646307 39172
FO-29
1 24278U 96046B 97139.14402063 .00000002 00000-0 41640-4 0 797
2 24278 98.5408 184.3308 0350772 261.5582 94.5659 13.52630119 37198
FAST
1 24285U 96049A 97137.88851619 .00003334 00000-0 32553-3 0 908
2 24285 82.9828 53.1112 2207316 46.5701 329.9049 10.82094437 29147
1996049B
1 24286U 96049B 97138.81283828 .00003558 00000-0 34540-3 0 1002
2 24286 83.0031 52.8480 2205772 44.4769 331.3511 10.82533708 29246
Microsat
1 24291U 96050A 97138.72762955 .00057383 67657-5 42282-3 0 2030
2 24291 62.7934 236.7713 0535558 145.6058 218.0855 14.82039471 38571
MO-30
1 24305U 96052B 97135.13824401 .00000203 00000-0 20364-3 0 1023
2 24305 82.9370 19.0150 0029303 300.6645 59.1604 13.73092044 34524
GPS BIIA-27
1 24320U 96056A 97117.77787110 -.00000002 00000-0 00000+0 0 768
2 24320 54.5891 275.6750 0050296 93.9397 266.5928 2.00552036 4431
SAC-B/HETE
1 24645U 96061A 97138.87525480 .00000869 00000-0 50957-4 0 679
2 24645 37.9761 37.4752 0047840 55.3676 305.1641 15.15016089 29613
Soyuz TM-25
1 24717U 97003A 97138.82646987 .00011048 00000-0 14300-3 0 804
2 24717 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582642441
ZEYA
1 24744U 97010A 97138.75880196 .00003384 00000-0 11445-3 0 403
2 24744 97.2791 44.3713 0006237 180.5536 179.5701 15.31289054 11589
DMSP B5D2-9
1 24753U 97012A 97139.07344925 .00000075 00000-0 64299-4 0 361
2 24753 98.9361 183.4248 0009338 125.6458 234.5593 14.12977314 6278
Progress M-34
1 24757U 97014A 97138.82646987 .00011048 00000-0 14300-3 0 552
2 24757 51.6527 233.3564 0009858 31.3572 328.7808 15.59419582 6595
1997012D
1 24777U 97012D 97138.85926061 .00001258 00000-0 69662-3 0 226
2 24777 98.9362 183.2086 0011971 139.0321 221.1770 14.13096227 4359
1997012E
1 24778U 97012E 97137.16160087 .00001042 00000-0 58277-3 0 195
2 24778 98.9467 181.5425 0011202 139.0380 221.1622 14.12993682 4116
MINISAT-01
1 24779U 97018A 97135.26424040 .00001450 00000-0 46370-4 0 109
2 24779 150.9667 276.8153 0013963 201.5304 158.4693 14.98286867 3574
CELESTIS
1 24780U 97018B 97137.24060377 .00001413 00000-0 40363-4 0 149
2 24780 150.9732 289.9367 0020139 220.9411 138.9681 14.99565038 3872
GOES 10
1 24786U 97019A 97137.33477530 -.00000091 00000-0 00000+0 0 500
2 24786 0.4472 277.9395 0003483 55.3188 277.2005 1.00268083 243
1997019B
```

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1 24787U 97019B 97137.79807620 .00015450 -81889-6 65917-3 0 202
2 24787 27.1831 113.5637 7596988 191.1831 127.8523 1.92940026 432
IRIDIUM 1
1 24792U 97020A 97138.54530931 -.00235105 00000-0 -43617-1 0 250
2 24792 86.3780 143.5499 0009654 124.7806 235.4474 14.66872713 1909
IRIDIUM 2
1 24793U 97020B 97136.09005813 .00003445 00000-0 48000-3 0 155
2 24793 86.3892 144.6428 0014526 185.5001 174.6259 14.77417002 1547
IRIDIUM 3
1 24794U 97020C 97135.07342814 .00000098 00000-0 10000-4 0 160
2 24794 86.3892 145.0998 0009799 188.9382 170.4553 14.77665247 1390
IRIDIUM 4
1 24795U 97020D 97136.22459558 .00000098 00000-0 10000-4 0 208
2 24795 86.3910 144.5836 0015271 187.1462 172.9798 14.77478640 1565
IRIDIUM 5
1 24796U 97020E 97135.07245654 .00000744 00000-0 10000-3 0 208
2 24796 86.3926 145.0885 0013431 187.8942 171.1912 14.77780408 1397
1997020F
1 24797U 97020F 97137.09124107 .00000187 00000-0 39209-4 0 93
2 24797 86.8976 145.1348 0248550 173.0751 187.3988 14.35796222 1645
DFH-3
1 24798U 97021A 97139.20031487 -.00000357 00000-0 00000+0 0 269
2 24798 0.3215 264.4267 0018676 66.0179 103.5913 1.00149115 94
1997021B
1 24799U 97021B 97132.35461050 .00000780 00000-0 10000-3 0 31
2 24799 28.6397 103.3259 7304091 179.8513 180.7802 2.27287154 25
Cosmos 2342
1 24800U 97022A 97138.72743248 -.00000546 00000-0 24156-4 0 112
2 24800 62.8338 189.5359 7406601 312.5994 168.5776 2.00807711 98
1997022B
1 24801U 97022B 97138.53927189 .00182268 17261-4 48188-3 0 123
2 24801 62.7708 173.5757 0198985 113.8829 248.3290 15.68895237 714
1997022C
1 24802U 97022C 97137.58121588 .00609862 75701-5 86905-3 0 113
2 24802 62.8126 177.0512 0231591 118.2742 244.1580 15.70736600 562
1997022D
1 24803U 97022D 97134.07379679 -.00000609 00000-0 10000-3 0 13
2 24803 62.8282 190.1953 7374802 312.5717 5.4767 2.04211885 02
STS 84
1 24804U 97023A 97139.25000000 -.00000325 00000-0 24394-5 0 152
2 24804 51.6555 231.2329 0008796 41.8560 177.5386 15.59416671 612
Cosmos 2343
1 24805U 97024A 97135.68786433 .00000000 00000-0 00000+0 0 36
2 24805 64.8647 90.9425 0116960 66.4533 294.8797 16.10085178 31
1997024B
1 24806U 97024B 97139.20621972 .03841924 75714-5 57918-3 0 253
2 24806 64.8644 77.7645 0050184 58.0022 302.6054 16.29712182 600
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

1553. AO-27 Pass Noon, CDT ... *Test*

Newsgroup: rec.radio.amateur.space
Date: 1997-05-19 00:00:00 UTC
From: mbv@flash.net
Message-ID: <AE18B66302DF2B66.02BABFA2F0B7B99A.4DB295DF67950BBF@library-proxy.airnews.net>
Source record: 18813

Just put my FT470 talkie in the car with a
dual band amp and dual band gain antenna.
Give me a call on AO-27 tomorrow noon CDT.
The talkie worked OK with the old 2 meter amp, but
the new one is supposed to work duplex, where
the old one killed the 70CM while transmitting
on 2 meters and the duplexer had way too much loss
to be able to hear well.
73 Ken K5MBV

1554. GO NOW!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-20 00:00:00 UTC
From: CASHNOW <Old@me.com>
Message-ID: <5lt5p9$jdj@lal.interserv.com>
Source record: 18814

http://www.freedomstarr.com/?TR7654321

****
This message has been sent using DYNAMIC MAIL. For more Information
and Free Demo: http://www.freeyellow.com/members/concorde/index.html
****

1555. NORAD Two-Line Orbital Element Set: Space Shuttle (97140.23632486)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-20 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5lt7tk$alq@blackbird.afit.af.mil>
Source record: 18815

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97140.23632486 .00002321 00000-0 35196-4 0 3034
2 16609 51.6551 226.2826 0007737 44.6400 315.5209 15.59407351642666
STS 84
1 24804U 97023A 97140.25000000 -.00000334 00000-0 23165-5 0 171
2 24804 51.6524 226.2098 0008670 46.3999 30.5930 15.59414634 768
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1556. Re: Freq. Sats

Newsgroup: rec.radio.amateur.space
Date: 1997-05-20 00:00:00 UTC
From: Russell Anderson <rusand@northernnet.com>
Message-ID: <33825A92.133F@northernnet.com>
Source record: 18816

Carlos Alberto Cipriano wrote:
>
> Hi all..
>
> My name is Carlos Alberto and my Call is PY4CEL...
>
> I need the freqs of up and down of satelites amateurs or no
> amateurs...
>
> Pse... Send for cipriano@nutenet.com.br
>
> Tanks...
>
> Carlos Alberto
> PY4CEL
>
> Carlos Alberto Cipriano
> cipriano@nutecnet.com.br
> if possible in portuguese. Thanks
suggest you connect to amsat.org the freq. are available there.

1557. N4OKL's Amateur Satellite Site

Newsgroup: rec.radio.amateur.space
Date: 1997-05-20 00:00:00 UTC
From: John - N4OKL <n4okl@amsat.org>
Message-ID: <5lsna9$shc@snews5.zippo.com>
Source record: 18817

Hello all and thanks for reading this,
I have redone my site now, NO FRAMES at all now so use the link below my email address.
Also i have redone my Links Page so check it out.

II have also joined the Amateur World Web Ring, http://www.webring.org (search under Amateur Radio) Check out Web Rings, Something for everybody...
As Always let me know what you think about my site, Please...
73, John - N4OKL

--
Reply via E-mail: n4okl@amsat.org
Homepage: http://www.newwave.net/~jharmon

1558. ARLK039 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-20 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk039.1997@arrl.org>
Source record: 18818
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK039
ARLK039 Keplerian data

ZCZC SK39
QST de W1AW
Keplerian Bulletin 39 ARLK039
From ARRL Headquarters
Newington, CT May 20, 1997
To all radio amateurs

SB KEP ARL ARLK039
ARLK039 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-84
1 24804U 97023A 97140.58333333 -.00000329 00000-0 23681-5 0 183
2 24804 51.6561 224.5394 0007973 48.4682 101.0415 15.59399704 825
AO-10
1 14129U 83058B 97137.07422430 -.00000173 00000-0 10000-3 0 04812
2 14129 25.8934 147.3240 6070489 117.8457 315.4715 2.05882511076740
RS-10/11
1 18129U 87054A 97139.73752266 .00000014 00000-0 -83536-6 0 03678
2 18129 82.9232 259.7528 0010949 307.4306 52.5856 13.72377874496338
UO-11
1 14781U 84021B 97139.98085469 .00000124 00000-0 28786-4 0 09952
2 14781 97.8330 122.3465 0012924 91.4356 268.8333 14.69551739707111
RS-12/13
1 21089U 91007A 97139.96576050 .00000077 00000-0 65196-4 0 09955
2 21089 82.9197 299.5733 0030505 18.0965 342.1267 13.74081716315280
UO-14
1 20437U 90005B 97140.10967344 .00000028 00000-0 27790-4 0 02841
2 20437 98.5183 222.3828 0010484 294.6611 65.3472 14.29960007382205
RS-15
1 23439U 94085A 97140.13482688 -.00000039 00000-0 10000-3 0 02257
2 23439 64.8169 198.1986 0150056 137.8814 223.3755 11.27527301098775
AO-16
1 20439U 90005D 97139.77549614 .00000053 00000-0 37387-4 0 00782
2 20439 98.5350 224.9230 0011065 296.7426 63.2624 14.30008148382174
```

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RS-16
1 24744U 97010A 97140.13107977 .00003504 00000-0 11838-3 0 00519
2 24744 97.2789 45.7178 0006294 174.8064 185.3259 15.31299383011793
DO-17
1 20440U 90005E 97140.11407301 .00000021 00000-0 24879-4 0 00721
2 20440 98.5399 226.0969 0010958 295.0780 64.9247 14.30150470382250
WO-18
1 20441U 90005F 97140.11131039 .00000004 00000-0 18185-4 0 00885
2 20441 98.5376 225.9956 0011526 294.8557 65.1417 14.30117970382251
LO-19
1 20442U 90005G 97140.15081505 .00000020 00000-0 24511-4 0 00712
2 20442 98.5427 226.6884 0011772 293.6206 66.3741 14.30232589382288
FO-20
1 20480U 90013C 97139.96579859 -.00000002 00000-0 60466-4 0 09814
2 20480 99.0430 106.8661 0541115 81.2826 284.9147 12.83238282341083
AO-21
1 21087U 91006A 97140.10317334 .00000094 00000-0 82657-4 0 8160
2 21087 82.9385 72.3627 0036953 349.7038 10.3353 13.74582514316298
UO-22
1 21575U 91050B 97139.00277705 -.00000042 00000-0 71722-7 0 07825
2 21575 98.3059 200.5742 0007587 347.8596 12.2402 14.37069175306299
KO-23
1 22077U 92052B 97140.14332296 -.00000037 00000-0 10000-3 0 06720
2 22077 66.0782 203.9479 0010607 220.3834 139.6398 12.86303063224143
KO-25
1 22828U 93061F 97140.11302938 .00000061 00000-0 41792-4 0 05449
2 22828 98.5429 215.2774 0010042 313.2742 46.7677 14.28178895158204
IO-26
1 22826U 93061D 97140.14206979 .00000032 00000-0 30351-4 0 05647
2 22826 98.5460 215.2224 0009077 330.7211 29.3461 14.27835854190082
AO-27
1 22825U 93061C 97139.89114955 .00000016 00000-0 23940-4 0 05635
2 22825 98.5467 214.7397 0008496 332.0218 28.0504 14.27726192190032
FO-29
1 24278U 96046B 97140.10562791 .00000009 00000-0 48543-4 0 00875
2 24278 98.5402 185.1610 0350803 259.0735 97.0765 13.52630294037329
MO-30
1 24305U 96052B 97140.09335791 .00000203 00000-0 20364-3 0 01078
2 24305 82.9367 15.3516 0029395 287.2060 72.5863 13.73092861035206
Mir
1 16609U 86017A 97140.68492489 .00060440 00000-0 74902-3 0 3055
2 16609 51.6556 224.0284 0008162 45.7669 314.4425 15.59432489642733

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
May 24, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1559. Listening to Mir and Shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-05-21 00:00:00 UTC
From: Tobin Fricke <tobin@mail.edm.net>
Message-ID: <01bc6599$359b40a0$0200a8c0@bonusroom>
Source record: 18819

Hello,
I once heard Mir by accident while monitoring on two meters. I was wondering how one could reliably hear the Mir cosmonauts or the Shuttle astronauts on the HAM bands.. I assume that a satelite tracking program of sorts is necessary to predict when they'll be overhead, but are there specific times and frequencies to monitor? What do I need?

please reply via email, tobin@edm.net

Thanks,
Tobin KE6WHF

1560. Writers Seeking Publication

Newsgroup: rec.radio.amateur.space
Date: 1997-05-21 00:00:00 UTC
From: Bob@ibm.net
Message-ID: <5luab5$35n$1410@news.internetmci.com>
Source record: 18820

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Woodside International Literary Agency
1190 North Collier Blvd.
Marco Island, Florida 34145
(941) 642-9660

Please do not send in complete manuscript unless invited.

1561. --Antenna Web Site--

Newsgroup: rec.radio.amateur.space
Date: 1997-05-21 00:00:00 UTC
From: Aaron Schmitz <aschmitz@mail.earthlink.net>
Message-ID: <3382E289.715F@mail.earthlink.net>
Source record: 18821

Greetings,
For all of you satellite antenna builders, I am announcing my web site devoted partially to antennas. I have numerous plans for yagi-udas, quads, j-poles, and collinear antennas. You can now also have a JavaScript to help you design a small yagi antenna. Go ahead and take a look at the page and if you like it, let me know I am always updating it with new plans and pictures. 73

Aaron Schmitz

--

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=========================================================================
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Aaron Schmitz KB0YKI
Route 1 Box 31 -- --- \ / | / -------
Ewing, MO 63440 | / | \ | | \ / | / |
Email: |/ | / | /| \/ |/ |
aschmitz@earthlink.net |\ |-- | / | {} | \ |
aschmitz@culver.edu | \ | \ |/ | {} | \ |
World Wide Web: | \ |__/ |___| {} | \ -------
http://home.earthlink.net/~aschmitz/home.html
```


"Specializing in support for Macintosh and IBM compatible Computers"
"Real Hams use verticals, but smart ones use Yagis!"

1562. EU: Meteosat receiving with a long yagi?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-21 00:00:00 UTC
From: bsmeeman@pi.NET
Message-ID: <Chameleon.970521154624.bert_s@web_pc.gv-asl.unisource.nl>
Source record: 18822

I have experience in receiving Meteosat with a home-made 3 and a 1 metre yagi in Holland. The yagi is described in VHF Communications (UKW Berichte) somewhere in 1990. Currently I am using the 1 metre version in the attick, in front of a window, together with a high quality pre-amp, also from VHF Comm.
OK, there is some noise in the picture, but even the synchronisation of the picture type works fine in JVFAX. Big advantage over a dish is that it is much smaller and I can use it inside my house.

Bert, pe1oot@amsat.org

1563. SAVE & EARN MONEY with FCI

Newsgroup: rec.radio.amateur.space
Date: 1997-05-22 00:00:00 UTC
From: gmed@geocities.COM
Message-ID: <3383A143.6ADF@geocities.com>
Source record: 18823

SAVE & EARN MONEY with FreedomStarr Communications Inc. (FCI):

Enjoy the LOWEST RATES in the nation with the 5th largest fiber optik network in the USA and SEE YOUR PHONE BILL ON THE WEB!

_____
FCI offers a flat rate 9.9 cent per minute rate for 1+ long distance AND 800 usage, and bills its customers in 6 second increments, instead of full minute increments like the big carriers do. This results in savings to consumers of an additional 10%-25%, depending on the types of calls placed.

FCI has also finished completing a "web page billing" system which is a great benefit to the consumer, as they are able to see the actual calls they place on a DAILY basis, as well as their cost for those calls. When in place, FCI will be the ONLY long distance company in the nation offering this unique service.

The Wall Street Journal, as well as the FOX New Channel, have recently featured FCI and their unique approach to the long distance market. FCI is a truly revolutionary company, and has been gaining acclaim across the nation and particularly on the internet.

As a reseller, FCI has the right to work with other carriers if they are presented with better rates for their customers. FCI has recently chosen to work with ITL (International Telecom Ltd) for its superior international calling rates, such as the following flat rates per minute (US origination):

UK .185
Russia .670
France .280
Greece .475
Israel .690
Japan .360 (This is NOT a typo!)
China .810

For more information on FCI and how you can even earn a great residual income by promoting their service like I do, you may visit my FCI web page at:

http://freedomstarr.com/?SA3610301

You will have the opportunity to sign up for service online, and get a free web page to promote the service, with an opportunity to earn up to 5% residual commissions on other people's usage. There is no "sign up" or "agent" fee to participate in the program.

I hope this note finds you and yours in good health.

1564. DL0ART/am - report 5th launch

Newsgroup: rec.radio.amateur.space
Date: 1997-05-22 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <3384350D.2823@muenster.de>
Source record: 18824

DL0ART/am - 5th launch (18-May-1997)

After quite a long break, we did it again... the 5th launch of our
balloon DL0ART/am was on 18-May-1997. The main issue about this
flight was the transponder (mode B), which worked quite nice, and
many hams took the chance to use it.

More information about DL0ART/am (pictures!) can be found at:

Internet: http://buene.muenster.de/darc/artob/homebale.htm

PR: DB0EA-8 (mailbox digipeater Muenster) -> ARTOB

Balloon launch 18-May-1997:

Launch: # 5
Launch date: 18-May-1997
Launch time: 1214 UTC
Launch site: Nienberge near Muenster, NW Germany, JO32SA

Payload DL0ART/am:
QRG/mod.: (1) Telemetry beacon: 145,200 MHz F2D & F2A
(2) 2nd beacon: 144.991 MHz F1A (call & info text)
(3) Transponder (J3E and A1A)
Uplink: 432,570 MHz \
Downlink: 144,470 MHz / +/- 20 kHz
+ beacon at 144,470 MHz (A1A)
(4) RX for remote control on 70 cm and 10 m (not used)
Power: (1) 2 W
(2) 100 mW
(3) 2.5 W
Antennas: (1) groundplane
(2) turnstile
(3) big wheels for 2 m and 70 cm
(4) 70 cm: groundplane / 10 m: lambda/4 vertical
Power supply: (1) & (4): 5 D cells LiSO2 in series (=14.4 V, 6 Ah)
(2) 1 D cell LiSO2 (3 V) and step-up to 9 V
Diameter ballon: ca. 8.5 ft
Gas: hydrogen
Parachute: ca. 8 ft
Weight: about 4700 g (over all)

The balloon has a gaz valve which can be opened to reduce the lift rate or start the touchdown procedure.

Balloon Team Members:

Ground Control: Armin (DF1QE) + Fritz (DF9XE)
DF Control: Joachim (DL3YBQ) + Ralph (DG3YEI)
DF Teams: Norbert (DL1YBR) + Oliver (DL9QJ)
Wilhelm (DG5YGF) + Kurt (DD3QQ)

Talk back of DF teams via repeater Osnabrueck, DB0CO (R 75).

(UTC)
10:30 Meeting of the team
11:15 Arrival at launch site (Muenster-Nienberge, JO32SA)
11:30 Phone call to air control Duesseldorf: launch permitted
11:40 Filling the balloon
11:50 Payload attached
12:03 Additional filling, lift rate was not sufficient
12:05 Transponder tested -> Go
12:07 Telemetry beacon switched on -> Go
12:10 Phone call to air control Duesseldorf to announce the launch
12:14 LAUNCH
12:16 Altitude already 3,065 ft
12:35 Problems ocurred on decoding the telemetry; data obviously invalid
(...)
13:55 Balloon bursted; telemetry data seem valid again
14:00 TOUCHDOWN (crash...) As we found out later, the balloon hit the roof of a farm house nr the city of Greven (JO32TC) and broke a tile (was already fixed when we came to the house... but the place could still be recognized by the red color left by the balloon).

The owner was a bit surprised (only a bit, it is a Muensterland farmer...!) and, since he read something about "explosives" on the package, called the police. The officers (almost correctly) recognized it as a weather balloon and took it to the Greven police station (was it arrested now?!). From there, they called Armin, DF1QE, on his cellular phone, since his number was written on the boxes. Shortly after that, we were able "recover" the equipment... and the beacons and transponder were transmitting when we arrived at the police station.

Tochdown site: nr Greven (JO32TC)
Touchdown distance: 7 miles

Flight Data

| Launch 14:35 h 15:55 h Touchdown

```
------------------+-----------------------------------------------
Altitude | 280 ft 12,125 ft 12,700 ft (885 ft)
Outside Temperature| 74 deg F 22 deg F - 5 deg F 46 deg F
Inside Temperature | 90 deg F 82 deg F 23 deg F 22 deg F
Battery Voltage | 14.177 V 14.311 V 14.218 V 14.059 V
-------------------------------------------------------------------
```

Results:

The telemetry data were not very useful this time; since they obviously were not correct during the time period 12:35 - 13:55 UTC. We assume it was because of the very difficult flight conditions - the balloon got into a thunderstorm, which means high humidity and low temperature. We have never had problems concerning the telemetry before; on this flight, we had trouble with during final testing and during the flight... The table shown above might not tell the very truth, but we think these data we copied are at least likely.

The transponder was a big success and worked better than expected, even though we got a report (after the flight) that we were still causing some intermodulation on the 2 m band. But the device had never been tested under "real" conditions. We already were afraid that the transponder hardly would be used, since during our final test, we did not find any stations that were able to help us testing (seems not very many people have allmode equipment for 2 m and 70 cm). But we were wrong, the transponder was very busy, sometimes the QSOs sounded almost like in a contest... Among others, stations from all over Germany, from Belgium, Switzerland, the Netherlands and Great Britain were able to use it.

```
-------------------------------------------------------------------
Here is the logbook of DL9QJ/m's transponder QSOs:
(SSB; using IC-820H / mag mount verticals)

UTC Call QTH Name
-----------------------------------------------------

1250 DD7LP
1252 DK6OO
1255 DG5AAE
1255 DL3KBH Uwe
1310 DG0ODA Thueringen Daniel
1313 DK1QJ Dieter
1315 ON6UG Freddy
1320 DB7EK JO31BS Daniel
1318 DG9BHV
1325 DK1KR
1340 HB9RDE Rolf
1342 DK3WG
-------------------------------------------------------------------
```

The balloon hulk was causing the main problem this time. I think we got a very old piece, and because of that and some not very professional handling during launch preparations, we were not able to open the gaz valve the get to balloon to land, but it bursted instead.

The time between DFing had been increased to 15 minutes (was: 10 minutes), which gave the DF teams better chances "to make more miles". But sometimes, the 15 minutes periods still were a bit short.

Our 2nd beacon (144.987 MHz) obviously again (like during our second flight) had problems with frequency stability. Its deviation caused problems on FM repeaters on R0 (input on 145.000 MHz) and kept them open (concerned: DB0UH). Again, the reason seems to be the flight conditions (see above) - we had the same weather during our second flight when the same problem ocurred. Of course, we regret any inconvenience caused by that fault!

If you heard our sigs, pse send QSL via PR / Internet / buro - all will be answered with our DL0ART/am QSL cards! Any suggestion or response is always welcome!

The DL0ART/am team hopes that all of you enjoyed this experiment, as well as our previous flights. We regret that we have to terminate the project now. This is due to a substantial lack of man power (the same 2 or 3 people were always doing all the work...) and - which is the main reason - financial resources (e. g. insurance is DM 500.00 / USD 300.00 p. a.). We are just a small local amateur radio group (subdivision of DARC) and no longer able to put our money into this project.

Maybe, you will here of DL0ART/am again inspite of this - he, we have a working transponder now! Possibly we will launch a captive balloon during our annual fieldday (okay, a few hundred feet is much less than what we had on this flight, but North Germany is quite flat, and it would provide a chance for some nice QSOs). An alternative would be the flight of a manned hot air balloon, on which the transponder could be a piggyback.

Anyway, we enjoyed this project and wish give our thanks to everybody who participated.

Best 73, Oliver

[Oliver Welp, DL9QJ, N3NSF
Gustav-Freytag-Str.11 / D-48161 Muenster / GERMANY
Internet: dl9qj@amsat.org / n3nsf@amsat.org
PR: DL9QJ@DB0EA.#NRW.DEU.EU
Tel./Fax: +49-2533-7312]

1565. Nova for Windows V1.0M

Newsgroup: rec.radio.amateur.space
Date: 1997-05-22 00:00:00 UTC
From: Frikkie <pottie@global.co.za>
Message-ID: <01bc66c5$b5357060$LocalHost@pottie>
Source record: 18875

Can anyone please help with a Program for Nova for Windows V1.0M to save
Information,Etc. Long x Lattetute.
Im still new in this stuff.
Im also looking for a program to learn the Rules and Reg from the Amateurs
from the Computer.
Thanx a Million.
Frikkie
South Africa

pottie@global.co.za

1566. GRID SQ DN37 Special Station

Newsgroup: rec.radio.amateur.space
Date: 1997-05-23 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bc6780$defb0980$5e427fce@default>
Source record: 18876

Howdy from Helena, Montana (KA7YAO) Bill - Several of us folks here in Helena and Lincoln, Montana will be operating a special station from Grid Square DN37 in Montana June 21 (Saturday) maily on 6 meters, 2 meters SSB, and some HF. However, I will be on the RS-10 and RS-12 Satellite for the passes that day. If anyone needs the above Grid Square from Montana look for KA7YAO on those two birds. Its going to be a fun day for a lot of new hams on HF, 6 meters, 2 meters, and satellite. We will be on a mountain top (8200 ft) just west of Lincoln, Montana. Hope to meet you on the birds.
Bill

1567. NORAD Two-Line Orbital Element Set: Space Shuttle (97143.25000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-23 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5m4vtc$44g@blackbird.afit.af.mil>
Source record: 18877

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

Mir
1 16609U 86017A 97143.12007660 .00016115 00000-0 20544-3 0 3154
2 16609 51.6557 211.7979 0006474 74.7422 285.4281 15.59454757643113
STS 84
1 24804U 97023A 97143.25000000 -.00000301 00000-0 27422-5 0 291
2 24804 51.6517 211.1274 0011669 71.9620 304.7120 15.61007498 1235
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1568. Re: Schematic needed for crossed dipole

Newsgroup: rec.radio.amateur.space
Date: 1997-05-24 00:00:00 UTC
From: "Ralph B. Holland" <vk1brh@dynamite.com.au>
Message-ID: <3386D79D.352C@dynamite.com.au>
Source record: 18878

Gerald Laver wrote:
>
> Gerald Laver <glaver@toolcity.net> wrote in article
> <01bc6148$4aae2e80$d5bc00d0@unit1>...
> > Hi
> > I am trying to receive satellite transmission for weather on the 137 Mz
> > range.
> > I came upon this photo and wanted to build one but I don't know the
> > dimensions
> > or where to attach the wire. The source that I got this photo at said
> that
> > the
> > crossed dipole consists two horizontal half wave dipoles mounted at right
> > angles
> > to each other on a short mast.
> >
> >
> >
> > Any help will be welcome.
> >
> > Feel free to email me.
> >
> > glaver@toolcity.net or
> > Gelaver@aol.com
> >
> > Thanks
> >
> I forgot to add the photo
>
> --
>
> Name: xdip.gif
> Part 1.2 Type: GIF Image (image/gif)
> Encoding: base64
> Description: xdip.gif (GIF Image)

Dear Gerald,

The cross dipoles should be fed in pahse quadrature which causes them to
produce circular polarisation. If you bend the top driven elements down
at 45 degrees then you will obtain a near omni-directional radiation
pattern from horizon to horizon, so it is unecessary to point the
antenna.

At work we have designed and used such a hybrid antenna for a Navy platform installation. You should place a masthead amplifier at the top to counteract the loss in gain due to pattern spread.

The quadrature feed can be organised by feeding one dipole with a quarter wave more of feedline than the other.

--
Regards, 73

Ralph Holland, VK1BRH

http://www2.dynamite.com.au/vk1brh
http://www.qsl.net/vk1brh

Distribute knowledge to further mankind

1569. Re: Schematic needed for crossed dipole

Newsgroup: rec.radio.amateur.space
Date: 1997-05-24 00:00:00 UTC
From: "Ralph B. Holland" <vk1brh@dynamite.com.au>
Message-ID: <3386D953.3465@dynamite.com.au>
Source record: 18879

Oops - I better answer your question too.

Yes the cross-dipoles are 1/2 wave dipoles which can be mounted about
1/4 wavelength from the reflectors, which should be slightly longer than
1/2 wave total length (say 10%).

If you bend the driven element you can mount them so they are about 8 or
so inches above the reflectors at the end - it is not critical.

The spacing will affect the feedpoint resistance. The closer they are to
the reflector the lower the feedpoint resistance; you could use this
separation to obtain a match to the cable.

The feedpoint will be 1/2 the resistance of each element feedpoint
when the lines are matched.

--
Regards, 73

Ralph Holland, VK1BRH

http://www2.dynamite.com.au/vk1brh
http://www.qsl.net/vk1brh

Distribute knowledge to further mankind

1570. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-24 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <2405970829095A85postmaster@emarkt.com>
Source record: 18880

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox2.ucsd.edu by fmgateb.PhoneLink.COM id aa29132;
24 May 97 8:28 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id XAA08490 for <ham-space-list@mailbox.ucsd.edu>; Fri, 23 May
1997 23:22:04 -0700 (PDT)
Received: by noc.ucsd.edu; id XAA02362
sendmail 8.8.5/UCSD8.3
Fri, 23 May 1997 23:07:50 -0700 (PDT)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id XAA02340
sendmail 8.8.5/UCSD8.3
Fri, 23 May 1997 23:07:44 -0700 (PDT)
Message-Id: <199705240607.XAA02340@noc.ucsd.edu>
Date: Fri, 23 May 97 23:07:43 PDT
From: Ham-Space Mailing List and Newsgroup <Ham-Space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #177
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 23 May 97 Volume 9

...rest of message truncated
```

1571. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-24 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <2405970829105A86postmaster@emarkt.com>
Source record: 18881

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox2.ucsd.edu by fmgateb.PhoneLink.COM id aa29132;
24 May 97 8:28 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id XAA08490 for <ham-space-list@mailbox.ucsd.edu>; Fri, 23 May
1997 23:22:04 -0700 (PDT)
Received: by noc.ucsd.edu; id XAA02362
sendmail 8.8.5/UCSD8.3
Fri, 23 May 1997 23:07:50 -0700 (PDT)
Errors-To: owner-ham-space@ucsd.edu
Sender: owner-ham-space@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-space to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id XAA02340
sendmail 8.8.5/UCSD8.3
Fri, 23 May 1997 23:07:44 -0700 (PDT)
Message-Id: <199705240607.XAA02340@noc.ucsd.edu>
Date: Fri, 23 May 97 23:07:43 PDT
From: Ham-Space Mailing List and Newsgroup <Ham-Space@ucsd.edu>
Errors-To: Owner-Ham-Space@ucsd.edu
Reply-To: Ham-Space@ucsd.edu
Precedence: List
Subject: Ham-Space Digest V97 #177
To: Ham-Space@ucsd.edu

Ham-Space Digest Fri, 23 May 97 Volume 9

...rest of message truncated
```

1572. ARLK040 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-24 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk040.1997@arrl.org>
Source record: 18882
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK040
ARLK040 Keplerian data

ZCZC SK40
QST de W1AW
Keplerian Bulletin 40 ARLK040
From ARRL Headquarters
Newington, CT May 24, 1997
To all radio amateurs

SB KEP ARL ARLK040
ARLK040 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-84
1 24804U 97023A 97143.91666667 -.00000293 00000-0 28431-5 0 315
2 24804 51.6548 207.7759 0011906 71.4386 94.2193 15.61035707 1332
AO-10
1 14129U 83058B 97143.38611808 -.00000092 00000-0 10000-3 0 4812
2 14129 25.9051 146.2547 6069620 119.6242 313.7164 2.05880579 76871
RS-10/11
1 18129U 87054A 97139.73752266 .00000014 00000-0 -83536-6 0 03678
2 18129 82.9232 259.7528 0010949 307.4306 52.5856 13.72377874496338
UO-11
1 14781U 84021B 97142.97677344 .00000140 00000-0 31381-4 0 09845
2 14781 97.8333 125.2220 0012948 81.7274 278.5396 14.69552958707551
RS-12/13
1 21089U 91007A 97142.95124223 .00000051 00000-0 37725-4 0 09857
2 21089 82.9196 297.3579 0030431 10.0044 350.1710 13.74081768315695
UO-14
1 20437U 90005B 97142.76860995 .00000020 00000-0 24631-4 0 02819
2 20437 98.5183 224.9843 0010254 285.7998 74.2053 14.29960253382582
RS-15
1 23439U 94085A 97143.23910634 -.00000039 00000-0 10000-3 0 2203
2 23439 64.8167 193.1805 0150018 137.3163 223.9525 11.27527373 99128
AO-16
1 20439U 90005D 97142.78419234 -.00000008 00000-0 13741-4 0 00735
2 20439 98.5354 227.8737 0010717 286.7283 73.2722 14.30007801382608
```

```
RS-16
1 24744U 97010A 97143.00631751 .00002267 00000-0 77417-4 0 00432
2 24744 97.2790 48.5408 0007122 164.8355 195.3103 15.31308895012233
DO-17
1 20440U 90005E 97143.82209451 .00000004 00000-0 18257-4 0 698
2 20440 98.5395 229.7341 0010843 283.3530 76.6425 14.30150793382780
WO-18
1 20441U 90005F 97142.76995198 .00000016 00000-0 23150-4 0 00771
2 20441 98.5378 228.6040 0011507 286.6893 73.3025 14.30118331382638
LO-19
1 20442U 90005G 97143.78866521 .00000024 00000-0 26079-4 0 695
2 20442 98.5428 230.2605 0011729 283.3046 76.6829 14.30232999382805
FO-20
1 20480U 90013C 97142.92847073 .00000003 00000-0 72081-4 0 09726
2 20480 99.0435 109.2713 0541211 74.5864 291.4338 12.83238403341469
AO-21
1 21087U 91006A 97143.16035992 .00000094 00000-0 82657-4 0 8177
2 21087 82.9388 70.1002 0036157 341.5503 18.4341 13.74582456316715
UO-22
1 21575U 91050B 97139.00277705 -.00000042 00000-0 71722-7 0 07825
2 21575 98.3059 200.5742 0007587 347.8596 12.2402 14.37069175306299
KO-23
1 22077U 92052B 97142.63132445 -.00000037 00000-0 10000-3 0 06674
2 22077 66.0778 198.7392 0010424 219.7961 140.2291 12.86302907224464
KO-25
1 22828U 93061F 97142.77527792 -.00000025 00000-0 72615-5 0 05383
2 22828 98.5433 217.8826 0009798 304.1292 55.8959 14.28178317158584
IO-26
1 22826U 93061D 97142.73488000 .00000049 00000-0 37142-4 0 5565
2 22826 98.5453 217.7573 0009279 323.2392 36.8150 14.27836460190452
AO-27
1 22825U 93061C 97143.25505359 -.00000006 00000-0 15235-4 0 5595
2 22825 98.5466 218.0295 0008462 322.4418 37.6170 14.27726474190514
FO-29
1 24278U 96046B 97143.65618981 .00000010 00000-0 49189-4 0 803
2 24278 98.5406 188.2293 0350641 249.8466 106.4633 13.52630681 37804
MO-30
1 24305U 96052B 97143.15387074 .00000203 00000-0 20364-3 0 1046
2 24305 82.9357 13.0879 0029390 279.2562 80.5259 13.73093461 35626
Mir
1 16609U 86017A 97143.44049393 .00005862 00000-0 78927-4 0 3165
2 16609 51.6547 210.1852 0006303 71.1172 289.0674 15.59447571643166

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
May 27, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1573. KPC-9612+ and WISP Program

Newsgroup: rec.radio.amateur.space
Date: 1997-05-25 00:00:00 UTC
From: realbill@phoenix.net
Message-ID: <3387927b.22075346@news.phoenix.net>
Source record: 18883

I am using the KPC-9612 Plus TNC and the WISP program for satellite communications on the 9600 baud birds (UO-20, KO-23, and KO-25). I have one slight problem in that with the configuration that I have the TNC does not go into KISS mode and FULL Duplex when the MSPE portion of the WISP program is running. As a result of the TNC not entering KISS mode and FULL Duplex the system locks up on recieve when the program transmits a request for directory fill to the bird that I am working at the time.

I have found a work-around in that I multitask to the terminal program of windows and manually place the TNC into the required FULL Duplex and KISS mode and then all works fine.

Was wondering if anyone is running this same software and hardware and would be willing to share their setup conditions with me.

Bill, W5BBR, Brenham, TX.

1574. *Amateur CW/Voice Satellite Frequencies FAQ 05.25.97*

Newsgroup: rec.radio.amateur.space
Date: 1997-05-25 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2505971333010001@cqtlm-pm3-087.dowco.com>
Source record: 18884
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ05.25
Amateur CW/Voice Satellite Frequencies for May 25, 1997.

BID: $FREQ0525
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11 A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

The chances of damaging AO-10 by uplinking during "FMing" are probably remote. The caution mainly stems from a theoretical consideration. AO-10's latching relays are set to the omni antenna and the transponder is on in Mode-B configuration. This all turns out to be perfect since we can't control the attitude, etc. Each time there's a power spike the chance exists that the IHU could have a "seizure" and blurt out a pulse to switch the antennas to higain, switch the transponder off or whatever. Of course these spikes occur every time we come out of eclipse, but the idea is to do what we can to minimize the number of power spikes. Occasionally spikes have "activated" the IHU in the past and caused the beacon to send out nonsensical data rather than the current constant carrier for short periods of time. ..and it isn't clear when AO-10 switched to the omni antenna, so I guess such things may have happened in the past.

I suppose there are also some considerations regarding the effects on the transponder of operating it so far off its normal voltage/current curve, but, again, this doesn't seem to have caused a problem after many years. <thanks to Stacey E. (Chuck) Mills W4SM for this explanation>

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. The 435.504 beacon is the only one currently being copied. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in late May or June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

1997 May 23(Fri) 00:29z JD 1200bps PSK MailBox
30(Fri) 01:07z JD 9600bps FSK MailBox
June 6(Fri) 08:25z JA
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox

27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA

* Mir Simplex has not been reported to be active at this time but
Ham-astronaut Mike Foale, KB5UAC, who has just joined the MIR crew has
indicated in a pre-flight interview that he intends to be active on
Amateur Radio.

* Space Shuttle Frequencies when in orbit.
Next SAREX mission scheduled for July 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

1575. *Updated Web Page*

Newsgroup: rec.radio.amateur.space
Date: 1997-05-25 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3388681B.7734@primenet.com>
Source record: 18885

Updated Web Page
http://www.qsl.net/k7on

1576. EU: Meteosat receiving with a long yagi?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-26 00:00:00 UTC
From: Rafael Garcia <ea4rj@ea4rj.ampr.org>
Message-ID: <3389B683.1E81E516@ea4rj.ampr.org>
Source record: 18886

Hi all,

I'm looking for experiences of anyone using a long yagi to receive Meteosat over Europe. Perhaps would be better a parabolic dish, but not found any source yet.

I'm considering a 44 elements, 20dBd, 3 meters long yagi by Down East with a preamp attached to the antenna. It should be enough, in comparision with a one meter dish.

The receiver will be an IC-R100 (the same that I use to get NOAA and Meteor pictures in 137MHz), and the excellent WXSat decoder program.

Thanks in advance for any kind of info.

Best,

--
Rafael,
Madrid (Spain) e-mail: ea4rj@amsat.org

1577. Re: EU: Meteosat receiving with a long yagi?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-27 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970527124900.IAA02924@ladder01.news.aol.com>
Source record: 18887

Hi

I am curious how your receiver works for 137 mhz apt, as the bandwidth would normally be either too narrow or too wide!..did you modify the I.F. bandwidth?

Jim

http://members.aol.com/jkktl/ham.htm (lots of good wxsat info here)

1578. * SpaceNews 26-May-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-05-27 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0526.1997@ampr.org>
Source record: 18888
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0526
* SpaceNews 26-May-97 *

BID: $SPC0526

=========
SpaceNews
=========

MONDAY MAY 26, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* PHASE III-D WEB PAGE UPDATE *
==============================
Bdale Garbee, N3EUA, recently updated the AMSAT-NA RUDAK Web page to include
a few more pictures from Lyle Johnson, WA7GXD. The three new pictures show
various aspects of the process of turning on the DSP modem board.

The page may be accessed at the following URL:

http://www.amsat.org/amsat/sats/phase3d/rudak-u/

Bdale hopes to make another significant update to the page shortly.

[Info via Bdale Garbee, N3EUA]

* FO-29 OPERATION SCHEDULE *
============================
The following is the current FO-29 operating schedule:

1997 May 16 (Fri) 01:35z JA
23 (Fri) 00:29z JD 1200bps PSK MailBox
30 (Fri) 01:07z JD 9600bps FSK MailBox
June 6 (Fri) 08:25z JA
13 (Fri) 00:39z JD 1200bps PSK MailBox
20 (Fri) 09:41z JD 9600bps FSK MailBox
27 (Fri) 00:11z JA
July 4 (Fri) 09:13z JD Digi-talker
8 (Fri) 09:06z JA

The FM Digitalker and digital downlink can be copied on 435.910 MHz.
FO-29's older brother, FO-20, continues to provide Mode JA service.

[info via Kazu Sakamoto, JJ1WTK]

* AMSAT-UK FINAL CALL FOR PAPERS *
==========
The 12th AMSAT-UK Colloquium will be held at Surrey University, Guildford, Surrey, U.K., from Friday 25th to Sunday 27th July 1997. This year's event will comprise three days of technical and operational matters only; there will be *NO* "political" subjects.

AMSAT-UK invite authors to submit papers, about amateur radio space and associated activities, for this event and for the "Proceedings" document which will be published at the same time. We normally prefer authors to present the papers themselves rather than having someone else read them in the authors' absence, but we also welcome "unpresented" papers for the document.

Abstracts of Papers should be submitted as soon as possible; the final date for full documents is 15 June 1997 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G3RWL, via the following routes:

Internet e-mail: g3rwl@amsat.org
Packet Radio: G3RWL @ GB7HSN.#32.GBR.EU
Satellite: AO16/19/22/23/25
Terrestrial mail: R W L Limebear G3RWL
60 Willow Road
Enfield EN1 3NQ
United Kingdom.

(G3RWL has no FAX)

Information about the Colloquium is available on the World Wide Web pages at the University of Surrey at the following URL:

http://www.ee.surrey.ac.uk/CSER/UOSAT/amateur/colloq97.html

Send all other inquiries about Colloquium-97 to the AMSAT-UK office:

AMSAT-UK
London E12 5EQ
England

[Info via Richard, G3RWL - AMSAT-UK Colloquium Program organizer]

* G2UK - SILENT KEY *
==========
On a sad note, Arthur C. Gee, G2UK, the former Chairman of AMSAT-UK, passed away on 19-May-97 after being re-admitted to the hospital after complications following a hip operation early in the month. He was 84.

"Doc" Gee, as he was referred to by many friends, was an AMSAT-UK member from the formation of the Organization (membership number 0025). He became AMSAT-UK's Chairman in 1979, and resigned from office in 1992 because of ill health. He was a friend to many and will surely be missed. He was active on the RS satellites up to three weeks prior to his death, and will be remembered as the writer of the Satellite column in "Radio Communications" for several

years.

Rest in Peace Arthur. A good friend and advisor to a vast number of people.

[Info from Ron Broadbent, G3AAJ via Richard Limebear, G3RWL]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.908.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.908.224.2060
-=-=-=-=-=-=-=-=-=-=-=-=- Linux: For IQs higher than 95 -=-=-=-=-=-=-=-=-=-=-=-=-

1579. ARLK041 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-05-27 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk041.1997@arrl.org>
Source record: 18889
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK041
ARLK041 Keplerian data

ZCZC SK41
QST de W1AW
Keplerian Bulletin 41 ARLK041
From ARRL Headquarters
Newington, CT May 27, 1997
To all radio amateurs

SB KEP ARL ARLK041
ARLK041 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97146.29926361 .00000122 00000-0 10000-3 0 4822
2 14129 25.9108 145.7470 6068933 120.4417 312.8478 2.05878993 76935
RS-10/11
1 18129U 87054A 97139.73752266 .00000014 00000-0 -83536-6 0 03678
2 18129 82.9232 259.7528 0010949 307.4306 52.5856 13.72377874496338
UO-11
1 14781U 84021B 97145.49606776 .00000108 00000-0 26066-4 0 9743
2 14781 97.8337 127.6404 0013013 74.6189 285.6453 14.69553420707924
RS-12/13
1 21089U 91007A 97145.49982497 -.00000010 00000-0 -26587-4 0 9800
2 21089 82.9191 295.4648 0030408 2.8319 357.3002 13.74081273316048
UO-14
1 20437U 90005B 97145.77740619 .00000023 00000-0 25724-4 0 2719
2 20437 98.5182 227.9279 0010387 277.0954 82.9047 14.29960643383011
RS-15
1 23439U 94085A 97147.49640506 -.00000039 00000-0 10000-3 0 2214
2 23439 64.8149 186.2965 0149654 136.4420 224.8439 11.27527390 99604
AO-16
1 20439U 90005D 97145.79288783 -.00000024 00000-0 76524-5 0 672
2 20439 98.5357 230.8246 0010716 277.8408 82.1558 14.30007902383035
RS-16
1 24744U 97010A 97146.33895027 .00001883 00000-0 64686-4 0 425
2 24744 97.2783 51.8115 0007738 154.1582 206.0025 15.31320530 12743
```

```
DO-17
1 20440U 90005E 97143.82209451 .00000004 00000-0 18257-4 0 698
2 20440 98.5395 229.7341 0010843 283.3530 76.6425 14.30150793382780
WO-18
1 20441U 90005F 97146.19820058 .00000017 00000-0 23422-4 0 722
2 20441 98.5372 231.9658 0011336 275.5931 84.3959 14.30118710383128
LO-19
1 20442U 90005G 97143.78866521 .00000024 00000-0 26079-4 0 695
2 20442 98.5428 230.2605 0011729 283.3046 76.6829 14.30232999382805
FO-20
1 20480U 90013C 97146.43687677 -.00000050 00000-0 -45937-4 0 9687
2 20480 99.0439 112.1180 0541270 66.6251 299.0823 12.83238140341912
AO-21
1 21087U 91006A 97146.21754615 .00000094 00000-0 82657-4 0 8187
2 21087 82.9392 67.8385 0036236 333.0952 26.8324 13.74582639317133
UO-22
1 21575U 91050B 97139.00277705 -.00000042 00000-0 71722-7 0 07825
2 21575 98.3059 200.5742 0007587 347.8596 12.2402 14.37069175306299
KO-23
1 22077U 92052B 97146.51882530 -.00000037 00000-0 10000-3 0 6649
2 22077 66.0773 190.5993 0010494 216.9576 143.0716 12.86302749224966
KO-25
1 22828U 93061F 97146.76865182 -.00000030 00000-0 54408-5 0 5368
2 22828 98.5424 221.7868 0009378 292.5947 67.4241 14.28178657159159
IO-26
1 22826U 93061D 97147.21974223 -.00000007 00000-0 14757-4 0 5573
2 22826 98.5455 222.1443 0008928 309.2834 50.7550 14.27836243191094
AO-27
1 22825U 93061C 97143.25505359 -.00000006 00000-0 15235-4 0 5595
2 22825 98.5466 218.0295 0008462 322.4418 37.6170 14.27726474190514
FO-29
1 24278U 96046B 97143.65618981 .00000010 00000-0 49189-4 0 803
2 24278 98.5406 188.2293 0350641 249.8466 106.4633 13.52630681 37804
MO-30
1 24305U 96052B 97146.57873082 .00000203 00000-0 20364-3 0 1055
2 24305 82.9324 10.5515 0029346 270.4528 89.3246 13.73094129 36092
Mir
1 16609U 86017A 97147.09320059 .00003087 00000-0 44601-4 0 3227
2 16609 51.6525 191.8350 0006499 86.9161 273.2557 15.59459988643731

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
May 31, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1580. Mir (Mike Foale)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-27 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19970527.170925.4646.0.harrymue@juno.com>
Source record: 18890

QST QST QST

I would like to report, and happy to report that Astronaut Mike Foale is already active on 2-meters from the Mir Space Station. I had an 8 minute QSO with Mike on May 24, 1997 at 14:47 hrs UTC from my QTH in Tulsa, Oklahoma. Mike got the Kenwood 733 radio into a "lock" mode and asked me for help in getting it back into the normal operating mode. I replied that I was not familiar with that radio, but I would try to find an answer and relay the instructions on a later pass.
His signal was 5/9 on a 10 degree pass to the southwest.

I was using an Icon IC-271H all-mode running 50 watts into a home-brew 5 element Yagi up at 35 feet with no pre-amp.

It's good to hear the Mir again!

73's Everyone...

DE "Harry" Mueller (KC5TRB)

1581. FreeNetAccessWorldwide

Newsgroup: rec.radio.amateur.space
Date: 1997-05-27 00:00:00 UTC
From: interbbs@hotmail.com
Message-ID: <338b179c.8497996@hiroken.hiroken.or.jp>
Source record: 18891

```
Free Adult Internet Connection Worldwide Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

1582. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970607440001@wd1v.mv.com>
Source record: 18892
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1583. Free Ham Radio Test Simulators - Mac - + CW Tutor

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970609170001@wd1v.mv.com>
Source record: 18893
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

FREE - BRAND NEW Macintosh HAM TEST SIMULATORS

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Or you may obtain a version "6" Ham Test Simulator by mailing me a *FORMATTED
disk HD disk (1.4 M) and include a Self Addressed and Stamped disk mailer for
the return. Specify the test you need.

Simulator Name Version Valid Until

Advanced Ham Test 6.0 June 30, 1998
Extra Ham Test 6.0 June 30, 2000
General Ham Test 6.0 June 30, 1998
Novice Ham Test 6.0 June 30, 1997
Technician Ham Test 6.0 June 30, 1997

Your comments and suggestions for future versions are always welcome.

ATTN: PC and other platform users:
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
My Home Page also links to sites that offer live ham test simulations right
over the net - plus links to Ham Radio.FAQ and VE session schedules.

Good luck with YOUR next test!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1584. Macintosh Ham Radio Users Group = Macnet

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970611100001@wd1v.mv.com>
Source record: 18894
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

There is an informal group of amateur radio operators that use Macintosh computers called "Macnet" with > 800 members world-wide.

We stay in touch with each other via packet & Internet and we have a HyperCard stack that tells the story of each of us called "Macnet Roster" that list

o CALL SIGN @ HOME PBBS
o FULL NAME
o Street ADDRESS
o CITY, STATE, ZIP
o INTERNET ADDRESS
o MACS USED
o RADIOS USED
o SOFTWARE USED
o PASSIONS
o COMMENTS

Macnet members can then communicate with one another directly or use our Macnet Moderated Mailing List to pose comments or questions to all of us on the Net.

To join Macnet, put YOUR INFO (via EMAIL or via disk using TEACH TEXT on a formatted disk in a self addressed and stamped disk mailer that is in a large envelope clearly marked "ROSTER").

Or connect to our home page via the WWW http://www.mv.com/ipusers/wd1v

-------<sent to all new Macnet Subscribers & Macnet Roster Updates>---------

Welcome to Macnet!

A trip to my home page also reveals there are many superb files and programs for amateur radio operators that want to use Mac computers. See more details in January 1997 QST, page 100. http://www.mv.com/ipusers/wd1v/

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Email Reflector - send an Email to all Macnet users on the Internet.

* Macnet Roster - a virtual "Who's Who" HyperCard stack with > 800 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and

their passions and put a design on your Mac Radio future. See what neat things are being done with Macs and Ham Radio!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get your new programs with just a click.

* Ham Radio.FAQ - compiled on a Mac with a lots of links to great Mac FTP sites for radio, electronic engineering, and similar data.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1585. FreeNetAccessWorldwid+

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: interbbs@hotmail.com
Message-ID: <337b179c.8497996@hiroken.hiroken.or.jp>
Source record: 18895

```
Free Adult Internet Connection Worldwid+ Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

1586. NORAD Two-Line Orbital Element Sets (TLE003)

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5mic6v$oqk@blackbird.afit.af.mil>
Source record: 18896

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #003 -
Alouette 1
1 00424U 62049A 97145.97452836 .00000043 00000-0 40237-4 0 2913
2 00424 80.4634 305.5071 0022587 231.5920 128.3197 13.67895157729207
ATS 1
1 02608U 66110A 97138.85365339 -.00000084 00000-0 10000-3 0 202
2 02608 14.5195 349.2294 0006876 104.9381 255.1236 1.00289259 28234
ATS 3
1 03029U 67111A 97140.07698699 -.00000113 00000-0 10000-3 0 6543
2 03029 14.8932 356.1021 0008455 280.9269 243.2172 1.00273543108149
Starlette
1 07646U 75010A 97147.70077551 -.00000523 00000-0 -29942-3 0 583
2 07646 49.8256 229.2071 0206328 288.4374 69.4193 13.82190617126615
LAGEOS
1 08820U 76039A 97146.00882226 .00000023 00000-0 00000+0 0 2883
2 08820 109.8162 143.4624 0043944 54.1378 306.3251 6.38664394235721
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97146.46800949 .00000050 00000-0 10000-3 0 8382
2 10061 12.8041 33.2370 0015078 135.9045 67.3672 1.00281064 17889
IUE
1 10637U 78012A 97141.48214612 -.00000274 00000-0 10000-3 0 3953
2 10637 36.0105 78.1700 1359202 66.4494 38.2186 1.00075412 23320
GOES 3
1 10953U 78062A 97148.26933216 -.00000093 00000-0 10000-3 0 8099
2 10953 11.8220 36.2011 0000588 312.9520 245.2444 1.00267036 22510

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SeaSat 1
1 10967U 78064A 97145.86715647 -.00000035 00000-0 32992-4 0 5767
2 10967 108.0001 163.8501 0002301 248.4958 111.5937 14.38170813990714
Nimbus 7
1 11080U 78098A 97147.11099650 -.00000039 00000-0 22341-5 0 6729
2 11080 98.8974 357.8154 0009238 114.3042 245.9081 13.83682406938737
GOES 5
1 12472U 81049A 97144.77473437 -.00000051 00000-0 10000-3 0 21
2 12472 8.7325 46.8138 0004152 69.0875 290.8373 1.00337875 16520
Cosmos 1383
1 13301U 82066A 97145.74938854 .00000008 00000-0 -82539-5 0 5878
2 13301 82.9323 242.6109 0028342 18.6537 341.5651 13.68082995744214
LandSat 4
1 13367U 82072A 97147.18281845 .00000070 00000-0 25301-4 0 706
2 13367 98.0291 192.6971 0007050 136.6747 223.5007 14.57208898790638
DMSP B5D2-1
1 13736U 82118A 97147.15565533 .00000065 00000-0 45558-4 0 2413
2 13736 98.6226 335.9841 0009361 100.6292 259.5940 14.25836518750084
IRAS
1 13777U 83004A 97148.01691021 .00000389 00000-0 29763-3 0 6738
2 13777 98.9694 332.2705 0011301 221.9481 138.0821 13.99279018401598
Cosmos 1447
1 13916U 83021A 97145.02805600 .00000015 00000-0 45925-6 0 6816
2 13916 82.9440 298.1926 0036708 281.0963 78.6071 13.74356001710691
TDRS 1
1 13969U 83026B 97146.57542563 -.00000299 00000-0 10000-3 0 7477
2 13969 9.4535 40.2916 0003262 53.7303 308.2382 1.00262790 24832
GOES 6
1 14050U 83041A 97140.53508517 .00000061 00000-0 10000-3 0 6663
2 14050 7.5806 50.5315 0002165 8.1771 241.7761 1.00244456109571
AO-10
1 14129U 83058B 97147.27032048 .00000170 00000-0 10000-3 0 4835
2 14129 25.9135 145.5861 6068792 120.7011 312.5611 2.05878776 76950
LandSat 5
1 14780U 84021A 97146.78471496 -.00000077 00000-0 -68883-5 0 6157
2 14780 98.2852 209.6826 0002253 336.5984 23.5110 14.57072251703993
UO-11
1 14781U 84021B 97145.49606776 .00000108 00000-0 26066-4 0 9743
2 14781 97.8337 127.6404 0013013 74.6189 285.6453 14.69553420707924
Cosmos 1574
1 15055U 84062A 97145.09091612 .00000049 00000-0 35505-4 0 8815
2 15055 82.9561 353.7873 0028442 107.0462 253.3815 13.73648652647925
Cosmos 1602
1 15331U 84105A 97148.08850623 .00000218 00000-0 22804-4 0 5630
2 15331 82.5335 149.8714 0017948 248.7516 111.1783 14.84885441684150
ERBS
1 15354U 84108B 97142.88375537 -.00000198 00000-0 37596-5 0 2782
2 15354 56.9961 100.6044 0009735 110.9514 249.2562 14.95040499687642
NOAA 9
1 15427U 84123A 97147.99861107 .00000082 00000-0 66828-4 0 1598
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2 15427 98.9043 218.3175 0016071 57.6070 302.6656 14.13858502642356
Mir
1 16609U 86017A 97148.11851328 .00021424 00000-0 27050-3 0 3255
2 16609 51.6497 186.6854 0006696 91.3796 268.7985 15.59486117643898
SPOT 1
1 16613U 86019A 97148.20166603 -.00000044 00000-0 00000+0 0 757
2 16613 98.7903 220.8173 0002298 23.7138 336.4101 14.19999544269272
Cosmos 1766
1 16881U 86055A 97146.24091364 .00000130 00000-0 12742-4 0 4780
2 16881 82.5192 209.1896 0017964 287.9692 71.9564 14.83852292584719
EGP
1 16908U 86061A 97146.91415857 -.00000083 00000-0 10000-3 0 1811
2 16908 50.0133 20.2422 0011243 168.4495 191.6599 12.44416111159200
NOAA 10
1 16969U 86073A 97148.02511385 .00000087 00000-0 55476-4 0 895
2 16969 98.5436 141.5769 0014358 66.8929 293.3764 14.25033364555710
MOS-1
1 17527U 87018A 97146.73822246 -.00000043 00000-0 00000+0 0 5484
2 17527 98.8930 206.3314 0018890 97.9815 262.3496 14.00454822523074
GOES 7
1 17561U 87022A 97147.42180207 -.00000147 00000-0 10000-3 0 3576
2 17561 3.7277 67.1036 0007875 303.5752 288.8755 1.00257178 20751
Kvant-1
1 17845U 87030A 97147.73399201 .00036240 00000-0 45229-3 0 75
2 17845 51.6520 188.6188 0006671 83.2968 276.7068 15.59487758577949
DMSP B5D2-3
1 18123U 87053A 97147.98131374 .00000042 00000-0 43926-4 0 9244
2 18123 98.7641 338.5277 0014771 354.2858 5.8144 14.15478659513272
RS-10/11
1 18129U 87054A 97148.26765673 .00000015 00000-0 38702-6 0 3576
2 18129 82.9263 253.4494 0010378 280.7141 79.2854 13.72378361497507
Meteor 2-16
1 18312U 87068A 97144.31437868 .00000077 00000-0 56295-4 0 5664
2 18312 82.5544 81.5106 0012996 350.6431 9.4487 13.84097922493367
Meteor 2-17
1 18820U 88005A 97147.04781617 .00000054 00000-0 34364-4 0 2651
2 18820 82.5417 133.5642 0018501 43.0476 317.2127 13.84774988471117
DMSP B5D2-4
1 18822U 88006A 97148.23660214 -.00000001 00000-0 17874-4 0 5377
2 18822 98.3828 329.8347 0008084 79.6462 280.5630 14.23227831483654
Glonass 34
1 19163U 88043A 97147.02507846 -.00000003 00000-0 10000-3 0 1858
2 19163 65.3917 74.2660 0008053 151.5654 208.4750 2.13102323 69560
Glonass 36
1 19165U 88043C 97145.20548114 -.00000000 00000-0 10000-3 0 5919
2 19165 65.3970 74.2751 0002965 8.5440 351.4052 2.13101809 70140
METEOSAT 3
1 19215U 88051A 97146.00504459 -.00000145 00000-0 00000+0 0 3190
2 19215 3.9525 65.9369 0003942 160.0414 199.6602 0.96948844 20508
OKEAN 1
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1 19274U 88056A 97145.98486815 .00000196 00000-0 21300-4 0 1779
2 19274 82.5124 310.6951 0021489 75.2904 285.0690 14.82619495480161
Meteor 3-2
1 19336U 88064A 97145.49040907 .00000051 00000-0 10000-3 0 5746
2 19336 82.5374 284.1927 0018269 98.9809 261.3383 13.16982302424534
Glonass 39
1 19503U 88085C 97145.70575720 -.00000010 00000-0 10000-3 0 4762
2 19503 65.4673 313.1364 0010388 142.3773 217.6935 2.13101883 67642
NOAA 11
1 19531U 88089A 97147.98174362 .00000042 00000-0 47559-4 0 9765
2 19531 99.1560 180.5534 0012198 358.2392 1.8735 14.13132933447144
TDRS 3
1 19548U 88091B 97141.69944100 -.00000180 00000-0 10000-3 0 2883
2 19548 3.1655 70.0997 0001830 39.5613 106.2873 1.00265613 18921
Glonass 40
1 19749U 89001A 97142.92739393 -.00000011 00000-0 10000-3 0 6811
2 19749 65.3584 73.8933 0007309 252.4568 107.4556 2.13101478 65092
Glonass 41
1 19750U 89001B 97146.26695017 -.00000001 00000-0 10000-3 0 5928
2 19750 65.3740 73.8547 0006921 243.0468 116.8853 2.13101721 65188
GPS BII-01
1 19802U 89013A 97146.16721495 .00000019 00000-0 00000+0 0 4201
2 19802 55.4864 96.9747 0015490 168.2350 191.7752 2.00572750 60590
Akebono
1 19822U 89016A 97147.87282145 .00016560 00000-0 86020-3 0 9224
2 19822 75.1014 282.7099 3716307 204.5863 132.0290 7.97742202194083
Meteor 2-18
1 19851U 89018A 97146.57692299 .00000075 00000-0 53786-4 0 5638
2 19851 82.5207 7.2808 0015466 89.2261 271.0673 13.84433243416344
MOP-1
1 19876U 89020B 97144.32781506 -.00000038 00000-0 00000+0 0 2621
2 19876 2.6839 70.8275 0019018 287.2608 72.0085 0.97108645 9935
TDRS 4
1 19883U 89021B 97142.10495145 -.00000261 00000-0 10000-3 0 3337
2 19883 0.5400 89.2370 0001617 337.7506 169.5418 1.00268069202500
GPS BII-02
1 20061U 89044A 97144.51393275 -.00000019 00000-0 10000-3 0 3993
2 20061 53.9855 272.2943 0167652 224.1082 134.5304 2.00562112 58306
Nadezhda 1
1 20103U 89050A 97142.73553634 .00000039 00000-0 25069-4 0 1256
2 20103 82.9615 218.2495 0036819 185.6023 174.4725 13.73878582395304
GPS BII-03
1 20185U 89064A 97144.21550756 .00000012 00000-0 00000+0 0 4288
2 20185 55.3047 97.4413 0015115 234.1729 126.0361 2.00568192 56879
GMS 4
1 20217U 89070A 97145.66395833 -.00000369 00000-0 10000-3 0 5792
2 20217 2.5052 72.5807 0001461 106.5453 62.6341 1.00254781 28856
INTERCOSMOS 24
1 20261U 89080A 97145.73787785 .00000086 00000-0 23552-4 0 5906
2 20261 82.5946 51.9310 1241823 342.7578 13.4645 12.47414245348612
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GPS BII-04
1 20302U 89085A 97145.37448137 .00000035 00000-0 10000-3 0 4201
2 20302 53.1676 211.9460 0031552 188.3002 171.7880 2.00554249 55696
Meteor 3-3
1 20305U 89086A 97147.82668932 .00000044 00000-0 10000-3 0 8220
2 20305 82.5517 246.3003 0007783 169.9541 190.1734 13.04438892363131
COBE
1 20322U 89089A 97148.07356485 -.00000250 00000-0 -13157-3 0 3083
2 20322 98.9297 163.2704 0008961 149.6543 210.5139 14.03463805385308
Kvant-2
1 20335U 89093A 97147.73399201 .00036240 00000-0 45229-3 0 9107
2 20335 51.6520 188.6188 0006671 83.2968 276.7068 15.59487758426951
GPS BII-05
1 20361U 89097A 97145.89493618 -.00000053 00000-0 00000+0 0 2282
2 20361 56.1908 39.7475 0095983 138.2435 222.5351 2.00567609 45181
COSMOS 2054 (Altair-1)
1 20391U 89101A 97147.53522367 -.00000146 00000-0 00000+0 0 5396
2 20391 4.4830 61.2862 0000936 283.2005 76.5418 1.00265804 27454
SPOT 2
1 20436U 90005A 97148.25708879 -.00000044 00000-0 00000+0 0 2300
2 20436 98.7269 223.2418 0001930 73.6180 286.5209 14.20027066380818
UO-14
1 20437U 90005B 97145.77740619 .00000023 00000-0 25724-4 0 2719
2 20437 98.5182 227.9279 0010387 277.0954 82.9047 14.29960643383011
AO-16
1 20439U 90005D 97145.79288783 -.00000024 00000-0 76524-5 0 672
2 20439 98.5357 230.8246 0010716 277.8408 82.1558 14.30007902383035
DO-17
1 20440U 90005E 97148.22974223 .00000020 00000-0 24598-4 0 708
2 20440 98.5399 234.0603 0010670 268.1837 91.8125 14.30151351383411
WO-18
1 20441U 90005F 97146.19820058 .00000017 00000-0 23422-4 0 722
2 20441 98.5372 231.9658 0011336 275.5931 84.3959 14.30118710383128
LO-19
1 20442U 90005G 97148.19605985 .00000026 00000-0 26793-4 0 707
2 20442 98.5427 234.5868 0011554 269.0103 90.9756 14.30233537383430
GPS BII-06
1 20452U 90008A 97144.30054674 .00000072 00000-0 10000-3 0 3193
2 20452 54.0670 152.8595 0063151 94.1762 266.5838 2.00562651 53651
MOS-1B
1 20478U 90013A 97145.72046399 -.00000044 00000-0 00000+0 0 506
2 20478 99.0915 216.3243 0006254 40.9209 319.2422 13.93974872292276
DEBUT
1 20479U 90013B 97145.90317995 .00000002 00000-0 69171-4 0 669
2 20479 99.0443 111.9512 0541253 67.1563 298.5742 12.83353744341860
FO-20
1 20480U 90013C 97146.43687677 -.00000050 00000-0 -45937-4 0 9687
2 20480 99.0439 112.1180 0541270 66.6251 299.0823 12.83238140341912
MOS-1B R/B
1 20491U 90013D 97147.51990636 -.00000421 00000-0 -72746-3 0 3493
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2 20491 99.0318 188.6907 0469617 207.7362 149.7973 13.02999539346707
LACE
1 20496U 90015A 97144.84691691 .00001353 00000-0 44866-4 0 7571
2 20496 43.1020 51.5523 0009507 118.6688 241.5107 15.36761851406376
Nadezhda 2
1 20508U 90017A 97145.57860458 .00000084 00000-0 73511-4 0 1255
2 20508 82.9531 350.6073 0044906 130.9908 229.5153 13.73522874362899
OKEAN 2
1 20510U 90018A 97146.26851080 .00000092 00000-0 94194-5 0 5857
2 20510 82.5218 267.0236 0017283 277.6282 82.2976 14.78687453390376
GPS BII-07
1 20533U 90025A 97144.44797462 -.00000020 00000-0 00000+0 0 3195
2 20533 54.3435 273.8193 0040877 69.3325 291.0967 1.91050954 52270
PegSat
1 20546U 90028A 97148.14576983 .00009003 00000-0 14242-3 0 762
2 20546 94.1082 189.6503 0053971 104.8230 255.9022 15.51775294398414
HST
1 20580U 90037B 97146.66452494 .00000234 00000-0 94423-5 0 9571
2 20580 28.4679 175.1337 0014318 330.6464 29.3324 14.86453263189848
MACSAT 2
1 20608U 90043B 97147.20673581 .00000070 00000-0 95999-5 0 2695
2 20608 89.9210 170.4096 0103870 294.3317 64.7060 14.65001283376652
Glonass 44
1 20619U 90045A 97146.57861978 -.00000009 00000-0 10000-3 0 3981
2 20619 65.0375 312.1743 0026139 206.7538 153.1136 2.13102537 54620
Glonass 45
1 20620U 90045B 97144.82025855 -.00000013 00000-0 10000-3 0 3744
2 20620 65.0243 312.2375 0011389 41.8951 318.1820 2.13102664 54620
Glonass 46
1 20621U 90045C 97144.41835004 -.00000015 00000-0 10000-3 0 9923
2 20621 65.0548 312.2992 0010669 190.2332 169.7324 2.13102980 54615
Kristall
1 20635U 90048A 97147.73399201 .00036240 00000-0 45229-3 0 7021
2 20635 51.6520 188.6188 0006671 83.2968 276.7068 15.59487758397782
ROSAT
1 20638U 90049A 97147.52188060 -.00000252 00000-0 25347-5 0 6598
2 20638 52.9941 188.1619 0013852 97.1681 263.0896 15.07620229384256
Meteor 2-19
1 20670U 90057A 97147.86484555 .00000043 00000-0 25130-4 0 2972
2 20670 82.5443 74.1199 0017074 11.9275 348.2284 13.84123931349426
CRRES
1 20712U 90065A 97139.83970688 .00000400 00000-0 39610-3 0 4306
2 20712 17.7674 112.4327 7188951 272.6350 14.6665 2.35919258 51064
GPS BII-08
1 20724U 90068A 97148.01447918 .00000014 00000-0 00000+0 0 2369
2 20724 55.1319 94.8041 0111666 170.6581 189.4484 2.00564020 48364
Feng Yun1-2
1 20788U 90081A 97145.01657401 -.00000033 00000-0 65783-5 0 3617
2 20788 98.8139 144.8231 0013143 261.2456 98.7222 14.01384341343971
Meteor 2-20
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1 20826U 90086A 97146.11347482 .00000029 00000-0 13140-4 0 768
2 20826 82.5275 11.4583 0012361 282.1394 77.8381 13.83653495336264
GPS BII-09
1 20830U 90088A 97146.06875812 -.00000055 00000-0 00000+0 0 1848
2 20830 56.1671 37.6333 0069886 90.8646 269.9676 2.00573885 48966
GPS BIIA-10
1 20959U 90103A 97147.97064999 .00000019 00000-0 00000+0 0 1967
2 20959 55.3139 96.9482 0112963 244.2544 114.5392 2.00569308 47591
DMSP B5D2-5
1 20978U 90105A 97148.02921464 .00000118 00000-0 57618-4 0 901
2 20978 98.5585 221.6335 0078022 231.8364 127.5773 14.32748804339093
Glonass 47
1 21006U 90110A 97143.97270180 -.00000006 00000-0 10000-3 0 9506
2 21006 65.3386 73.1859 0055846 188.8491 171.0473 2.13102394 50274
Glonass 48
1 21007U 90110B 97146.98176595 -.00000004 00000-0 10000-3 0 819
2 21007 65.3577 73.1724 0032549 181.8114 178.1849 2.13101104 50327
Glonass 49
1 21008U 90110C 97145.94184625 -.00000001 00000-0 00000+0 0 3509
2 21008 65.3429 73.1305 0008821 284.8046 75.1310 2.13098620 50296
AO-21
1 21087U 91006A 97146.21754615 .00000094 00000-0 82657-4 0 8187
2 21087 82.9392 67.8385 0036236 333.0952 26.8324 13.74582639317133
RS-12/13
1 21089U 91007A 97145.49982497 -.00000010 00000-0 -26587-4 0 9800
2 21089 82.9191 295.4648 0030408 2.8319 357.3002 13.74081273316048
MOP-2
1 21140U 91015B 97146.51101273 -.00000086 00000-0 00000+0 0 3483
2 21140 1.2413 78.9620 0000901 8.1131 331.2737 1.00273401 25042
Nadezhda 3
1 21152U 91019A 97145.82694448 -.00000000 00000-0 -16669-4 0 8120
2 21152 82.9230 251.9786 0043245 108.1009 252.4863 13.73546810310789
Glonass 50
1 21216U 91025A 97146.33648318 -.00000010 00000-0 10000-3 0 6074
2 21216 64.7901 311.6132 0008808 199.5566 160.3995 2.13103220 47832
Glonass 51
1 21217U 91025B 97144.53273809 -.00000015 00000-0 10000-3 0 129
2 21217 64.7699 311.6727 0010897 216.8842 143.0303 2.13101868 47789
Glonass 52
1 21218U 91025C 97146.51902344 -.00000009 00000-0 10000-3 0 4816
2 21218 64.7868 311.5818 0003391 320.0724 39.9004 2.13102599 47835
GRO
1 21225U 91027B 97145.03512472 .00000776 00000-0 15725-4 0 4631
2 21225 28.4606 325.5888 0054825 269.5533 89.8755 15.31650001222770
Meteor 3-4
1 21232U 91030A 97145.90931442 .00000051 00000-0 10000-3 0 9812
2 21232 82.5384 130.4935 0014559 29.8781 330.3179 13.16476445292635
NOAA 12
1 21263U 91032A 97148.03760980 .00000121 00000-0 72868-4 0 3961
2 21263 98.5379 162.9189 0013360 357.6574 2.4540 14.22715186313495
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1996049B
1 24286U 96049B 97147.22146905 .00003341 00000-0 32222-3 0 1039
2 24286 83.0014 48.9442 2206271 29.6369 341.3172 10.82574189 30151
Microsat
1 24291U 96050A 97148.23851531 .00061336 68596-5 45525-3 0 2125
2 24291 62.7921 205.3231 0530685 146.9915 216.5503 14.82948345 39984
MO-30
1 24305U 96052B 97146.57873082 .00000203 00000-0 20364-3 0 1055
2 24305 82.9324 10.5515 0029346 270.4528 89.3246 13.73094129 36092
GPS BIIA-27
1 24320U 96056A 97117.77787110 -.00000002 00000-0 00000+0 0 768
2 24320 54.5891 275.6750 0050296 93.9397 266.5928 2.00552036 4431
SAC-B/HETE
1 24645U 96061A 97147.57525765 .00000635 00000-0 39013-4 0 695
2 24645 37.9751 345.4845 0045909 126.6543 233.8492 15.15028213 30936
Soyuz TM-25
1 24717U 97003A 97147.73399201 .00036240 00000-0 45229-3 0 892
2 24717 51.6520 188.6188 0006671 83.2968 276.7068 15.59487758643837
ZEYA
1 24744U 97010A 97146.33895027 .00001883 00000-0 64686-4 0 425
2 24744 97.2783 51.8115 0007738 154.1582 206.0025 15.31320530 12743
DMSP B5D2-9
1 24753U 97012A 97147.99574770 .00000083 00000-0 68679-4 0 482
2 24753 98.9358 192.3287 0009779 102.0686 258.1579 14.12979425 7538
Progress M-34
1 24757U 97014A 97147.73399201 .00036240 00000-0 45229-3 0 641
2 24757 51.6520 188.6188 0006671 83.2968 276.7068 15.59487758 7981
CELESTIS
1 24780U 97018B 97145.36054226 .00001393 00000-0 38645-4 0 166
2 24780 150.9737 342.5375 0020022 305.9926 53.8802 14.99573040 5096
GOES 10
1 24786U 97019A 97147.53603821 -.00000097 00000-0 00000+0 0 581
2 24786 0.4134 277.1866 0003129 64.0971 351.5221 1.00267646 348
IRIDIUM 1
1 24792U 97020A 97147.68272469 -.00008393 00000-0 -29979-2 0 381
2 24792 86.3946 139.5402 0005574 113.7649 248.8509 14.34380744 3229
IRIDIUM 2
1 24793U 97020B 97147.81532188 -.00005011 00000-0 -18038-2 0 405
2 24793 86.4077 139.4630 0007736 116.1401 244.0706 14.34040031 3244
IRIDIUM 3
1 24794U 97020C 97147.73850092 .00002261 00000-0 79922-3 0 305
2 24794 86.4107 139.4687 0006647 104.9147 252.9755 14.34249681 3236
IRIDIUM 4
```

```
1 24795U 97020D 97147.69290808 -.00045941 00000-0 -10896-1 0 334
2 24795 86.3933 139.5130 0011391 110.6306 249.6206 14.54391920 3241
IRIDIUM 5
1 24796U 97020E 97148.21381119 -.00030561 00000-0 -11112-1 0 378
2 24796 86.4074 139.3270 0007976 124.2692 235.9259 14.33554808 3312
1997020F
1 24797U 97020F 97145.24546301 .00000163 00000-0 32668-4 0 112
2 24797 86.8975 142.1888 0250003 146.2598 215.4803 14.35797935 2818
DFH-3
1 24798U 97021A 97146.94950910 -.00000362 00000-0 00000+0 0 434
2 24798 0.3036 274.7131 0000311 273.6755 163.0307 1.00272322 165
1997021B
1 24799U 97021B 97146.83827074 .00008282 00000-0 73366-3 0 63
2 24799 29.1177 98.1180 7305455 188.4555 158.7991 2.27546052 342
Cosmos 2342
1 24800U 97022A 97147.47195284 -.00000671 00000-0 -57511-3 0 294
2 24800 62.8401 188.1929 7397918 312.6919 5.3668 2.00616735 266
1997022B
1 24801U 97022B 97148.02806431 .00214766 21474-4 54665-3 0 266
2 24801 62.7690 137.8294 0186352 115.5955 246.6951 15.71903098 2207
1997022C
1 24802U 97022C 97148.25002082 .00581870 77228-5 64562-3 0 395
2 24802 62.8055 136.6373 0205563 119.4113 242.7743 15.79283426 2248
1997022D
1 24803U 97022D 97147.29415960 .00001101 00000-0 -18443-3 0 89
2 24803 62.8179 188.1407 7365113 312.6887 5.3417 2.04233977 278
Cosmos 2343
1 24805U 97024A 97135.68786433 .00000000 00000-0 00000+0 0 36
2 24805 64.8647 90.9425 0116960 66.4533 294.8797 16.10085178 31
1997024B
1 24806U 97024B 97140.61065422 .20778430 80540-5 12013-3 0 375
2 24806 64.8497 72.3527 0016083 57.4230 302.7904 16.53768130 831
THOR 2
1 24808U 97025A 97147.88490527 -.00000048 00000-0 00000+0 0 113
2 24808 0.0490 143.0443 0089898 246.4322 142.4759 1.01548939 104
1997025B
1 24809U 97025B 97146.85904205 -.00000168 00000-0 -17785-3 0 108
2 24809 26.3029 2.3618 0676158 331.6853 24.8413 13.27594743 781
1997025C
1 24810U 97025C 97145.15781740 -.00000132 00000-0 00000+0 0 73
2 24810 19.7305 31.1258 6956208 0.7515 0.0929 2.16112235 98
1997026A
1 24812U 97026A 97147.55043730 -.00000065 00000-0 00000+0 0 101
2 24812 7.7270 148.4038 3252723 358.9310 0.4128 1.52787694 52
1997026B
1 24813U 97026B 97148.26782748 .01583589 12095-4 36741-3 0 226
2 24813 51.5897 126.8870 0008094 287.9316 72.0670 16.29006844 589
1997026C
1 24814U 97026C 97147.03793981 .19653485 12492-4 76733-3 0 219
2 24814 51.5690 133.6719 0003013 249.2564 120.5605 16.44027021 383
```

```
1997026D
1 24815U 97026D 97146.29787527 .00000016 00000-0 00000+0 0 18
2 24815 17.6027 148.5583 5305507 359.0246 0.2120 1.89996685 21
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology
```

1587. QSOs with Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <338CDEA8.339A@ix.netcom.com>
Source record: 18897

Has anybody talked with the Yankee ticket holder with a Limey accent on
the Ruskie spacecraft yet?

--
73 de Jim, KD1YV
http://pw1.netcom.com/~jimkd1yv/hamily.html

1588. Cum visit our free BBS

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: stephlise@telco.com
Message-ID: <336b179c.8497996@hiroken.hiroken.or.jp>
Source record: 18898

Free Adult Internet Connection Worldwid- Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm

1589. NAVSPASUR receiver site

Newsgroup: rec.radio.amateur.space
Date: 1997-05-28 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaEAwF96.Mzv@netcom.com>
Source record: 18899
Cross-posted to: rec.radio.amateur.space,sci.space.tech

The NAVSPASUR transmitter at Lake Kickapoo, Texas usually
gets the publicity because of its impressive size, but apparently
the receiver sites aren't tiny, either:

From Commerce Business Daily, April 17, 1997 PSA-1826

ANTENNA VERIFICATION TESTING
The Dahlgren Division of the Naval Surface Warfare Center, Dahlgren, Va
is seeking sources on a competitive basis for an antenna verification
testing and installation of replaced/installed spare components at the
NAVSPACECOM Elephant Butte, New Mexico Field Station.
These antennas are used in a one-of-a-kind earth satellite signal
detection receiver. This receiver is in use at six NAVSPACOM Field
Station. The antennas are constructed of Dipole Elements (144 per 600
foot array), coaxial transmission line combiners, tees, elbows, expansion
joints and 7/8 inch, 3-1/8 inch transmission lines. The contractor
will test fifty 600 foot arrays at the Elephant Butte, NMNAVSPACECOM
^^^^^^^^^^^^^^^^^^^!!
Receiver Station...

1590. new ham web site

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: Al & Jane Perreault <janeal@intergate.bc.ca>
Message-ID: <01bc6bf1$670b1080$9ec0cecd@InternetGateway.intergate.bc.ca>
Source record: 18900

Hello,
I am working on a comprehensive list of web sites by hams.
If you would like to add a Personal Web Page by a ham, then please go visit
my web site at http://www.geocities.com/HotSprings.com/9732/hams.html, and
fill out the application form. I will post it as soon as I can. I have
totally revamped the website, so tell me what you think!

Albert Perreault RN
E-mail: ve7fym@geocities.com
URL: http://www.geocities.com/HotSprings/9732
Burnaby, British Columbia, Canada

1591. new web site.. correct url

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: Al & Jane Perreault <janeal@intergate.bc.ca>
Message-ID: <01bc6bf8$2f2ef800$9ec0cecd@InternetGateway.intergate.bc.ca>
Source record: 18901

Sorry!
Error in previous message, please note correct web address!

I am working on a comprehensive list of web sites by hams.
If you would like to add a Personal Web Page by a ham, then please go visit
my web site at http://www.geocities/HotSprings/9732/hams.html, and
fill out the application form. I will post it as soon as I can. I have
totally revamped the website, so tell me what you think!

_____
Albert Perreault RN
E-mail: ve7fym@geocities.com
URL: http://www.geocities/HotSprings/9732
Burnaby, British Columbia, Canada

1592. KEPS, what happend?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: rmanns@saba.kuentos.guam.net
Message-ID: <5mjv8s$hhi@lehi.kuentos.guam.net>
Source record: 18902

Does anyone know why the KEP postings have stopped getting posted. I am talking about the longer listing two liners, not the ARRL postings. I think the listing I am looking for is by Dr. Kelso?? spelling probably wrong.

--
Rick Manns rmanns@kuentos.guam.net

1593. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: "Christopher A. King" <cking4@ford.com>
Message-ID: <338DCACF.6641@ford.com>
Source record: 18903
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Flipper Boy wrote:

> Make money selling stupid stuff on the Net (Great for Teenagers)

So what we're supposed to do is send you money for what *you*
are selling, which by your definition is already "stupid" to
begin with...?

C.K.

1594. Re: KEPS, what happend?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EAyDr3.F25@pe1chl>
Source record: 18904

In <5mjv8s$hhi@lehi.kuentos.guam.net> rmanns@saba.kuentos.guam.net (Rick Manns) writes:

>Does anyone know why the KEP postings have stopped getting posted. I am
>talking about the longer listing two liners, not the ARRL postings. I
>think the listing I am looking for is by Dr. Kelso?? spelling probably
>wrong.

Just get them from his FTP site: 129.92.1.66 (directory /pub/space).

(it has a hostname, but the nameserver for it is hard to reach. often the
name cannot be resolved but the site is accessible normally. so I use the
IP address mentioned above)

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1595. Re: KEPS, what happend?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc6c5a$4d210f80$4ce06e97@pc3527.bev.etn.com>
Source record: 18905

Considering the sporadic nature of the internet newsgroups, I go right to the source instead of waiting for a posting. Checkout Dr. Kelso's web site at http://www.grove.net/~tkelso, the latest keps are available for downloading.

Dana, WA1UIW

Rick Manns <rmanns@saba.kuentos.guam.net> wrote in article <5mjv8s$hhi@lehi.kuentos.guam.net>...
> Does anyone know why the KEP postings have stopped getting posted. I am
> talking about the longer listing two liners, not the ARRL postings. I
> think the listing I am looking for is by Dr. Kelso?? spelling probably
> wrong.
>
> --
> Rick Manns rmanns@kuentos.guam.net
>
>

1596. **QSL.Net Back Up!**

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <338E371A.6E06@primenet.com>
Source record: 18906

QSL.Net Back Up!

Please check my web page:
http://www.qsl.net/k7on

1597. FREE HOT PICTURES HOT!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-29 00:00:00 UTC
From: stephlise@telco.com
Message-ID: <998b179c.8497996@hiroken.hiroken.or.jp>
Source record: 18907

Free Adult Internet Connection Worldwide Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm

1598. Computer Control for ICOM rigs for satellite work

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: Roger Rehr <rrehr@epix.net>
Message-ID: <01bc6c94$7bb99210$5d42e0c7@rrehr>
Source record: 18908

I recently came across a wonderful new (to me) station control program primarily designed for those of us who use the Analog amateur satellites. It is the first Windows program I have found that provides automatic Doppler correction for the ICOM series via the standard ICOM CI-V interface WITHOUT the need for KC Tracker or another add-on! It also supports Kenwood rigs and many antenna control interfaces, including KC Tracker, the AEA-ST1, TrakBox,...

It works great for me with my ICOM 735 and SSB Electronics transverter.

Paul Willmott VP9MU wrote this delightful program (called "The Station Program") and it is available at 199.172.219.213/stat.htm.

To use it you must make a donation of 15 Pounds Sterling (+20% if you are not a member of UK-AMSAT) to UK-AMSAT to get a registration number so that the program will run. The donation was well worth it to me!! It may be that AMSAT-NA can do the same for you...I wanted to run it very badly on Memorial Day, and so AMSAT-NA was not available.

AMSAT-UK's phone number is 44 (0) 181 989 6741
and FAX 44 (0) 181 989 3430.
The country code is 011 (from my QTH I dial the country code first).

1599. Re: !!!!!MAKE MONEY FAST!!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: masa@writeme-x.com
Message-ID: <338e556b.20103917@news.bctel.ca>
Source record: 18909
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Fri, 30 May 1997 01:18:21 GMT, reznor_nin@hotmail.com (chris)
wrote:

>1) G. Carroll, PO Box 204, Muncie, IN 47308-0204
>
>2) R. Gebbie, 17 Church Lane, Loughton, Milton Keynes, MK5 8AS, England,
>Europe
>
>3) S. Hogan, 36 Prenton Lane, Prenton, Wirral, Merseyside, L42 8LB, England,
>Europe
>
>4) J. Larsen, Grinnek[illegible]rrsv[illegible]gen 50, 436 56 Hov[illegible]s, Sweden, Europe
>
>5) C. Mason, 473 44th Ct. NW, Rochester, MN 55901-6666

What i do not understand is the people's mind who want to show their
name + address...

>STEP (3)
>Post the article to at least 200 news groups. There are at least
>20000 news groups at any give moment in time. The more groups you
>post to, the more people will see your article and send you cash!
>It's recommended that you do AT LEAST 200 news groups for a lot of
>people to read it!

and how many people respond to the article ? anyone have done this
thought of thing ?

>STEP (4)
>You are now in business for yourself, and should start seeing
>returns within 7 to 14 days. Remember, the Internet is new and
>huge. There's no way you can lose.

there's no way you can lose your mind huh ? keep posting your name +
address. you will become pretty famous !! well... in a bad way.

Masa
Masa@WriteMe-X.com
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)

http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "-x" from noted e-mail address to contact me.

1600. *** Re: !!!!!MAKE MONEY FAST!!!!! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: masa@writeme-x.com
Message-ID: <338e58c1.20957729@news.bctel.ca>
Source record: 18910
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Fri, 30 May 1997 01:18:21 GMT, reznor_nin@hotmail.com (chris)
wrote:

>If you want to know how to make thousands of dollars quickly,
>legally

>Well, two weeks later, I began receiving money in the mail!

>Fold a $1 bill
>inside each paper, and mail them to the following five addresses:

well... sending out a cash in a mail is NOT legal. Get a life. You
are contradicting yourself.

>Now here is how and why this system works:

>Out of every block of 250 posts I made, I got back 5 responses.
>Yes, that's right, only 5. You make $5.00 in cash, not checks or
>money orders, but real cash with your name at #5.

>Each additional person who sent you $1.00 now also makes 250
>additional postings with your name at #4, 1000 postings.
>On average then, 50 people will send you $1.00 with your name
>at #4 ... $50.00 in your pocket!
(...)

how do you know that the people actually send you the money ? fake !!
I can just post the "money make fast" with slipping my name into #5 of
this, and post the article again. Just right now... without sending
out the money. Remember, this kind of stupid stuff will not work.
Get a life.

Masa
Masa@WriteMe-X.com
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "-x" from noted e-mail address to contact me.

1601. How do I request telemetry data from amateur satellites?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: moschler@ts.umu.se
Message-ID: <338f3970.54502605@news.luth.se>
Source record: 18911

Hi!

I'm a student at the Swedish Space Engineer Campus and right now I'm working with a couple of friends on our final degree project. It's a lab for our Satellite technique course. None of us have ever used amateur satellites so we thought this would be a wonderful practical for the students. We are, after all, space engineers.. :o) The title of the lab is "practical in groundstation technology"

Now to our question, if anyone could answer it. Is the telemetry data from the amateur satellites transmitted 24h a day or do we have to transmitt a request string to the satellite? If it's so, we have a huge problemm :o) Well, we could listen when other people are requesting it, but then we nedd a lot of luck..
I hope someone can answer this question...

Have a nice summer, if you live on the north side of the globe.....
BEST wishes from
Krister Sundstroem, programmer for the SamSat-team.
moschler@ts.umu.se
http://www.ts.umu.se/~moschler

1602. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc6cdf$309af620$e6915cc1@dummy.forthnet.gr>
Source record: 18912
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97.
FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT
++30 81 761382

1603. telemetry

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: Elaine Warren <ewarren@thezone.net>
Message-ID: <338F32CC.7866@thezone.net>
Source record: 18913

Can anyone tell me the source of the telemetre on 145.921 mhz ,and is there any freeware for the Kam to reveal its secrets?
73 DE Tom VO1TY

1604. ARLS016 Mike Foale, KB5UAC, aboard and active From Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls016.1997@arrl.org>
Source record: 18914
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS016
ARLS016 Mike Foale, KB5UAC, aboard and active From Mir

ZCZC AS16
QST de W1AW
Space Bulletin 016 ARLS016
From ARRL Headquarters
Newington, CT May 30, 1997
To all radio amateurs

SB SPACE ARL ARLS016
ARLS016 Mike Foale, KB5UAC, aboard and active From Mir

Ham-astronaut Mike Foale, KB5UAC, who swapped places with Jerry Linenger, KC5HBR, aboard the Russian Mir space station in mid-May, already is making good on his promise to keep Mir active on the ham bands. Foale is scheduled to spend more than four months on the space station before returning to Earth in September.

Al Lark, KD4SFF, of Greenville, South Carolina, was among the first US stations to snag a QSO with Foale (who was using R0MIR at the time). During a Memorial Day contact, KD4SFF got a chance to try out a few Russian phrases during the QSO. The Mir frequencies are 145.800 MHz (downlink) and 145.200 MHz (uplink).

Foale has FCC permission to speak with unlicensed third parties via ham radio during his stay on Mir. Foale also has permission to use the German Space Amateur Funk EXperiment (SAFEX) equipment on Mir in addition to the 2-meter gear.

Dave Larsen, N6CO, is the US Mir QSL manager for contacts made with Mir crew members. QSL cards must include date, time, and mode of contact. He does not handle cards for SWL reports. To confirm contacts with the Mir packet radio personal message system (PMS), include the message number issued by the PMS on your QSL. Send QSLs along with a business-size, self-addressed, stamped envelope to: David G. Larsen, N6CO, Box 1501, Pine Grove, CA 95665 USA. For further details, get in touch with Larsen via e-mail at docvolcano.net.
NNNN
/EX

1605. WWW Message Board Experiment

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <338F7F7B.1D5D@primenet.com>
Source record: 18915

WWW Message Board Experiment

Folks,

May I engage your services for an experiment...

As you know, I set up a "Personal Web Server" on my
home computer running Win95. Previously, the server
had only a copy of my web page...

But, now...

I have taken the mirror of my home page off and installed
an automated message/discussion group faility called aptly
"Short Circuits"...

Please go to my home page http://www.qsl.net/k7on and click
on the rotating arrow and while I'm connected you'll be then
connected to my personal server where you can access the messages
entered by you and others.

It is threaded and resembles a Usenet newsgroup, but will not
be spammed as it is not connected to the Internet by a static
IP address...(this is part of the experiment, BTW...)

Please give it a shot!

I'll be watching for messages on there and I've put 2 already myself.

73, Brian http://www.qsl.net/k7on

1606. Help with Satelilite Antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-05-30 00:00:00 UTC
From: Marv Boetcher <boetcher@netnitco.net>
Message-ID: <338F909E.88E6F9AD@netnitco.net>
Source record: 18916

I am looking for an antenna system to work the satellites and was
wondering if anyone hand any comments on KLM's or M2 antennas?

73

--

_____
Marv Boetcher WV9O #INTERNET: boetcher@netnitco.net

i

_____

1607. sattelite sets

Newsgroup: rec.radio.amateur.space
Date: 1997-05-31 00:00:00 UTC
From: nl11891@worldaccess.nl
Message-ID: <338f36ea.2400675@news.worldaccess.nl>
Source record: 18917

Hello friends,

Currently, I subscribed to AMSAT to receive their keppler-sets.
In this newsgroup, such a sets are also posted.

Now, I have three sources where I could obtain sets from....
Because all these sets seemed to origin from other sources,
which are THE BEST ??? Which are the most accurate (especially MIR) ?

Can anyone explain this to me ? TNX :-)

73!
Robert Joosten, NL-11891.

1608. DO-17?

Newsgroup: rec.radio.amateur.space
Date: 1997-05-31 00:00:00 UTC
From: "Joseph C. Bender" <jcbender@oakland.edu>
Message-ID: <Pine.OSF.3.95.970531124329.680A-100000@saturn.acs.oakland.edu>
Source record: 18918

Anybody know if DO-17 is back to normal?

Regards,

J. Bender

Joseph C. Bender | PGP MAIL PREFERRED
Consultant at Large | PGP key at:
Computing/Audio/Video/Stage Lighting | finger jcbender@saturn.oakland.edu
Homepage: http://www.oakland.edu/~jcbender | www.oakland.edu/~jcbender/key.asc
Information wants to be free. Emancipate some today!

1609. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5mr0g9$kpq@blackbird.afit.af.mil>
Source record: 18919

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1610. Re: EU: Meteosat receiving with a long yagi?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: Rafael Garcia <ea4rj@ea4rj.ampr.org>
Message-ID: <33918162.3DA26BE1@ea4rj.ampr.org>
Source record: 18920

bsmeeman wrote:

> I have experience in receiving Meteosat with a home-made 3 and a 1 metre yagi in Holland. The yagi is described in VHF Communications (UKW Berichte) somewhere in 1990. Currently I am using the 1 metre version in the attick, in front of a window, together with a high quality pre-amp, also from VHF Comm.

Thanks for reply. I read the article suggested just after my post. And
I've received another reply here in Spain who is using a 1.8m yagi too.
So I think the decision is already made, :)

I won't forget a good preamp too. TGN at Germany build a 30dB, 0.5dB NF
preamplifier for about 200DM.

Best,

--
Rafael,
Madrid (Spain) e-mail: ea4rj@amsat.org

1611. Mir PMS

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: fertree@pacbell.net
Message-ID: <5ms9gf$s45$1@news4.snfc21.pacbell.net>
Source record: 18921

Does anyone know the current status of the Mir Personal Message
System?

1612. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: Victor <victor@vicmck.demon.co.uk>
Message-ID: <L3oEzCAFiWkzEw3G@vicmck.demon.co.uk>
Source record: 18922
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

You are quite right it is NOT the same old scam.
Its a NEW one !
Please go elsewhere as scam merchants are not welcome here.
--
Victor

1613. Surround Sound

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: Mark Anderson <manderso@theriver.com>
Message-ID: <3391E78C.43A0@theriver.com>
Source record: 18923

Hello All,
My name is Mark, I maintain a list of Surround Sound recordings in all formats on the internet to help bridge the gap between recording engineers producing Surround recordings
and the unaware public.
The list not only includes recordings distributed via Vinyl, CD or Tape but also includes
Radio Broadcasts and television.
I am currently working on updates to all the discographies and would like to include any
new releases that you might be aware of that I have missed.
Any help you might be able to pass on will be greatly appreciated by many folks.
Thanks for your efforts
Best wishes
Mark
--
* /|\ * Mark Anderson
/ | \ * Email = manderso@theriver.com
* / | \ 2700 E. Executive Dr. Suite 100
------/ | \--------------- Tucson,Az. 85706 520-887-3056
/ | \
|
Visit the SURROUND SOUND DISCOGRAPHY HOME PAGE for recordings in all surround formats to bring out the most in your audio gear!
(Ambisonic UHJ, Circle Sound, Dolby, D.T.S. and Quadraphonic)

http://personal.riverusers.com/~manderso/

1614. Is it RS-10 or Me?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-01 00:00:00 UTC
From: Terry Sellick <tsellic@ibm.net>
Message-ID: <33920160.6867@ibm.net>
Source record: 18924

Hi
In the last few days, I have not heard RS-10/11 at
all. I thought it might be something on my end, but I've
checked everything that I could think of. I'm pretty sure that
I'm listening at the right time and place, because I get the
same times, azimuth, and elvation from 3 different programs.
Has anyone else heard it recently?

Any enlightment would be greatly appreciated.

73 Terry

1615. Re: Help with Satelilite Antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: rmurdock2@aol.com
Message-ID: <19970602003700.UAA03999@ladder02.news.aol.com>
Source record: 18825

Greetings from Yuba City;
I have been using M2 antennas for mode b, mode a, mode j since 1994 and they are superb. I have, but have not yet put up, a KLM 40CX, 435 MHz crossed yagi and its construction is equal to that of the M2. The M2 antenna on 2m is the 14 element crossed yagi. I don't run much power so my fun is from the gain of the array.
73, Ron, W6KJ

1616. rs-10?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: rmurdock2@aol.com
Message-ID: <19970602003900.UAA04170@ladder02.news.aol.com>
Source record: 18826

Anyone know what has happened to RS-10. I didn't the beacon or
transponder the last several times I've tried it.
73, Ron, W6KJ

1617. Radio telescope

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: unbk@eunet.yu
Message-ID: <3392f8b5.35439879@solair3.eunet.yu>
Source record: 18827

I am currently establishing amateur radio telescope. I would like to
share my ideas with anyone interested in radio astronomy and even to
smake kind of amateur radio telescope network.
Does anyone have a good schematics for 4GHz radio telescope, basically
back end?

Thank you,

Velimir Dedic

unbk@eunet.yu
or
vdedic@sezampro.yu

1618. * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0206971408520001@cqtlm-pm2-066.dowco.com>
Source record: 18828
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ06.02
Amateur CW/Voice Satellite Frequencies for June 2, 1997.

BID: $FREQ0602
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 is currently offline in sleep mode. The sun angle to the
solar panels is such that not enough light is reaching them to power the
```

transponder therefore ground control has put the satellite into sleep mode for the next several weeks.

* Radio Sport-10/11 has been inactive for several days now. Beacons and transponder appear to have been shut off but no official reports can confirm if this is the case or if something else has happened to the satellite.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite.

* Radio Sport-16 currently has its Mode A transponder turned off. No beacons are presently being copied. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in June.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

1997 May 30(Fri) 01:07z JD 9600bps FSK MailBox
June 6(Fri) 08:25z JA
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA

* Mir Simplex Good News! Ham-astronaut Mike Foale, KB5UAC, who has just joined the MIR crew has been QSOed several times on passes over North America this last week. Sounds like he is going to be very active on 145.80 MHz.

* Space Shuttle Frequencies when in orbit.
Next SAREX mission scheduled for July 1997.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

Scott Leaf VE7VDX - VHF DX Grid Square CN89
ve7vdx@dowco.com
Coquitlam, British Columbia, Canada.

Scott Leaf VE7VDX - VHF DX Grid Square CN89
ve7vdx@dowco.com
Coquitlam, British Columbia, Canada.

1619. Re: sattelite sets

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EB5x7M.E05@pe1chl>
Source record: 18829

In <338f36ea.2400675@news.worldaccess.nl> nl11891@worldaccess.nl (Robert Joosten) writes:

>Currently, I subscribed to AMSAT to receive their keppler-sets.
>In this newsgroup, such a sets are also posted.

>Now, I have three sources where I could obtain sets from....
>Because all these sets seemed to origin from other sources,
>which are THE BEST ??? Which are the most accurate (especially MIR) ?

In the end they are all from the same source. Compare them and you
will see a striking similarity.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1620. help for kct*******

Newsgroup: rec.radio.amateur.space
Date: 1997-06-02 00:00:00 UTC
From: WALTER GIRARDI <narda@sunrise.it>
Message-ID: <01bc6f74$fc5bdee0$a8a26397@sabrina.sunrise.it>
Source record: 18830

i need hel to set the KCT/T with the yaesu rotors.
sen me an e mail to: narda@sunrise.it
Thanks
Walter

1621. Re: --Antenna Web Site--

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970603042301.AAA11567@ladder02.news.aol.com>
Source record: 18831

Antenna web site

http://Members.aol.com/Arrow146/index.html

1622. RE:WHERE IS RS-10

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: QUVP17A@prodigy.com
Message-ID: <5n06cg$30oc@newssvr02-int.news.prodigy.com>
Source record: 18832

SUBJECT: Re: Is it RS-10 or Me?
YES I HAVE THE SAME PROBLEM...
I STARTED PLAYING WITH RECEIVING SAT. NEAR THE END OF MAY..
I WAS RECEIVING THE RS-10 AND THEN THE RS-12...
ON MAY THE 28TH I PUT IN NEW KEPS USING TRAKSAT..
I NOTICED THE RS-10 WAS TRAILING THE RS-12 AND I THOUGHT I HAD A
PROBLEM WITH MY PROGRAM BUT THEN I NOTICED I WAS RECEIVING THE RS-12
GREAT THEN THE RS-10 CAME PASSED AND NO SIGNAL AND I HAVE NOT RECEIVED IT
SINCE.. WHAT COULD IT BE..I MISS RECEIVING IT
IF YOU FIND OUT LET ME KNOW...ADDRESS IS J.JARRETT@JUNO.COM

-
JOSEPH JARRETT QUVP17A@prodigy.com

1623. Re: rs-10?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: QUVP17A@prodigy.com
Message-ID: <5n05jk$3squ@newssvr02-int.news.prodigy.com>
Source record: 18833

SUBJECT: Re: Is it RS-10 or Me?
YES I HAVE THE SAME PROBLEM...
I STARTED PLAYING WITH RECEIVING SAT. NEAR THE END OF MAY..
I WAS RECEIVING THE RS-10 AND THEN THE RS-12...
ON MAY THE 28TH I PUT IN NEW KEPS USING TRAKSAT..
I NOTICED THE RS-10 WAS TRAILING THE RS-12 AND I THOUGHT I HAD A
PROBLEM WITH MY PROGRAM BUT THEN I NOTICED I WAS RECEIVING THE RS-12
GREAT THEN THE RS-10 CAME PASSED AND NO SIGNAL AND I HAVE NOT RECEIVED IT
SINCE.. WHAT COULD IT BE..I MISS RECEIVING IT
IF YOU FIND OUT LET ME KNOW...ADDRESS IS J.JARRETT@JUNO.COM
KQ4TX

1624. WHERE IS RS-10

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: QUVP17A@prodigy.com
Message-ID: <5n065v$4gr6@newssvr02-int.news.prodigy.com>
Source record: 18834

SUBJECT: Re: Is it RS-10 or Me?
YES I HAVE THE SAME PROBLEM...
I STARTED PLAYING WITH RECEIVING SAT. NEAR THE END OF MAY..
I WAS RECEIVING THE RS-10 AND THEN THE RS-12...
ON MAY THE 28TH I PUT IN NEW KEPS USING TRAKSAT..
I NOTICED THE RS-10 WAS TRAILING THE RS-12 AND I THOUGHT I HAD A
PROBLEM WITH MY PROGRAM BUT THEN I NOTICED I WAS RECEIVING THE RS-12
GREAT THEN THE RS-10 CAME PASSED AND NO SIGNAL AND I HAVE NOT RECEIVED IT
SINCE.. WHAT COULD IT BE..I MISS RECEIVING IT
IF YOU FIND OUT LET ME KNOW...ADDRESS IS J.JARRETT@JUNO.COM
KQ4TX

1625. Re: Is it RS-10 or Me?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: QUVP17A@prodigy.com
Message-ID: <5n04ob$o56@newssvr02-int.news.prodigy.com>
Source record: 18835

RIGHT ON THERE..KQ4TX
I HAVE JUST STARTED TRYING TO RECIEVE SATELLITES AND HAVE HAD LUCK
RECEIVING THE THREE RS-10 AND RS-12 AND RS-15 USING TRAKSAT
PROGRAM..MY FIRST CONTACT WAS THE RS-10 THEN THE RS-12 FOLLOWED BUT I
JUST PUT IN NEW KEPS MAY 30 AND THEN I NOTICED NO CONTACT WITH THE RS-10
BUT I WAS RECEIVING THE RS-12..I NOTICED THE RS-10 IS NOW BEHIND THE RS-
12..IF YOU FIND OUT SOMETHING LET ME KNOW..YES I HAVE THE SAME PROBLEM AS
OF JUNE THE SECOND..
I THINK THE LAST TIME I HEARD IT WAS ON MAY THE 28TH...
I GLAD I LOOK THAT THIS PAGE..I WAS HAVING FUN FOLLOWING THOSES SAT...
I ONLY HAVE A 2 METER RIG AND A HF RIG..I'M USING A HORIZONTAL LOOP
8 FT OFF THE GROUND TO PICK UP THE SAT. AT HIGH ANGLES LIKE 20 DEGS AND
AN INVERTED VEE FOR THE LOW ANGLES..THERE IS NOT TO MUCH INFO ON ANTENNAS
TO USE EXCEPT THE ONES YOU CAN BUILD AND I LIKE THAT TO BUT EVERYONE SAYS
YOU CAN USE A GROUND PLANE OR A SMALL YAGI BUT THATS NOT THAT EASY NO 10
METERS..16 FT IS A BIG ANTENNA TO TRY TO ROTATE...
THANKS FOR THE INFO...
KQ4TX

1626. Re: Is it RS-10 or Me?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: QUVP17A@prodigy.com
Message-ID: <5n058i$m76@newssvr02-int.news.prodigy.com>
Source record: 18836

YES I HAVE THE SAME PROBLEM...
I STARTED PLAYING WITH RECEIVING SAT. NEAR THE END OF MAY..
I WAS RECEIVING THE RS-10 AND THEN THE RS-12...
ON MAY THE 28TH I PUT IN NEW KEPS USING TRAKSAT..
I NOTICED THE RS-10 WAS TRAILING THE RS-12 AND I THOUGHT I HAD A
PROBLEM WITH MY PROGRAM BUT THEN I NOTICED I WAS RECEIVING THE RS-12
GREAT THEN THE RS-10 CAME PASSED AND NO SIGNAL AND I HAVE NOT RECEIVED IT
SINCE.. WHAT COULD IT BE..I MISS RECEIVING IT
IF YOU FIND OUT LET ME KNOW...ADDRESS IS J.JARRETT@JUNO.COM
KQ4TX

1627. Re: How do I request telemetry data from amateur satellites?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <339402FD.12EE@muenster.de>
Source record: 18837

Hi,

> I'm a student at the Swedish Space Engineer Campus and right now I'm working
> with a couple of friends on our final degree project. It's a lab for our
> Satellite technique course. None of us have ever used amateur satellites so we
> thought this would be a wonderful practical for the students. We are, after all,
> space engineers.. :o) The title of the lab is "practical in groundstation
> technology"
>
> Now to our question, if anyone could answer it. Is the telemetry data from the
> amateur satellites transmitted 24h a day or do we have to transmitt a request
> string to the satellite? If it's so, we have a huge problemm :o) Well, we could

The good news for you is: Most sats are sending telemetry 24 h a day.
The bad news is: Most of theses sats are in low earth orbit and cannot
be received 24 h a day, rather only for about 20 min., and again after
abt. 60 - 100 min. (depends on the satellite / its orbit).

You should make you mind up about what kind of telemetry you want to
receive. Some sats send it in morse (CW), RTTY (radio teletype), AX.25
and so on. The morse telemetry, for example, can be received with a
normal receiver (capable of SSB/CW) and manually decoded, so you don't
need any hardware/computer... ;-) But the other telemetry types would do
so.

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

1628. MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc6fcd$8dba31e0$59280ace@home.the-bridge.net>
Source record: 18838

I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the packet signals on 145.800 MHz. 73 de Bj
--

B.J. Arts
WT0N in EN-37mk
bjarts@the-bridge.net
Hibbing,MN U.S.A.

1629. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <3394aeec.4310307@news.bctel.ca>
Source record: 18839

On 3 Jun 1997 03:25:46 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:

>I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the
>packet signals on 145.800 MHz. 73 de Bj

I am not doubting you... but I thought MIR was down.

maybe someone transmitted the packet signal mistakenly... (didn't try
to put -600 offset ?)

I also understand that 145.800 is only for the voice communication
(MIR).

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1630. ARLK043 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk043.1997@arrl.org>
Source record: 18840
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK043
ARLK043 Keplerian data

ZCZC SK43
QST de W1AW
Keplerian Bulletin 43 ARLK043
From ARRL Headquarters
Newington, CT June 3, 1997
To all radio amateurs

SB KEP ARL ARLK043
ARLK043 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97151.15454646 .00000108 00000-0 10000-3 0 04885
2 14129 25.9242 144.9168 6068807 121.7683 311.4183 2.05879972077036
RS-10/11
1 18129U 87054A 97154.17313575 .00000015 00000-0 38702-6 0 03731
2 18129 82.9273 249.0873 0010331 262.5526 97.4458 13.72378523498316
UO-11
1 14781U 84021B 97153.93909479 .00000143 00000-0 31988-4 0 9767
2 14781 97.8339 135.7426 0013147 49.1649 311.0699 14.69556149709161
RS-12/13
1 21089U 91007A 97153.87373501 .00000087 00000-0 76926-4 0 9827
2 21089 82.9195 289.2534 0029436 340.4327 19.5702 13.74082335317197
UO-14
1 20437U 90005B 97154.24401783 .00000023 00000-0 25851-4 0 2730
2 20437 98.5186 236.2141 0010226 250.4514 109.5558 14.29961610384227
RS-15
1 23439U 94085A 97154.14843168 -.00000039 00000-0 10000-3 0 02347
2 23439 64.8139 175.5387 0149662 135.2682 226.0423 11.27527429100353
AO-16
1 20439U 90005D 97154.25921390 .00000028 00000-0 27660-4 0 692
2 20439 98.5355 239.1267 0010599 251.6629 108.3397 14.30009441384248
RS-16
1 24744U 97010A 97154.24559831 .00002945 00000-0 99608-4 0 459
2 24744 97.2768 59.5689 0008252 127.4234 232.7748 15.31374568 13958
```

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DO-17
1 20440U 90005E 97154.17656808 .00000012 00000-0 21337-4 0 00827
2 20440 98.5401 239.8960 0010549 250.5935 109.4109 14.30152110384269
WO-18
1 20441U 90005F 97154.17412531 -.00000003 00000-0 15681-4 0 00984
2 20441 98.5384 239.7925 0011101 250.2746 109.7240 14.30119391384265
LO-19
1 20442U 90005G 97153.79275185 .00000012 00000-0 21361-4 0 00794
2 20442 98.5427 240.0811 0011426 250.2359 109.7591 14.30233997384238
FO-20
1 20480U 90013C 97153.92140316 -.00000013 00000-0 37846-4 0 09894
2 20480 99.0439 118.1921 0541396 49.7027 315.0113 12.83238494342872
AO-21
1 21087U 91006A 97154.15167657 .00000093 00000-0 82657-4 0 08283
2 21087 82.9400 61.9680 0035303 311.2234 48.5880 13.74582903318224
UO-22
1 21575U 91050B 97154.18130473 -.00000009 00000-0 11161-4 0 07866
2 21575 98.3022 215.2198 0007133 300.9277 59.1208 14.37071492308471
KO-23
1 22077U 92052B 97154.13832550 -.00000037 00000-0 10000-3 0 06856
2 22077 66.0776 174.6474 0010166 214.4746 145.5607 12.86302977225942
KO-25
1 22828U 93061F 97154.19492255 .00000043 00000-0 34561-4 0 05518
2 22828 98.5416 229.0497 0009451 270.0055 90.0086 14.28180336160217
IO-26
1 22826U 93061D 97154.15725946 .00000077 00000-0 48474-4 0 05704
2 22826 98.5451 228.9303 0008702 287.9445 72.0782 14.27837831192087
AO-27
1 22825U 93061C 97154.18774191 -.00000024 00000-0 79083-5 0 05751
2 22825 98.5458 228.7205 0007720 287.1928 72.8419 14.27727154192079
FO-29
1 24278U 96046B 97154.16005443 -.00000055 00000-0 -18658-4 0 00947
2 24278 98.5398 197.3019 0350655 222.5306 134.8181 13.52630289039222
MO-30
1 24305U 96052B 97154.08428701 .00000203 00000-0 20364-3 0 01133
2 24305 82.9366 5.0142 0028699 245.6286 114.1865 13.73093013037128
Mir
1 16609U 86017A 97154.20632962 .00002051 00000-0 31775-4 0 3438
2 16609 51.6516 156.1011 0005641 109.0678 251.0971 15.59464749644845

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
June 7, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1631. How do I request telemetry data??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: moschler@ts.umu.se
Message-ID: <338f37a3.54041381@news.luth.se>
Source record: 18841

Hi!

I'm a student at the Swedish Space Engineering Campus, and right now I'm working on my degree project. It consist of making a lab in our satellite course... Now we have a small problem while recieving telemetry data from satllites. None of us have ever tried such thing, and that's why we think a lab on Ground Station Technology could be very useful. We are space engineers after all.. :o)

Now to my question, if anyone can answer it... Is the telemetry data from the amateur satellites transmitted 24h aday or do we have to send a request to the satellite? Then we will have a huge problem.... But so be it if it's so... :o)

Thanks for your help and have a nice summer, if you live on the north side of the globe....
Best wishes from
Krister Sundstroem, moschler@ts.umu.se
http://www.ts.umu.se/~moschler

1632. Re: How do I request telemetry data from amateur satellites?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: Rafael Garcia <ea4rj@ea4rj.ampr.org>
Message-ID: <33946A89.3E945129@ea4rj.ampr.org>
Source record: 18842

Krister Sundstroem wrote:

> Now to our question, if anyone could answer it. Is the telemetry data from the
> amateur satellites transmitted 24h a day or do we have to transmitt a request
> string to the satellite? If it's so, we have a huge problemm :o) Well, we could
> listen when other people are requesting it, but then we nedd a lot of luck..

Amateur satellites do transmit realtime telemetry. You don't need a special feature (license) to receive them. You must keep in mind that if you are unlicensed to transmit in amateur bands at your country, you cannot transmit to the satellite.

Telemetry received in realtime mode is mainly broadcast in CW (morse code) in analog satellites (russian series) and in packet radio, AX.25 for all digital satellites.

There are some telemetry files, those called WOD (whole orbit data) that should be requested for the groundstation, so this is the only feature that you will miss.

That's all Krister. Best wishes,

PS I'm instructing a couple of students to the use of a satellite groundstation here at the uni at this time too, :)

--
Rafael,
Madrid (Spain) e-mail: ea4rj@amsat.org

1633. NORAD Two-Line Orbital Element Sets (TLE006)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-03 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5mvnol$cj@blackbird.afit.af.mil>
Source record: 18843

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #006 -
Alouette 1
1 00424U 62049A 97150.50941541 .00000046 00000-0 43781-4 0 2925
2 00424 80.4627 301.0310 0022788 219.0363 140.9135 13.67895471729820
ATS 1
1 02608U 66110A 97148.82429600 -.00000090 00000-0 10000-3 0 232
2 02608 14.5126 349.1152 0006974 99.9291 260.1290 1.00289996 28337
ATS 3
1 03029U 67111A 97151.37680979 -.00000130 00000-0 10000-3 0 6583
2 03029 14.8926 356.0005 0008458 282.4293 0.8822 1.00273097108255
Starlette
1 07646U 75010A 97147.70077551 -.00000523 00000-0 -29942-3 0 583
2 07646 49.8256 229.2071 0206328 288.4374 69.4193 13.82190617126615
LAGEOS
1 08820U 76039A 97150.23678716 .00000028 00000-0 00000+0 0 2908
2 08820 109.8165 144.9106 0043881 53.2133 307.2465 6.38664431235992
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97151.48660626 .00000041 00000-0 10000-3 0 8421
2 10061 12.8085 33.1803 0013347 138.9223 76.2396 1.00282788 17937
IUE
1 10637U 78012A 97151.57340450 -.00000327 00000-0 10000-3 0 3964
2 10637 36.0273 78.0057 1364786 66.4764 73.8172 1.00071784 23422
GOES 3
1 10953U 78062A 97149.35362874 -.00000095 00000-0 10000-3 0 8100
2 10953 11.8237 36.1891 0000991 299.7635 289.8460 1.00267127 22524

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SeaSat 1
1 10967U 78064A 97149.90142520 -.00000060 00000-0 24628-4 0 5776
2 10967 108.0000 172.2004 0002232 243.8187 116.2728 14.38171079991290
Nimbus 7
1 11080U 78098A 97151.16036305 -.00000083 00000-0 -38165-4 0 6738
2 11080 98.9005 1.6509 0009436 104.2918 255.9286 13.83681709939296
GOES 5
1 12472U 81049A 97149.75770732 -.00000069 00000-0 10000-3 0 32
2 12472 8.7404 46.7672 0004134 69.7243 290.2143 1.00338470 16572
Cosmos 1383
1 13301U 82066A 97145.74938854 .00000008 00000-0 -82539-5 0 5878
2 13301 82.9323 242.6109 0028342 18.6537 341.5651 13.68082995744214
LandSat 4
1 13367U 82072A 97151.57739038 .00000048 00000-0 20306-4 0 712
2 13367 98.0286 196.9325 0007431 123.7790 236.4118 14.57209551791274
DMSP B5D2-1
1 13736U 82118A 97152.55906192 .00000066 00000-0 46036-4 0 2450
2 13736 98.6228 341.2999 0009494 85.7161 274.5103 14.25837520750852
IRAS
1 13777U 83004A 97153.02223201 .00000321 00000-0 25084-3 0 6778
2 13777 98.9697 337.1716 0011403 206.8518 153.2048 13.99282085402299
Cosmos 1447
1 13916U 83021A 97149.25059178 .00000024 00000-0 10147-4 0 6823
2 13916 82.9435 295.0676 0036596 269.1185 90.5800 13.74356031711272
TDRS 1
1 13969U 83026B 97152.56015779 -.00000310 00000-0 10000-3 0 7505
2 13969 9.4540 40.2611 0003686 58.6586 303.5000 1.00260154 24890
GOES 6
1 14050U 83041A 97152.52829987 .00000047 00000-0 10000-3 0 6734
2 14050 7.6007 50.4270 0002985 52.5995 205.7221 1.00248584109695
AO-10
1 14129U 83058B 97148.24139209 .00000193 00000-0 10000-3 0 4846
2 14129 25.9153 145.4198 6068989 120.9634 312.2846 2.05878785 76972
LandSat 5
1 14780U 84021A 97153.23980593 .00000088 00000-0 29847-4 0 6176
2 14780 98.2841 216.1002 0001340 315.4118 44.6973 14.57075020704934
UO-11
1 14781U 84021B 97149.92185216 .00000071 00000-0 19811-4 0 9756
2 14781 97.8339 131.8875 0013102 60.5815 299.6718 14.69554190708570
Cosmos 1574
1 15055U 84062A 97149.89834880 .00000017 00000-0 15137-5 0 8825
2 15055 82.9547 350.2403 0028851 94.7448 265.7020 13.73648480648587
Cosmos 1602
1 15331U 84105A 97152.46865659 .00000293 00000-0 31539-4 0 5641
2 15331 82.5331 145.7660 0018056 232.3923 127.5655 14.84888032684803
ERBS
1 15354U 84108B 97153.18109736 -.00000236 00000-0 24605-6 0 2807
2 15354 56.9947 59.4422 0008966 113.2566 246.9542 14.95041801689186
NOAA 9
1 15427U 84123A 97153.02312211 .00000078 00000-0 64438-4 0 1664
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2 15427 98.9038 223.3204 0015970 44.1589 316.0858 14.13859418643061
Mir
1 16609U 86017A 97153.11693488 .00003765 00000-0 52970-4 0 3418
2 16609 51.6515 161.5729 0005831 111.0199 249.1544 15.59463094644679
SPOT 1
1 16613U 86019A 97152.21802998 -.00000044 00000-0 00000+0 0 780
2 16613 98.7881 224.8022 0001070 24.2793 335.8437 14.19994848269844
Cosmos 1766
1 16881U 86055A 97150.55667255 .00000214 00000-0 22911-4 0 4790
2 16881 82.5200 205.1457 0017601 272.4571 87.4630 14.83853927585354
EGP
1 16908U 86061A 97151.17076231 -.00000083 00000-0 10000-3 0 1825
2 16908 50.0130 7.1570 0011207 178.8627 181.2235 12.44416336159736
NOAA 10
1 16969U 86073A 97153.01028249 .00000103 00000-0 61938-4 0 958
2 16969 98.5441 146.4316 0014401 53.3974 306.8528 14.25034738556421
MOS-1
1 17527U 87018A 97153.16821177 -.00000043 00000-0 00000+0 0 5515
2 17527 98.8981 212.5901 0018376 78.8998 281.4255 14.00458756523974
GOES 7
1 17561U 87022A 97151.46035116 -.00000151 00000-0 10000-3 0 3589
2 17561 3.7382 67.1077 0002038 84.5816 165.4163 1.00256949 20798
Kvant-1
1 17845U 87030A 97153.18101877 -.00016871 00000-0 -20296-3 0 135
2 17845 51.6521 161.2535 0005608 103.8050 256.3558 15.59439705578794
DMSP B5D2-3
1 18123U 87053A 97153.00008822 .00000031 00000-0 38379-4 0 9306
2 18123 98.7644 343.4610 0014602 340.0557 20.0045 14.15479086513985
RS-10/11
1 18129U 87054A 97152.56917812 .00000015 00000-0 38702-6 0 3589
2 18129 82.9278 250.2730 0010344 267.1879 92.8088 13.72378490498099
Meteor 2-16
1 18312U 87068A 97153.20602575 .00000123 00000-0 96960-4 0 5688
2 18312 82.5539 74.4577 0012417 326.4938 33.5442 13.84099637494595
Meteor 2-17
1 18820U 88005A 97152.46690369 .00000052 00000-0 32605-4 0 2694
2 18820 82.5414 129.2526 0018255 29.2863 330.9317 13.84775171471869
DMSP B5D2-4
1 18822U 88006A 97153.22810632 .00000042 00000-0 36928-4 0 5413
2 18822 98.3833 334.5901 0008032 65.8481 294.3535 14.23228712484365
Glonass 34
1 19163U 88043A 97152.18695368 -.00000054 00000-0 10000-3 0 1876
2 19163 65.3952 74.0897 0007776 151.9822 208.0524 2.13102278 69677
Glonass 36
1 19165U 88043C 97152.24445250 -.00000055 00000-0 10000-3 0 5941
2 19165 65.3932 74.0341 0003526 341.0355 18.9466 2.13101811 70298
METEOSAT 3
1 19215U 88051A 97146.00504459 -.00000145 00000-0 00000+0 0 3190
2 19215 3.9525 65.9369 0003942 160.0414 199.6602 0.96948844 20508
OKEAN 1
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1 19274U 88056A 97150.50668087 .00000181 00000-0 19438-4 0 1780
2 19274 82.5118 306.4586 0021432 61.5995 298.7376 14.82620454480830
Meteor 3-2
1 19336U 88064A 97149.89674253 .00000051 00000-0 10000-3 0 5752
2 19336 82.5369 281.0739 0018171 88.4809 271.8353 13.16982007425111
Glonass 39
1 19503U 88085C 97150.39836442 -.00000021 00000-0 10000-3 0 4777
2 19503 65.4651 312.9781 0010278 142.8445 217.2228 2.13101902 67741
NOAA 11
1 19531U 88089A 97153.00881157 -.00000014 00000-0 17635-4 0 9821
2 19531 99.1558 185.6943 0011974 344.3347 15.7453 14.13132924447857
TDRS 3
1 19548U 88091B 97141.69944100 -.00000180 00000-0 10000-3 0 2883
2 19548 3.1655 70.0997 0001830 39.5613 106.2873 1.00265613 18921
Glonass 40
1 19749U 89001A 97150.90486467 -.00000043 00000-0 10000-3 0 6825
2 19749 65.3602 73.6310 0007082 246.7964 113.1289 2.13101503 65269
Glonass 41
1 19750U 89001B 97146.26695017 -.00000001 00000-0 10000-3 0 5928
2 19750 65.3740 73.8547 0006921 243.0468 116.8853 2.13101721 65188
GPS BII-01
1 19802U 89013A 97151.15273216 -.00000012 00000-0 00000+0 0 4225
2 19802 55.4915 96.7751 0015183 173.5842 186.4069 2.00572876 60696
Akebono
1 19822U 89016A 97152.76352717 .00011828 00000-0 58858-3 0 9254
2 19822 75.0831 279.8405 3717774 200.8717 138.8986 7.97884527194479
Meteor 2-18
1 19851U 89018A 97150.91326671 .00000039 00000-0 21687-4 0 5645
2 19851 82.5205 3.8231 0015666 79.0255 281.2638 13.84433347416941
MOP-1
1 19876U 89020B 97144.32781506 -.00000038 00000-0 00000+0 0 2621
2 19876 2.6839 70.8275 0019018 287.2608 72.0085 0.97108645 9935
TDRS 4
1 19883U 89021B 97149.54024171 -.00000276 00000-0 10000-3 0 3357
2 19883 0.5902 86.5755 0002132 354.9152 319.1507 1.00273472202589
GPS BII-02
1 20061U 89044A 97149.49974164 -.00000048 00000-0 10000-3 0 4013
2 20061 53.9814 272.0888 0168587 223.8240 134.8258 2.00562253 58405
Nadezhda 1
1 20103U 89050A 97150.67378516 .00000083 00000-0 72019-4 0 1269
2 20103 82.9628 212.3973 0037759 163.2953 196.9714 13.73879751396398
GPS BII-03
1 20185U 89064A 97152.19240826 -.00000025 00000-0 00000+0 0 4317
2 20185 55.3111 97.1190 0019775 219.0689 140.8448 2.00562374 57038
GMS 4
1 20217U 89070A 97147.08291667 -.00000372 00000-0 10000-3 0 5806
2 20217 2.5081 72.5607 0001406 110.2921 211.0463 1.00254277 28863
INTERCOSMOS 24
1 20261U 89080A 97149.74776090 .00000195 00000-0 58052-4 0 5913
2 20261 82.5947 49.3703 1241968 333.6361 20.6308 12.47416117349111
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GPS BII-04
1 20302U 89085A 97150.36035122 .00000017 00000-0 10000-3 0 4213
2 20302 53.1671 211.7368 0031859 188.7254 171.2920 2.00554390 55797
Meteor 3-3
1 20305U 89086A 97152.19865531 .00000044 00000-0 10000-3 0 8231
2 20305 82.5514 243.2779 0007343 163.0203 197.1158 13.04439662363702
COBE
1 20322U 89089A 97152.49365260 -.00000316 00000-0 -17410-3 0 3095
2 20322 98.9297 167.6093 0009026 136.6496 223.5382 14.03460852385924
Kvant-2
1 20335U 89093A 97153.18101877 -.00016871 00000-0 -20296-3 0 9155
2 20335 51.6521 161.2535 0005608 103.8050 256.3558 15.59439705427807
GPS BII-05
1 20361U 89097A 97151.87778018 -.00000085 00000-0 00000+0 0 2305
2 20361 56.1842 39.5098 0098923 137.0379 223.6787 2.00567650 45303
COSMOS 2054 (Altair-1)
1 20391U 89101A 97147.53522367 -.00000146 00000-0 00000+0 0 5396
2 20391 4.4830 61.2862 0000936 283.2005 76.5418 1.00265804 27454
SPOT 2
1 20436U 90005A 97151.21644323 -.00000044 00000-0 00000+0 0 2325
2 20436 98.7260 226.1601 0001848 67.5279 292.6089 14.20027471381235
UO-14
1 20437U 90005B 97150.18564229 .00000028 00000-0 27594-4 0 2724
2 20437 98.5184 232.2423 0010226 263.1260 96.8761 14.29961165383647
AO-16
1 20439U 90005D 97150.20097439 .00000070 00000-0 43979-4 0 688
2 20439 98.5360 235.1480 0010547 264.7517 95.2459 14.30009267383665
DO-17
1 20440U 90005E 97152.28757576 .00000038 00000-0 31351-4 0 714
2 20440 98.5400 238.0423 0010604 256.3105 103.6895 14.30152148383996
WO-18
1 20441U 90005F 97150.25612687 .00000022 00000-0 25174-4 0 734
2 20441 98.5384 235.9489 0011132 262.5721 97.4195 14.30119190383708
LO-19
1 20442U 90005G 97152.25366156 .00000009 00000-0 20158-4 0 714
2 20442 98.5430 238.5709 0011394 255.2657 104.7263 14.30233828384010
GPS BII-06
1 20452U 90008A 97152.27774781 .00000081 00000-0 10000-3 0 3219
2 20452 54.0715 152.5332 0064708 95.0148 265.7082 2.00562684 53810
MOS-1B
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Glonass 73
1 23513U 95009C 97151.38264215 -.00000034 00000-0 00000+0 0 3701
2 23513 64.5196 312.0183 0013002 197.0681 162.8800 2.13102637 17393
GMS 5
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1 23522U 95011B 97151.61384942 -.00000298 00000-0 00000+0 0 2981
2 23522 0.4453 347.4240 0002399 213.1458 49.5700 1.00266413 7941
DMSP B5D2-8
1 23533U 95015A 97153.01673321 .00000031 00000-0 40426-4 0 01
2 23533 98.8475 157.1153 0007580 135.2667 224.9118 14.12791492113026
OSC 1
1 23545U 95017A 97150.21248800 .00000154 00000-0 60599-4 0 2253
2 23545 69.9717 84.7513 0010582 57.5986 302.6168 14.45534739113808
OSC 2
1 23546U 95017B 97149.89907453 .00000165 00000-0 63844-4 0 2597
2 23546 69.9786 85.7630 0010291 47.3001 312.8994 14.45540040113765
Microlab 1
1 23547U 95017C 97149.88734774 .00000237 00000-0 83988-4 0 1973
2 23547 69.9777 85.3936 0010417 48.7512 311.4510 14.45705859113774
OFEQ 3
1 23549U 95018A 97152.23729050 .00018461 00000-0 39496-3 0 5695
2 23549 143.3583 209.8457 0188308 217.5191 141.2261 15.25823384119482
GFZ-1
1 23558U 86017JE 97153.25331821 .00003602 00000-0 41843-4 0 2465
2 23558 51.6481 144.2363 0006453 96.5049 263.6680 15.64768725644774
ERS-2
1 23560U 95021A 97151.95318804 -.00000015 00000-0 10711-4 0 3900
2 23560 98.5482 227.0006 0001175 71.2002 288.9320 14.32249123110495
Spektr
1 23579U 95024A 97153.18101877 -.00016871 00000-0 -20296-3 0 6684
2 23579 51.6521 161.2535 0005608 103.8050 256.3558 15.59439705116119
GOES 9
1 23581U 95025A 97150.35699572 .00000073 00000-0 10000-3 0 4302
2 23581 0.3114 90.8561 0001836 337.7889 172.7129 1.00279313 7408
Helios 1A
1 23605U 95033A 97153.25783986 .00000144 00000-0 36690-4 0 5307
2 23605 98.1530 90.5600 0001418 70.9421 289.1935 14.63807519101778
UPM SAT 1
1 23606U 95033B 97150.21123111 .00000281 00000-0 58245-4 0 2780
2 23606 98.1352 89.7699 0007149 158.3956 201.7565 14.67403635101606
CERISE
1 23607U 95033C 97152.87953771 .00000087 00000-0 24170-4 0 1792
2 23607 98.1371 92.1501 0006297 149.7013 210.4556 14.67026698102001
TDRS 7
1 23613U 95035B 97152.62036517 .00000088 00000-0 00000+0 0 3462
2 23613 1.4002 81.3266 0004569 344.4636 236.8607 1.00283189 6880
Glonass 74
1 23620U 95037A 97151.63566623 .00000080 00000-0 00000+0 0 2975
2 23620 64.8136 192.3203 0018106 174.2189 185.8758 2.13102752 14438
Glonass 75
1 23621U 95037B 97153.22175875 .00000088 00000-0 00000+0 0 3023
2 23621 64.8309 192.2752 0018346 185.3219 174.7311 2.13102251 14461
Glonass 76
1 23622U 95037C 97152.34103474 .00000085 00000-0 00000+0 0 3108
2 23622 64.8205 192.3005 0036255 168.6257 191.5327 2.13102589 14440
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Prognoz-M2
1 23632U 95039A 97152.67852050 -.00001435 00000-0 00000+0 0 1376
2 23632 72.2660 246.8200 7373316 331.1290 41.1820 0.26366178 1761
SICH-1
1 23657U 95046A 97148.57185999 .00000022 00000-0 -17986-7 0 1714
2 23657 82.5328 242.6257 0028909 11.6011 348.5857 14.73554564 93690
RADARSAT
1 23710U 95059A 97150.88470997 .00000142 00000-0 72025-4 0 2771
2 23710 98.5795 158.6181 0001277 54.3049 305.8253 14.29989881 81936
Glonass 79
1 23734U 95068A 97152.92866611 .00000088 00000-0 00000+0 0 2943
2 23734 64.8173 192.1922 0018814 318.1286 41.8060 2.13101802 11422
Glonass 78
1 23735U 95068B 97152.16544707 .00000084 00000-0 00000+0 0 2787
2 23735 64.8246 192.2138 0008423 221.8396 138.1724 2.13124245 11402
Glonass 77
1 23736U 95068C 97152.69378630 .00000087 00000-0 00000+0 0 2688
2 23736 64.8069 192.2040 0008524 207.5403 152.4886 2.13101951 11418
XTE
1 23757U 95074A 97150.67097821 .00000611 00000-0 21935-4 0 1502
2 23757 22.9845 206.1520 0013281 257.5354 102.3644 14.97835923 77621
Polar
1 23802U 96013A 97150.74291849 .00000030 00000-0 00000+0 0 1376
2 23802 86.3699 22.2682 6525314 269.2126 21.5237 1.35670993 6294
1996010E
1 23824U 96010E 97152.55442985 .00007349 00000-0 58810-2 0 2575
2 23824 47.4967 142.5372 6796841 130.1739 312.4583 2.85991458 11310
GPS BIIA-25
1 23833U 96019A 97152.89988573 -.00000072 00000-0 00000+0 0 1873
2 23833 54.6034 333.7264 0025235 127.9759 232.2611 2.00565357 8691
Priroda
1 23848U 96023A 97153.18101877 -.00016871 00000-0 -20296-3 0 3578
2 23848 51.6521 161.2535 0005608 103.8050 256.3558 15.59439705 63209
MSX
1 23851U 96024A 97152.05792210 -.00000047 00000-0 00000+0 0 2365
2 23851 99.4128 145.2514 0006654 280.1297 79.9142 13.97392966 56228
SAX
1 23857U 96027A 97143.88603146 .00001193 00000-0 42347-4 0 774
2 23857 3.9536 144.5036 0014211 267.8009 92.0468 14.91823242 58106
MSTI 3
1 23868U 96031A 97152.56777325 .00001922 00000-0 39647-4 0 1531
2 23868 97.1188 342.9810 0010103 344.0238 16.0692 15.47081508 58814
TOMS-EP
1 23940U 96037A 97149.78015759 .00002882 00000-0 12720-3 0 1194
2 23940 97.4197 56.9768 0011569 206.3942 153.6706 15.22510248 50346
GPS BIIA-26
1 23953U 96041A 97151.82592734 -.00000027 00000-0 00000+0 0 1503
2 23953 55.2031 94.3121 0022399 28.3300 331.7438 2.00550977 6461
ADEOS
1 24277U 96046A 97151.22221980 -.00000044 00000-0 00000+0 0 1817
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2 24277 98.5978 229.0065 0001061 109.6033 250.5262 14.27646221 40948
FO-29
1 24278U 96046B 97152.53268485 -.00000044 00000-0 -73151-5 0 828
2 24278 98.5397 195.8960 0350546 226.7632 130.3747 13.52630420 39008
FAST
1 24285U 96049A 97152.77105119 .00002731 00000-0 26401-3 0 950
2 24285 82.9845 46.1920 2207974 20.3167 347.3268 10.82172379 30759
1996049B
1 24286U 96049B 97152.58053824 .00002749 00000-0 26461-3 0 1052
2 24286 83.0020 46.4535 2206216 20.1522 347.4219 10.82608957 30734
Microsat
1 24291U 96050A 97151.54227456 .00038156 64763-5 29167-3 0 2171
2 24291 62.7908 194.3784 0528483 147.4545 216.0285 14.83252194 40476
MO-30
1 24305U 96052B 97153.06411467 .00000203 00000-0 20364-3 0 1085
2 24305 82.9373 5.7687 0028722 248.4088 111.3992 13.73092788 36986
GPS BIIA-27
1 24320U 96056A 97149.19017795 -.00000044 00000-0 00000+0 0 771
2 24320 54.5635 274.3986 0048163 92.7199 267.8375 2.00551359 5079
SAC-B/HETE
1 24645U 96061A 97149.88203748 .00000904 00000-0 52673-4 0 703
2 24645 37.9745 331.7018 0046314 145.7511 214.6254 15.15034513 31289
Soyuz TM-25
1 24717U 97003A 97153.18101877 -.00016871 00000-0 -20296-3 0 941
2 24717 51.6521 161.2535 0005608 103.8050 256.3558 15.59439705644682
ZEYA
1 24744U 97010A 97150.19429111 .00003516 00000-0 11854-3 0 446
2 24744 97.2760 55.5946 0008228 140.5447 219.6396 15.31349261 13334
DMSP B5D2-9
1 24753U 97012A 97153.02338677 .00000065 00000-0 58583-4 0 547
2 24753 98.9357 197.3458 0010068 89.5191 270.7144 14.12980132 8249
Progress M-34
1 24757U 97014A 97152.73243411 .00020890 00000-0 26411-3 0 688
2 24757 51.6516 163.5067 0006034 100.5851 259.5377 15.59472181 8764
MINISAT 01
1 24779U 97018A 97152.51718292 .00001627 00000-0 60526-4 0 140
2 24779 150.9690 28.3495 0014114 23.6761 336.4491 14.98307776 6163
CELESTIS
1 24780U 97018B 97149.48708473 .00001515 00000-0 48117-4 0 175
2 24780 150.9735 9.2724 0019847 349.5447 10.4738 14.99576825 5714
GOES 10
1 24786U 97019A 97149.60799850 -.00000100 00000-0 00000+0 0 607
2 24786 0.4149 277.5032 0002746 61.8306 21.3761 1.00267425 373
IRIDIUM 1
1 24792U 97020A 97152.56565139 -.00016072 00000-0 -57546-2 0 433
2 24792 86.3975 137.5037 0004481 80.8312 279.3396 14.34259249 3925
IRIDIUM 2
1 24793U 97020B 97152.90812501 -.00010633 00000-0 -38073-2 0 486
2 24793 86.3976 137.3392 0005803 90.0212 270.1647 14.34245828 3971
IRIDIUM 3
```

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1 24794U 97020C 97152.55294946 -.00003496 00000-0 -12560-2 0 364
2 24794 86.4128 137.4694 0006441 85.2424 274.9512 14.34207418 3929
IRIDIUM 4
1 24795U 97020D 97152.82592489 -.00012744 00000-0 -45764-2 0 423
2 24795 86.3998 137.4022 0013311 89.8071 270.4849 14.34059435 3985
IRIDIUM 5
1 24796U 97020E 97152.88910393 -.00008169 00000-0 -29277-2 0 469
2 24796 86.3950 137.3706 0009105 120.1289 240.0813 14.34196873 3980
1997020F
1 24797U 97020F 97149.91494298 .00000137 00000-0 26315-4 0 121
2 24797 86.8985 140.5038 0250364 130.9212 231.3963 14.35798596 3483
DFH-3
1 24798U 97021A 97152.11322304 -.00000369 00000-0 00000+0 0 459
2 24798 0.2971 274.1799 0000629 281.0283 220.1977 1.00268947 220
1997021B
1 24799U 97021B 97148.13438835 .00008448 -11680-6 61146-3 0 72
2 24799 29.1410 97.6385 7307843 189.3962 140.6212 2.27569311 370
Cosmos 2342
1 24800U 97022A 97150.96125399 -.00000530 00000-0 45376-3 0 303
2 24800 62.8424 187.6608 7395511 312.7160 5.3913 2.00611622 336
1997022B
1 24801U 97022B 97152.92326883 .00176483 17162-4 42450-3 0 337
2 24801 62.7742 119.3197 0181431 115.6725 246.3260 15.73750981 2978
1997022C
1 24802U 97022C 97153.24474162 .00547069 78088-5 57133-3 0 520
2 24802 62.8026 117.5281 0186154 119.8717 242.1072 15.84035893 3036
1997022D
1 24803U 97022D 97150.23208540 .00000462 00000-0 39208-3 0 104
2 24803 62.8264 187.6920 7363258 312.7028 5.4960 2.04243385 338
Cosmos 2343
1 24805U 97024A 97153.19989828 .00205017 70221-5 18605-3 0 592
2 24805 64.8576 26.5478 0099971 83.9822 277.2727 16.02352030 2846
1997024B
1 24806U 97024B 97140.61065422 .20778430 80540-5 12013-3 0 375
2 24806 64.8497 72.3527 0016083 57.4230 302.7904 16.53768130 831
THOR 2
1 24808U 97025A 97152.74609661 .00000055 00000-0 10000-3 0 151
2 24808 0.0472 94.3583 0082933 295.6976 119.5214 1.01586376 154
1997025B
1 24809U 97025B 97149.94253480 .00000124 00000-0 54910-5 0 117
2 24809 26.3028 346.8117 0676108 357.8661 1.9153 13.27595795 1193
1997025C
1 24810U 97025C 97152.09807817 -.00000158 00000-0 00000+0 0 100
2 24810 19.7448 29.1574 6955390 4.3571 359.5726 2.16111890 247
TELSTAR 5
1 24812U 97026A 97152.81119640 -.00000136 00000-0 00000+0 0 86
2 24812 0.0349 269.9502 0019587 351.9102 185.0046 1.00080226 103
1997026B
1 24813U 97026B 97151.56543137 .50520782 12739-4 20596-3 0 439
2 24813 51.5856 108.3339 0018253 247.1395 113.2207 16.55950717 1123
```

1997026C
1 24814U 97026C 97147.03793981 .19653485 12492-4 76733-3 0 219
2 24814 51.5690 133.6719 0003013 249.2564 120.5605 16.44027021 383
1997026D
1 24815U 97026D 97146.29787527 .00000016 00000-0 00000+0 0 18
2 24815 17.6027 148.5583 5305507 359.0246 0.2120 1.89996685 21
--
Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1634. *** Space Station MIR ***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <3394f9c9.162787@news.bctel.ca>
Source record: 18844
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

Seems Space Station MIR is back again.
I heard some kind of signal on 145.800 too.

I will try to update the information on this newsgroup.

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1635. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <3394fa45.287262@news.bctel.ca>
Source record: 18845

On 3 Jun 1997 03:25:46 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:

>I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the
>packet signals on 145.800 MHz. 73 de Bj

sorry... I heard the signal too. I heard just a minute ago.

Please disregard last posting. I will try to update MIR information
on this newsgroup.

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1636. *** MIR Web Page ***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <3394fe9d.1398778@news.bctel.ca>
Source record: 18846
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

MIR Information Page (under construction) is at:
http://www.geocities.com/Yosemite/1325/mir.htm

Visit 9 other radio sites too !!!!!

See you there !!!!!

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
http://www.geocities.com/Yosemite/1325/mir.htm (Space Station MIR)
http://www.geocities.com/Yosemite/1325/prop.htm (Propagation Info)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1637. IC-821H with KPC9612

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: vk6xlr@onaustralia.com.au
Message-ID: <33955d19.40803769@news.bigpond.com>
Source record: 18847
Cross-posted to: alt.ham-radio.packet,aus.radio.packet,rec.radio.amateur.space

I'm after the correct connections between the Icom IC821H and
Kantronics 9612. I want to operate 1200 & 9600 using the rear ACC
connector of the 821.

Thanks,
73's

Rick Kowalewski, VK6XLR, Exmouth, WA, vk6xlr@bigpond.com
"Out of order there is chaos, and out of chaos there is order"

1638. Re: How do I request telemetry data??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: Figaredo Martin Alberto Ignacio <figarema@ee.port.ac.uk>
Message-ID: <339575DA.2B8A@ee.port.ac.uk>
Source record: 18848

Krister Sundstroem wrote:
>
> Hi!
>
> I'm a student at the Swedish Space Engineering Campus, and right now I'm working
> on my degree project. It consist of making a lab in our satellite course... Now
> we have a small problem while recieving telemetry data from satllites. None of
> us have ever tried such thing, and that's why we think a lab on Ground Station
> Technology could be very useful. We are space engineers after all.. :o)
>
> Now to my question, if anyone can answer it... Is the telemetry data from the
> amateur satellites transmitted 24h aday or do we have to send a request to the
> satellite? Then we will have a huge problem.... But so be it if it's so... :o)
>
> Thanks for your help and have a nice summer, if you live on the north side of
> the globe....

Most of them 24h telemetry. The easiest to listen to is DO-17 at 145.845
(not sure about the freq, check http://www.amsat.org/) , it can be
heard with a talky!!
But I am not sure if it is working now... it crashes from time to time.

Cheers

--
Alberto Ignacio Figaredo Martin | email: figarema@ee.port.ac.uk
Now in the Gs land | AX25: EB1CFL@EA1URA.EAO.ESP.EU
EB1CFL/G & EC1AJY/G (Morse is not so difficult! 73s..)
http://www.ee.port.ac.uk/~students/figarema/

1639. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: wowens@dpnet.net
Message-ID: <339575b8.1035006@news.dpnet.net>
Source record: 18849

On Wed, 04 Jun 1997 05:17:48 GMT, masa@writeme.NOSPAMcom (Masa) wrote:

>On 3 Jun 1997 03:25:46 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:
>
>>I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the
>>packet signals on 145.800 MHz. 73 de Bj
>
>sorry... I heard the signal too. I heard just a minute ago.
>
>Please disregard last posting. I will try to update MIR information
>on this newsgroup.
>
>

The packet signals that I hear on 145.800 are constant, every few
minutes, are these from the Mir Space Station? And do they ever switch
to voice on the same freq.?

1640. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <3395885a.2820959@news.fastlink.com.au>
Source record: 18850
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

ve7vdx@dowco.com (Scott Leaf) wrote:

:SB freqs @ amsat $FREQ06.02
:Amateur CW/Voice Satellite Frequencies for June 2, 1997.

Silly you. You put 6th of Febuary 97 in the subject line. :-)

Barry

==========
To reply via email please remove the XX from my
return address.

1641. Mobile pacsat radio?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: Ken Harris <kjh@shoreline-studios.com>
Message-ID: <3395A94C.41C6@shoreline-studios.com>
Source record: 18851
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc

Can you recommend a mobile radio that will do (9600)
pacsat? I guess it has to be dual band, full duplex (separate
antennae connections seem like a good idea.

Ken J. Harris voice: 415/969-7896 x 15 fax: 415/969-7864
mailto:kjh@shoreline-studios.com http://www.shoreline-studios.com
snail mail: 1804 N. Shoreline Blvd, Ste 240, Mountain View, CA 94043
ICBM: 37 25.10' N, 122 04.67' W

1642. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: Michael J Wooding <g6iqm@g6iqm.demon.co.uk>
Message-ID: <QseRFAAPyalzEw8v@g6iqm.demon.co.uk>
Source record: 18852
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

In article <3395885a.2820959@news.fastlink.com.au>, Barry O'Grady
<barryoXX@fastlink.com.au> writes
>ve7vdx@dowco.com (Scott Leaf) wrote:
>
>:SB freqs @ amsat $FREQ06.02
>:Amateur CW/Voice Satellite Frequencies for June 2, 1997.
>
>Silly you. You put 6th of Febuary 97 in the subject line. :-)
>
>Barry
>
>====================================
>To reply via email please remove the XX from my
>return address.

No he didn't. Remember he is not from the UK, therefore using the
'international' dating method of putting the month number first, but I
guess you know that really.

Mike

--
Michael J Wooding G6IQM email: vhf-comm@g6iqm.demon.co.uk
World Wide Web site http://www.vhfcomm.co.uk
KM Publications, 5 Ware Orchard, Barby, Nr.Rugby, CV23 8UF, UK
Tel: (0)1788 890365 Fax: (0)1788 891883
VHF Communications Magazine - Especially covering VHF, UHF and Microwaves

1643. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5n4ldffoo1@news.mhv.net>
Source record: 18853

In article <339575b8.1035006@news.dpnet.net>, wowens@dpnet.net (William Owens N3ZLL) wrote:
>On Wed, 04 Jun 1997 05:17:48 GMT, masa@writeme.NOSPAMcom (Masa) wrote:
>
>>On 3 Jun 1997 03:25:46 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:
>>
>>>I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the
>>>packet signals on 145.800 MHz. 73 de Bj
>>
>>sorry... I heard the signal too. I heard just a minute ago.
>>
>>Please disregard last posting. I will try to update MIR information
>>on this newsgroup.
>
>The packet signals that I hear on 145.800 are constant, every few
>minutes, are these from the Mir Space Station? And do they ever switch
>to voice on the same freq.?

They use packet and voice on the same freq. IF Mir was over your location
you must of heard packet...

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio web site:
http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ TW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1644. Mir Contact

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: jrayol@netium.COM.BR
Message-ID: <3395DE84.3261@netium.com.br>
Source record: 18854

```
Dear Friends.
Fellow my contact with Mir.
73's PP8KWA

cmd:C R0MIR-1
*** CONNECTED to R0MIR-1
Logged on to R0MIR's Personal Message System

CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
S WORLD

Subject:
Hello

Message:
Hello World from Amazonas Brasil
By PP8KWA
jrayol@netium.com.br
/ex
Message saved as Msg # 103

CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
l

Msg # Stat Date Time To From @ BBS Subject
103 P 06/04/97 23:53 WORLD PP8KWA Hello
102 PR 06/04/97 22:20 TODOS PT7WA Hello Everybody
101 PR 06/04/97 13:35 N6C0 R0MIR Frequencies?
100 PR 06/04/97 12:04 R0MIR N6CO TNX
99 PR 06/04/97 12:03 R0MIR N6CO bio
98 PR 06/04/97 12:02 ALL N6CO 2 Line MIR Keps 6-03
97 PR 06/04/97 10:28 R0MIR A6LIE Hello Mike and CREW!
96 PR 06/04/97 10:26 R0MIR A6LIE Hello Mike and CREW!
94 PR 06/04/97 07:26 R0MIR VE1AMA Question
93 PR 06/04/97 07:25 R0MIR VE1AMA Hello MIR crew...
7023 Bytes free
Next message Number 104

CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
s crew

Subject:
Hello Friends...

Message:
Hello Friends in Mir Station.
My Name is Fred I live in Amazonas Brasil.
```

```
All the best for all.
73's
/ex
*** Retry count exceeded
*** DISCONNECTED: R0MIR-1
```

1645. X-Quad

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: dogpark@interlog.com
Message-ID: <19970604184344161109 2@dogpark.interlog.com>
Source record: 18855
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna

Hi,

Does anyone know where I can get any information (price / availability etc.) about the 2 meter or 70 cm crossed X-Beams (I think the manufacturers name is 'ANDES').

73 & Thanks

Don Agro VE3VRW

1646. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-04 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <3395f6c8.1403928@news.bctel.ca>
Source record: 18856

On Wed, 04 Jun 1997 14:06:26 GMT, wowens@dpnet.net (William Owens N3ZLL) wrote:

>The packet signals that I hear on 145.800 are constant, every few >minutes, are these from the Mir Space Station? And do they ever switch >to voice on the same freq.?

I believe it is from MIR station, but I am not sure. It may be from another satellite. Also, I don't know why MIR is now using 145.8 for packet communication.

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
http://www.geocities.com/Yosemite/1325/mir.htm (Space Station MIR)
http://www.geocities.com/Yosemite/1325/prop.htm (Propagation Info)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1647. Re: rs-10?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <339639eb.2105112@news.capital.net>
Source record: 18857

On 3 Jun 1997 04:12:36 GMT, QUVP17A@prodigy.com (Joseph Jarrett)
wrote:

>SUBJECT: Re: Is it RS-10 or Me?
>YES I HAVE THE SAME PROBLEM...
>I STARTED PLAYING WITH RECEIVING SAT. NEAR THE END OF MAY..
>I WAS RECEIVING THE RS-10 AND THEN THE RS-12...
>ON MAY THE 28TH I PUT IN NEW KEPS USING TRAKSAT..
>I NOTICED THE RS-10 WAS TRAILING THE RS-12 AND I THOUGHT I HAD A
>PROBLEM WITH MY PROGRAM BUT THEN I NOTICED I WAS RECEIVING THE RS-12
>GREAT THEN THE RS-10 CAME PASSED AND NO SIGNAL AND I HAVE NOT RECEIVED IT
>SINCE.. WHAT COULD IT BE..I MISS RECEIVING IT
>IF YOU FIND OUT LET ME KNOW...ADDRESS IS J.JARRETT@JUNO.COM
>KQ4TX
>
>
Turn off your CAPS LOCK key. It's difficult to read, and is considered
shouting.

--
73,
Butch

To send mail
delete the xyz]
from my address.

1648. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <339642e4.8417118@news.fastlink.com.au>
Source record: 18858
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

Michael J Wooding <g6iqm@g6iqm.demon.co.uk> wrote:

:In article <3395885a.2820959@news.fastlink.com.au>, Barry O'Grady
:<barryoXX@fastlink.com.au> writes
:>ve7vdx@dowco.com (Scott Leaf) wrote:
:>
:>:SB freqs @ amsat $FREQ06.02
:>:Amateur CW/Voice Satellite Frequencies for June 2, 1997.
:>
:>Silly you. You put 6th of Febuary 97 in the subject line. :-)
:>
:>Barry
:>
:>===================================
:>To reply via email please remove the XX from my
:>return address.
:
:No he didn't. Remember he is not from the UK, therefore using the
:'international' dating method of putting the month number first, but I
:guess you know that really.
:
:Mike

It was posted only in the UK newsgroup. Therefore the date he put was
6th of Febuary '97 according to the standards of the newsgroup he posted
to. You shouldn't make excuses for these people.

Also, unless otherwise noted, it is reasonable to assume that the world
standard format will be used when posted in a world wide forum.

Barry

===================================
To reply via email please remove the XX from my
return address.

1649. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Glenn <grhanse@ibm.net>
Message-ID: <01bc717c$c53ca2a0$f08293cf@glenn>
Source record: 18859
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

Barry O'Grady <barryoXX@fastlink.com.au> wrote ....
>
> It was posted only in the UK newsgroup. Therefore the date he put was
> 6th of Febuary '97 according to the standards of the newsgroup he posted
> to.
Take Usenet 101 and learn to read headers. First assignment, this header
will send this message to what groups?

Newsgroups: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

> You shouldn't make excuses for these people.

OK. You don't know what you are saying and you have no excuse. OK?

> Also, unless otherwise noted, it is reasonable to assume that the world
> standard format will be used when posted in a world wide forum.

Golly Barry, do you know the world standard for people who assume things?

Now Barry, take a deep breath of air and read and see what you can learn.
Don't jump to conclusions and use the resources at hand. If you do you will
learn things like, posts can go to more than one newsgroup and, yes the MIr
is operational or even cool things like why the Mir uplink is different
than what it used to be.

grh

1650. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5n5nqejct1@artemis.backbone.ou.edu>
Source record: 18860
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

barryoXX@fastlink.com.au (Barry O'Grady) writes:

>Michael J Wooding <g6iqm@g6iqm.demon.co.uk> wrote:

<snip>

>:No he didn't. Remember he is not from the UK, therefore using the
>:'international' dating method of putting the month number first, but I
>:guess you know that really.
>:
>:Mike
>
>It was posted only in the UK newsgroup. Therefore the date he put was
>6th of Febuary '97 according to the standards of the newsgroup he posted
>to. You shouldn't make excuses for these people.

Where is it "only" in UK group?

Newsgroups: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

I see _three_ (3) groups: aus.*, uk.*, and r.r.a.s.

Since it was an "international" post, it follows "international" rules.

>Barry

Let's quit the bickering and move on to something more important, like
the disappearance of RS-10!

John KC5VEI
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

1651. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Chris Nicholson <csnichol@mail.delcoelect.com>
Message-ID: <3396AFD1.542B@mail.delcoelect.com>
Source record: 18861

William Owens N3ZLL wrote:
>
> On Wed, 04 Jun 1997 05:17:48 GMT, masa@writeme.NOSPAMcom (Masa) wrote:
>
> >On 3 Jun 1997 03:25:46 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:
> >
> >>I monitored the 0200 UTC June 3rd pass of MIR over the USA. I heard the
> >>packet signals on 145.800 MHz. 73 de Bj
> >
> >sorry... I heard the signal too. I heard just a minute ago.
> >
> >Please disregard last posting. I will try to update MIR information
> >on this newsgroup.
> >
> >
>
> The packet signals that I hear on 145.800 are constant, every few
> minutes, are these from the Mir Space Station? And do they ever switch
> to voice on the same freq.?

These are probably terrestrial APRS on 145.79 this is killing
MIR contacts. With so many APRS stations out there I think MIR will
have to change frequency to make it a viable 2m station.

73 Chris
N9LLO

1652. Sunspots and Global Climate - An Appology

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Mike Flaugher N9LLX <flaugher@thepoint.net>
Message-ID: <01bc71c5$67b8edc0$dfa2f6ce@flaugher.thepoint.net>
Source record: 18862
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.shortwave,sci.astro,sci.astro.amateur,sci.environment,sci.geo.meteorology

Over the last few months I've tried to "stir the waters" a bit to provoke some discussion on sunspots and climate, a subject I got interested in as a ham radio operator years ago. Lots of people responded and sent me e-mail, but an article I read the other day by George Reid at http://www.agu.org/revgeophys/reid00.html finally put the while thing into perspective for me. I realized then that I'd been preaching to the choir, and also that it's likely to be SOME time before a real solar-Earth connection is developed.

It seems there are a lot of scientists, good scientists at places like NASA, NOAA, Yale, Harvard, etc. who have found strong correlations between solar change and climate/weather change on Earth. The correlations themselves are not in question. The problem is that they are ONLY correlations and we do not yet understand the mechanisms. Every explanation why a decline or lengthening of the sunspot cycles correlates with global cooling and increase and shortening of the cycles leads to global warming are theory. Proof according to the "scientific method" is needed, and proof promises to be hard to come by in this case. The need for research is great, but right now a lot of our efforts are being poured into anthropogenic (manmade) global warming.

My appologies to anyone and everyone I may have misunderstood. Like many, I have a real gut feeling that the sun is a major player in our weather patterns and long-term climate, but I now understand that we have to play by the rules. Until these things get proven out it's premature to tout solar power as the real biggie. Too bad because if we HAD this knowledge it would go a long way toward helping climatologists explain the warming and cooling anomalies we've been experiencing since sunspot cycle 22 started into decline.

Check out the neat "Graphical comparison of cylces 21, 22 and 23" at the DX Listener's Club page at http://dxlc.com/solar/. Also check out cycle 20 which "correlated" with the cooling patterns of the early 70's. Is another cycle 20 on the way? Hmmmm.

--

1653. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: send.no.junk.email.to.ken.thompson_at.sign_symbios.com.delete.this@no.spam.org
Message-ID: <send.no.junk.email.to.ken.thompson_at.sign_symbios.com.delete.this.1568.000AE000@no.spam.org>
Source record: 18863

>another satellite. Also, I don't know why MIR is now using 145.8 for
>packet communication.

145.8 was their uplink with 145.2 the down.
They swapped it around.
Probably getting too much interference from that crap on 145.79
called APRS.

1654. Re: Noise reduction, SNR enhancement

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <3396d671.5276046@news.earthlink.net>
Source record: 18864
Cross-posted to: rec.radio.cb,rec.radio.shotwave,rec.radio.broadcast,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Thu, 05 Jun 1997 10:19:42 +0200, Ulrich Schnaidt
<uschnaid@ba-stuttgart.de> wrote:

>Hello,
>
>I use the simulationtool 'PTOLEMY' under Linux.
>
>I need to know anything about noise and noise reduction algorithm.
>
>Maybe anyone of you knows a lot about that topic.
>Also literature links or internet information is very welcome.
>
>It would be nice if you can help in that.
>You can cantact me via email (see below).
>
>Thanx in advance,
> Uli
>
>--
http://www.eskimo.com/~billb/hum/hum.html
dr

1655. Phasing Harness for Tonnas

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Jonathan <tsumon@gtnet.gov.uk>
Message-ID: <33967087.3B12@gtnet.gov.uk>
Source record: 18865

PHASING Harnesses / Power splitters question for TONNA antennas

I have a Tonna 9 element crossed beam for 144 MHz and would
like to make a phasing harnes for circular polarisation.

This particular antenna has its driven elements virtually next
to each other so is a straight power splitter with an extra
quarter wave inserted in one feed line the thing to use?

I also have a Tonna 19 element crossed for 435 MHz. However
this time the driven elements look as if they are already a
quarter wave apart. May I therefore use a straight power
splitter to obtain circular polarisation?

I would be very grateful for the answer.

Jonathan G4MDU

1656. Re: * Amateur CW/Voice Satellite Frequencies for 06.02.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Michael J Wooding <g6iqm@g6iqm.demon.co.uk>
Message-ID: <KZwHoHA3pvlzEwND@g6iqm.demon.co.uk>
Source record: 18866
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

In article <339642e4.8417118@news.fastlink.com.au>, Barry O'Grady
<barryoXX@fastlink.com.au> writes
>Also, unless otherwise noted, it is reasonable to assume that the world
>standard format will be used when posted in a world wide forum.

Which is essentially what he did.

Why not take more note of the info he was imparting instead of
nitpicking about how he did it.

Mike

--
Michael J Wooding G6IQM email: vhf-comm@g6iqm.demon.co.uk
World Wide Web site http://www.vhfcomm.co.uk
KM Publications, 5 Ware Orchard, Barby, Nr.Rugby, CV23 8UF, UK
Tel: (0)1788 890365 Fax: (0)1788 891883
VHF Communications Magazine - Especially covering VHF, UHF and Microwaves

1657. FAQ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: mh@nwu.edu
Message-ID: <mh-0506971405560001@fwk101035.res-hall.nwu.edu>
Source record: 18867

I have not seen the FAQ or its location posted recently. Is there a FAQ?

Mark Harms
mh@nwu.edu
"Go Cats!"

1658. Instant Track and Keps?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970605163005.5642B-100000@spacelink>
Source record: 18868

I am having a bear of a time loading fresh Keps into my copy of Instant Track. Is anyone else having this problem? Wasn't used to be this way!

Dick

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1659. WTB 2.4 GHz Downconverter

Newsgroup: rec.radio.amateur.space
Date: 1997-06-05 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc7171$f29f4aa0$3a280ace@home.the-bridge.net>
Source record: 18869

am looking to buy or trade and some money for a used 2.4 GHz
downconverter. I need to get one for satellite work. It can convert 2.4 GHz
down to 144 or 400 MHz bands. I have for trade and Alinco DJ-560 dual band
ht. Send me an e-mail with what you have. 73 and Thanks for your time de Bj
--

B.J. Arts
WT0N in EN-37mk
bjarts@the-bridge.net
Hibbing,MN U.S.A.

1660. Re: IC-821H with KPC9612

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: Brian Mork <morkNOSPAM@usa.net>
Message-ID: <3398C2B3.56C7@usa.net>
Source record: 18725
Cross-posted to: alt.ham-radio.packet,aus.radio.packet,rec.radio.amateur.space

Rick Kowalewski wrote:

> I'm after the correct connections between the Icom IC821H and
> Kantronics 9612. I want to operate 1200 & 9600 using the rear ACC
> connector of the 821.

Oops. I lied in my previous e-mail. I also have the 9612
1200 bps pinout (the same on all Kantronics modems):

1 - TXAudio
2 - External Carrier Detect (leave disconnected)
3 - PTT
4 - RXAudio
5 - RXAudio
6 - Ground
7 - VARIES! Power voltage or reset pin or nothing
8 - Ground
9 - Ground

73, Brian
--
Delete NOSPAM from address to reply!
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

1661. Re: IC-821H with KPC9612

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: Brian Mork <morkNOSPAM@usa.net>
Message-ID: <3398C1FE.6D25@usa.net>
Source record: 18726
Cross-posted to: alt.ham-radio.packet,aus.radio.packet,rec.radio.amateur.space

Rick Kowalewski wrote:

> I'm after the correct connections between the Icom IC821H and
> Kantronics 9612. I want to operate 1200 & 9600 using the rear ACC
> connector of the 821.

It just so happens our club station (K0MIC) acquired an
IC-821 and I've been messing with 9612s for weeks with
the Astronautics Dept (see my web page below).

Where did you get the 821 without the documentation?!

Looking into the radio from the back side, starting in the
lower left side, count clockwise around:

6
1 - 1200 bps RXAudio, DC coupled to IC109, a BU4053BCF
4 - 1200 bps TXAudio, AC coupled to either of two places,
software selectable from the IC-821 front panel.
2 - Ground
5
3 - PTT from the TNC
7
8 (center)

Sorry, that's all I know from memory. If you need more, I can
FAX you or USMail (send a SASE) of whatever 9612 docs or 821
docs you need.

--
Delete NOSPAM from address to reply!
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

1662. Re: Instant Track and Keps?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: Tom Warren <vo1ty@thezone.net>
Message-ID: <33986C9C.779B@thezone.net>
Source record: 18727

Richard David Glueck wrote:
>
> I am having a bear of a time loading fresh Keps into my copy of Instant
> Track. Is anyone else having this problem? Wasn't used to be this way!
>
> Dick
>
>
>
> ----------
> Richard David Glueck Email:glue9600@spacelink.msfc.nasa.govI have played with IT a bit and found that I have to save the download
to to a file in the same directory as IT is in. The file should also be
edited prior to updating IT .I use the NASA 2 line format (actully 3
lines like this.
Alouette 1
1 00424U 62049A 97154.82487369 .00000041 00000-0 38087-4 0 2936
2 00424 80.4632 296.7723 0022897 207.5894 152.4044 13.67895676730417

Removing all text other then the sats name and the code from the top and
bottom of the list you have downloaded
73 de VO1ty Tom

1663. Mailloop: Mass E-Mailing Software

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: <>
Message-ID: <5n8mkm$fr8@newsfep1.sprintmail.com>
Source record: 18870

Mailloop v3.0 is an industrial strength bulk mailer.

Mailloop v3.0 is a bulk mailing program for the internet. It can take a single message and broadcast it to either a listing of e-mail addresses or to a listing of newsgroups. Creates custom newsgroup lists by filtering NNTP servers. Creates custom e-mail lists by extracting them from newsgroups. Can also extract e-mail addresses or newsgroup names from other protocols. Built-in NNTP, SMTP, POP, FTP, HTTP, EXEC, CGI, WHOIS and FINGER clients. Anti-cancelbot feature. Automatically processes remove requests. Includes extensive on-line help.
The most powerful bulk mailer available. Requires Windows 95 or NT 3.51+ and internet access.

The "Program" Mailloop is only available in English.

For more info goto: http://205.199.4.219

http://205.199.4.219

Using it is easy:

1) Create a message (http://205.199.4.219/editor.htm)
...by using the pull down menus or
...by using any editor

2) Create a newsgroups list (http://205.199.4.219/news3.htm)
...by filtering an NNTP server or
...by importing from any text file or
...by manually creating with any editor or
...by extracting from any FTP file or
...by extracting from any HTTP file

3) Create an e-mail list (http://205.199.4.219/em3.htm)
...by extracting from newsgroups or
...by importing from any text file or
...by manually creating with any editor or
...by extracting from a WHOIS response or
...by extracting from a fingering response or
...by extracting from a UNIX response or
...by extracting from any FTP file or
...by extracting from any HTTP file or

4) Broadcast the message
...to the e-mail list or (http://205.199.4.219/embc.htm)
...to the newsgroup list (http://205.199.4.219/ngbc.htm)

5) Then process the remove requests
...by using the mailbox processor (http://205.199.4.219/pop.htm)

6) If you want you can use the Newsletter Sever
...The Newsletter Sever will allow you to have an topic-specific newsletter that other can subscribe
and unsubscribe to.
...Customizing this server response files (http://205.199.4.219/response.htm)
...Creating a new newsletter (http://205.199.4.219/create.htm)
...Creating and Updating a newsletter the actual newsletter (http://205.199.4.219/update.htm)

For more info visit http://205.199.4.219

http://205.199.4.219

1664. Plans needed for Sat Antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: kb8ydx@geocities.com
Message-ID: <339817c7.152522024@news.bright.net>
Source record: 18871

Hello. Anyone out there have designs fer Helical or dual-polarized antennas? Have friend wanting to build one. Any Help Appreciated.

TNX ES 73
Adam KB8YDX
kb8ydx@geocities.com

1665. Re: Noise reduction, SNR enhancement

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <3398148b.1951948@news.earthlink.net>
Source record: 18872
Cross-posted to: rec.radio.cb,rec.radio.shortwave,rec.radio.broadcast,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Thu, 05 Jun 1997 10:19:42 +0200, Ulrich Schnaidt
<uschnaid@ba-stuttgart.de> wrote:

>Hello,
>
>I use the simulationtool 'PTOLEMY' under Linux.
>
>I need to know anything about noise and noise reduction algorithm.
>
>Maybe anyone of you knows a lot about that topic.
>Also literature links or internet information is very welcome.
>
>It would be nice if you can help in that.
>You can cantact me via email (see below).
>
>Thanx in advance,
> Uli
>
>--
http://www.eskimo.com/~billb/hum/hum.html
dr

1666. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc7297$d61108c0$f6915cc1@dummy.forthnet.gr>
Source record: 18873

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97.
FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT
++30 81 761382.

1667. ARROW antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-06 00:00:00 UTC
From: ronchap@cybercomm.net
Message-ID: <3398112c.2617521@news.cybercomm.net>
Source record: 18874

Hello,
I just got done speaking to a HAM who told me about something called
an ARROW hand held satellite beam that lets you work the AO27
satellite with an HT.

He had lost the contact info. So he couldn't tell me were I could buy
this antenna.

Could someone give me more info on this antenna. Where can I buy it
and get product info.

73
from KA2HZO
RON

1668. Re: MIR PACKET HEARD IN USA

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5naomb$2dh$1@ddi2.digital.net>
Source record: 18728

In article <339575b8.1035006@news.dpnet.net> William Owens N3ZLL, wowens@dpnet.net writes:

>The packet signals that I hear on 145.800 are constant, every few >minutes, are these from the Mir Space Station? And do they ever switch >to voice on the same freq.?

Since Mir is in a low altitude orbit which circles the Earth every 90 minutes or so, it can only be over a given QTH for about 10 minutes MAX. (most passes are shorter in duration, your mileage may vary).

What you are hearing is certainly local terrestrial 2 meter packet contacts or beacons. 145.800 is the edge of the satellite band, and no terrestrial communications should occur at that frequency. Unfortunately should and does are different concepts.

Most likely you're hearing spillover from 145.79 Mhz. packet beacons. Try tuning your radio to 145.795 or 145.79. If the signal becomes louder and more distinct, you've found the source of your interference.

About six months ago all Mir 2 meter open operations (Voice QSOs and packet) were moved over to 145.200 uplink / 145.800 downlink. the same frequencies are used for both purposes, so you absolutely must listen first. If you hear an astronaut (or cosmonaut)'s voice - then DO NOT TRANSMIT PACKET!!!

The currently frequencies are compromises, and there is a lot of interference because of the lack of sensible two meter band plans, especially for packet. While it's fairly easy to find an open 2 meter frequency and still possible to find an open duplex 600 hz. spaced pair at any given location, there is no frequency which is consistenly available throughout the world.

Beside the QRM from 145.79 packet users (which really shouldn't have 'set up shop' on that frequency since that's part of the experimental portion of the band) the Mir cosmonauts are hearing the outputs of dozens of repeaters on their receive frequency 145.200. Your signal to Mir has to compete with all of those repeaters -- not just the ones in your particular area, but *all* of the 145.200 output repeaters within Mir's footprint!

Currently the hams around the world who are responsible for Mir's amateur radio activities are trying for a better set of frequencies which will satisfy more folks, and hopefully not interfere with existing bandplans too much.

I've compiled a FAQ about Mir's 2 meter amateur radio activities. The Unofficial Mir FAQ is available at on the worldwide web at -

http://www.phoenix.net/~mbordel/jscarc/mir/mirfaq.html

(thanks Matt!)

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant, author of The Unofficial Mir FAQ

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

1669. Re: arrow antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5nap9f$305$1@ddi2.digital.net>
Source record: 18729

In article <3398112c.2617521@news.cybercomm.net> Ron,
ronchap@cybercomm.net writes:
>I just got done speaking to a HAM who told me about something called
>an ARROW hand held satellite beam that lets you work the AO27
>satellite with an HT.
>
>He had lost the contact info. So he couldn't tell me were I could buy
>this antenna.
>
>
>Could someone give me more info on this antenna. Where can I buy it
>and get product info.

Based on your description I *think* I know what you're talking about, and what the confusion is. It's an arrow (generic name) antenna, not ARROW (brand name) antenna. The reason for it's particular name is that it is built out of aluminum archery arrows!

At last year's AMSAT Symposium in Tuscon somebody (I forgot who) presented a paper on a very portable AO-27 setup which consisted of a handheld radio, and a portable antenna setup -- perfect for the back of the car or field days.

The 'problem' with AO-27 is it has an extremely sensitive receiver (more often than not it picks up Spanish non-ham conversations (e.g. taxi drivers) from the Carribiean who are pirating the ham radio bands. These drivers are using 2 meter radios - and not concious of the fact that their transmissions are being received aboard a satellite, and retransmitted on the 70 cm. band to a much wider footprint than they could ever comprehend). But AO-27's transmitter is not as powerful. So to receive its signal you need a directional antenna, and a preamp.

Fortunately UHF Yagi antennas are fairly easy to build, and preamps are fairly cheap.

What this ham did was put everything together in a nice, easy to transport package which he could just toss in the back of his car, or carry while hiking, on field day, or whatever.

The paper is in the 1996 AMSAT meeting proceedings which is available from your lovely local Martha.

(Martha refers to AMSAT's 'mom', the only permanent AMSAT employee. She's the office manager, keeps track of how everything's done, and we all obey everything she tells us to do.)

Call Martha at 301-589-6062 and tell her that you'd like to purchase a copy of the 1996 Symposium papers. It's about $12 and well worth the cost!

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

1670. Re: arrow antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: n3wmt1@juno.com
Message-ID: <5nbnkn$ace@camel2.mindspring.com>
Source record: 18730

In their 1997 catalog, Arrow Antenna does in fact list a hand held sat
antenna. You can get their catalog from:
Arrow Antenna
1803 S. Greely Hwy. #B
Cheyenne, Wy 82007
(307) 638-2368
ARROW146@AOL.COM
As an aside, I have their 4 element 2m portable and I like it a lot.

Philip Chien <nobody@nowhere.com> wrote:

>In article <3398112c.2617521@news.cybercomm.net> Ron,
>ronchap@cybercomm.net writes:
>>I just got done speaking to a HAM who told me about something called
>>an ARROW hand held satellite beam that lets you work the AO27
>>satellite with an HT.
>>
>>He had lost the contact info. So he couldn't tell me were I could buy
>>this antenna.
>>
>>
>>Could someone give me more info on this antenna. Where can I buy it
>>and get product info.

>Based on your description I *think* I know what you're talking about, and
>what the confusion is. It's an arrow (generic name) antenna, not ARROW
>(brand name) antenna. The reason for it's particular name is that it is
>built out of aluminum archery arrows!

>At last year's AMSAT Symposium in Tuscon somebody (I forgot who)
>presented a paper on a very portable AO-27 setup which consisted of a
>handheld radio, and a portable antenna setup -- perfect for the back of
>the car or field days.

>The 'problem' with AO-27 is it has an extremely sensitive receiver (more
>often than not it picks up Spanish non-ham conversations (e.g. taxi
>drivers) from the Carribiean who are pirating the ham radio bands. These
>drivers are using 2 meter radios - and not concious of the fact that
>their transmissions are being received aboard a satellite, and
>retransmitted on the 70 cm. band to a much wider footprint than they
>could ever comprehend). But AO-27's transmitter is not as powerful. So
>to receive its signal you need a directional antenna, and a preamp.

>Fortunately UHF Yagi antennas are fairly easy to build, and preamps are
>fairly cheap.

>What this ham did was put everything together in a nice, easy to
>transport package which he could just toss in the back of his car, or
>carry while hiking, on field day, or whatever.

>The paper is in the 1996 AMSAT meeting proceedings which is available
>from your lovely local Martha.

>(Martha refers to AMSAT's 'mom', the only permanent AMSAT employee.
>She's the office manager, keeps track of how everything's done, and we
>all obey everything she tells us to do.)

>Call Martha at 301-589-6062 and tell her that you'd like to purchase a
>copy of the 1996 Symposium papers. It's about $12 and well worth the
>cost!

>Philip Chien, KC4YER@amsat.org
>Earth News - space writer and consultant

>my E-mail address is purposely incorrect to avoid SPAM-bots. I will not
>accept any unsolicited E-mail or commercial advertisements.

1671. Re: ARROW antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5nbtvc$5mq@dfw-ixnews4.ix.netcom.com>
Source record: 18731

In <3398112c.2617521@news.cybercomm.net> ronchap@cybercomm.net (Ron) writes:
>
>Hello,
>I just got done speaking to a HAM who told me about something called
>an ARROW hand held satellite beam that lets you work the AO27
>satellite with an HT.
>
>He had lost the contact info. So he couldn't tell me were I could buy
>this antenna.
>
>
>Could someone give me more info on this antenna. Where can I buy it
>and get product info.
>
>
>73
>from KA2HZO
>RON
>
Ron,

Arrow Antennas are in Cheyenne Wyoming they do sell direct but do not take credit cards so it is a bit cumbersome. I presented the antenna to AES and now they handle it. You can get it from any of their locations. I believe the model you are thinking of is the 144/436-10 it has 3 elements on 2 meters and 7 on 70cm. This antenna is an adaptation of a previous design. I did the redesign of the AO-27 antenna so I am a bit prejudiced.

It may well have been me you were in contact with as I do a great deal with the Arrow. I just got back from Alaska 10 grid squares and hundreds of contacts in 8 days on AO-27.

For all you potential AO-27 users there is one trick and one trick only to working this bird. You must hear it before you can work it!!! People are forever QRMing the bird by broadcasting when they are not hearing it. Take my word for it. If it is over the lower 48 it is in use. If you hear nothing the problem is yours. I have worked it from places where there is not the activity and you can still clearly detect the carrier. If you are on frequency and pointing correctly it is full quieting.

73 Jerry KK5YY

1672. ARLK044 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk044.1997@arrl.org>
Source record: 18732
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK044
ARLK044 Keplerian data

ZCZC SK44
QST de W1AW
Keplerian Bulletin 44 ARLK044
From ARRL Headquarters
Newington, CT June 7, 1997
To all radio amateurs

SB KEP ARL ARLK044
ARLK044 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97151.15454646 .00000108 00000-0 10000-3 0 04885
2 14129 25.9242 144.9168 6068807 121.7683 311.4183 2.05879972077036
RS-10/11
1 18129U 87054A 97157.16232963 .00000015 00000-0 38702-6 0 03611
2 18129 82.9272 246.8783 0010269 253.7060 106.2970 13.72378581498722
UO-11
1 14781U 84021B 97155.50513735 .00000149 00000-0 32896-4 0 09853
2 14781 97.8340 137.2455 0013115 44.5443 315.6817 14.69556775709390
RS-12/13
1 21089U 91007A 97157.87865017 .00000024 00000-0 93805-5 0 9837
2 21089 82.9199 286.2832 0028997 329.2783 30.6666 13.74081936317741
UO-14
1 20437U 90005B 97157.18284224 .00000014 00000-0 22317-4 0 02920
2 20437 98.5187 239.0899 0010166 240.7731 119.2439 14.29961779384643
RS-15
1 23439U 94085A 97157.16401445 -.00000039 00000-0 10000-3 0 02272
2 23439 64.8141 170.6630 0149855 134.8749 226.4462 11.27527545100699
AO-16
1 20439U 90005D 97157.19793948 .00000004 00000-0 18157-4 0 00835
2 20439 98.5351 242.0069 0010592 242.6184 117.3923 14.30009512384666
RS-16
1 24744U 97010A 97157.18603094 .00002540 00000-0 86205-4 0 00502
2 24744 97.2768 62.4537 0008745 118.2135 241.9992 15.31387987014401
```

```
DO-17
1 20440U 90005E 97157.18496270 .00000001 00000-0 17013-4 0 00741
2 20440 98.5407 242.8497 0010484 240.9426 119.0709 14.30152204384694
WO-18
1 20441U 90005F 97157.18258841 -.00000003 00000-0 15431-4 0 00859
2 20441 98.5385 242.7440 0011097 240.7564 119.2511 14.30119609384694
LO-19
1 20442U 90005G 97157.15076661 .00000039 00000-0 31600-4 0 00769
2 20442 98.5421 243.3757 0011443 240.8503 119.1545 14.30234756384713
FO-20
1 20480U 90013C 97156.96196670 -.00000032 00000-0 -39322-5 0 09833
2 20480 99.0440 120.6595 0541376 42.8147 321.3806 12.83238547343266
AO-21
1 21087U 91006A 97157.13607490 .00000093 00000-0 82657-4 0 08288
2 21087 82.9396 59.7568 0035249 302.5936 57.1818 13.74583162318639
UO-22
1 21575U 91050B 97157.17523297 .00000021 00000-0 21250-4 0 07782
2 21575 98.3022 218.1085 0007031 291.4638 68.5800 14.37072055308906
KO-23
1 22077U 92052B 97157.09282547 -.00000037 00000-0 10000-3 0 06758
2 22077 66.0776 168.4629 0010062 213.8357 146.2008 12.86302984226325
KO-25
1 22828U 93061F 97157.13740655 .00000016 00000-0 23755-4 0 05462
2 22828 98.5416 231.9285 0009403 260.0217 99.9914 14.28180437160636
IO-26
1 22826U 93061D 97157.17052474 .00000056 00000-0 40244-4 0 05678
2 22826 98.5454 231.8782 0008604 277.6771 82.3426 14.27837932192512
AO-27
1 22825U 93061C 97157.20123802 .00000021 00000-0 25900-4 0 05680
2 22825 98.5458 231.6681 0007735 277.8742 82.1564 14.27727813192501
FO-29
1 24278U 96046B 97157.11891612 -.00000037 00000-0 -76559-6 0 00874
2 24278 98.5395 199.8572 0350773 214.8360 142.9365 13.52630414039623
Mir
1 16609U 86017A 97157.79490383 .00000290 00000-0 10000-4 0 3525
2 16609 51.6528 138.0759 0005905 119.6855 240.4668 15.59466159645408

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
June 10, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1673. Re: arrow antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <3399A702.1D77@amsat.org>
Source record: 18733

Actually Phil, there is a company called "Arrow Antenna" that
manufactures just such an antenna. I have one myself that works
perfectly fine without any need for a preamp on AO-27.

The model number of the antenna is: 146/440-8 and is available directly
from them. It is a quality-built antenna made to assemble and
dis-assemble in a short amount of time.

Arrow Antenna
Mr. Allen Lowe - N0IMW
1803 South Greeley Hwy, Suite B
Cheyenne, WY 82007
Phone: 307-638-2369
Fax: 307-638-3521

The person that you are refering to is Chuck Duey (ki0ag@amsat.org).
He's written several helpful articles on portable operation with AO-27,
MIR and several other birds. Most recently, AMSAT Journal (Mar/Apr) on
page 10 & 11. Chuck is a "regular" on AO-27 and has been super-helpful
by sharing his portable experiences.

Hope this helps out!

Mark Fossum - N0NSV

> ronchap@cybercomm.net writes:
> >I just got done speaking to a HAM who told me about something called
> >an ARROW hand held satellite beam that lets you work the AO27
> >satellite with an HT.
> >
> >He had lost the contact info. So he couldn't tell me were I could buy
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> >
> >Could someone give me more info on this antenna. Where can I buy it
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> Based on your description I *think* I know what you're talking about, and
> what the confusion is. It's an arrow (generic name) antenna, not ARROW
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> drivers are using 2 meter radios - and not concious of the fact that
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> could ever comprehend). But AO-27's transmitter is not as powerful. So
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>
> Fortunately UHF Yagi antennas are fairly easy to build, and preamps are
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> carry while hiking, on field day, or whatever.
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> The paper is in the 1996 AMSAT meeting proceedings which is available
> from your lovely local Martha.
>
> (Martha refers to AMSAT's 'mom', the only permanent AMSAT employee.
> She's the office manager, keeps track of how everything's done, and we
> all obey everything she tells us to do.)
>
> Call Martha at 301-589-6062 and tell her that you'd like to purchase a
> copy of the 1996 Symposium papers. It's about $12 and well worth the
> cost!
>
> Philip Chien, KC4YER@amsat.org
> Earth News - space writer and consultant
>
> my E-mail address is purposely incorrect to avoid SPAM-bots. I will not
> accept any unsolicited E-mail or commercial advertisements.

1674. WTB: 70cm M2 Eggbeater Antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-06-07 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <3399A82D.2B00@amsat.org>
Source record: 18734

Hi:

Thanks for reading this. I'm looking for a 70cm M2 Eggbeater Antenna. If you have one that you'd like to part with, please drop me a note.

Mark Fossum - N0NSV
n0nsv@amsat.org

1675. NAVSPASUR protoFAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaEBFLo7.H64@netcom.com>
Source record: 18735

Here's some material concerning NAVSPASUR I put together for a Web page. It isn't quite a NAVSPASUR FAQ, but maybe it will help if someone wants to write a real one. What follows is an ASCII export from a Word 6.0 .doc, so there may be some oddities.

****

US Naval Space Command Space Surveillance System

One of the lesser-known assets of the US Space Command's world-wide space surveillance system is the 217 MHz NAVSPASUR "fence" across the southern US. The following items from various sources (indicated at the end of each section) give some basic information about the system, its organizational setting, history and use.

NAVAL SPACE COMMAND

Mission

Headquartered at Dahlgren, Va., Naval Space Command began operations Oct. 1, 1983. Naval Space Command uses the medium of space and its potential to provide essential information and capabilities to shore and afloat naval forces by a variety of means:

+ Operating surveillance, navigation, communication, environmental, and information systems;

+ Advocating naval warfighting requirements in the joint arena; and

+ Advising, supporting, and assisting the naval services through training, and by developing space plans, programs, policies, concepts, and doctrine.

Overview

Naval Space Command's headquarters staff and operational element numbers approximately 350 Navy military and civilian personnel. Their component commands include the Naval Satellite Operations Center and the Fleet Surveillance Support Command.

Naval Space Command, a component of USSPACECOM, operates assigned space systems to provide surveillance and warning, and provides spacecraft telemetry and on-orbit engineering support. In addition, Naval Space Command serves as the Alternate Space

Control Center [AASC] for USSPACECOM's primary centers located at Cheyenne Mountain AS.

ASCC missions include operational direction of the entire global space surveillance network (SSN) for commander in chief, USSPACECOM (USCINCSPACE). The ASCC also detects, tracks, identifies, and catalogs all man-made objects in space and provides position information on these objects to about 1,000 customers. In addition, ASCC is charged with monitoring the space environment and informing owners and operators of U.S. and allied space systems of potential threats to their assets by continuous liaison with the systems' operations centers.

The heartbeat of Naval Space Command revolves around providing space support to day-to-day operations of the Fleet and Fleet Marine Forces worldwide, whether for routine deployments, exercises, or actions in response to a crisis situation. This space support to terrestrial and naval forces can be categorized across a broad spectrum of activities that encompass communications, surveillance and indication, and warning, intelligence, navigation, and remote sensing.

Surveillance:

A constant and vigilant surveillance of potentially hostile military threats is critical in preserving the operational effectiveness of our armed forces around the world. Naval Space Command manages two distinct surveillance efforts in support of Fleet and Fleet Marine Forces: tracking satellites in orbit and monitoring over-the-horizon threats from sea and air forces.

First, Naval Space Command operates a surveillance network of nine field stations located across the southern U.S. Three transmitter sites in the network are located at Jordan Lake, Ala., Lake Kickapoo, Texas, and Gila River, Ariz. Six receiver sites are located at Tattnall, Ga., Hawkinsville, Ga., Silver Lake, Miss., Red River, Ark., Elephant Butte, N.M., and San Diego, Calif.

These surveillance stations produce a "fence" of electromagnetic energy that can detect objects out to an effective range of 15,000 nautical miles.

Over one million satellite detections, or observations, are collected by this surveillance network each month. Data gathered is transmitted to a computer center at Naval Space Command headquarters in Dahlgren, where it is used to constantly update a data base of spacecraft orbital elements. This information is reported to Fleet and Fleet Marine Forces to alert them when particular satellites of interest are overhead. The command also maintains a catalog of all earth-orbiting satellites and supports USSPACECOM as part of the nation's worldwide Space Surveillance

Network...

Intelligence:

Naval Space Command provides space intelligence support to deployed naval forces through an initiative dubbed "Chambered Round." The Chambered Round product is a message that provides deployed naval forces with tactical assessments of hostile space capabilities and specific reactions to their operations. This knowledge assists Fleet and Fleet Marine Force tactical units in reducing their vulnerability to space reconnaissance efforts...

excerpts from

http://www.spacecom.af.mil/usspace/fbnavspa.htm

History

The Minitrack system that was developed in the late 1950s for the NRL Vanguard Satellite Program used the signals emitted by Sputnik and later satellites to determine their positions and orbits. This pioneering tracking system led to the concept of tracking nonradiating, or noncooperative, satellites by signals reflected off them. An experiment using a transmitter in Fort Monmoth, New Jersey and Minitrack receivers demonstrated the concept, and from this experiment a larger and more elaborate system was developed by NRL. This system became known as the Naval Space Surveillance System (NAVSPASUR), which was commissioned as an operational command in 1961. Although the operational command is now integrated with the Naval Space Command, the sensor system is still in active use as a major component of the North American Aerospace Defense Command (NORAD), and has become the alternate Space Defense Computational Facility.

The system concept of NAVSPASUR is that of a continuous wave (CW) multistatic radar. A high-powered transmitter generates a large fan beam of energy, commonly called the "fence," which reflects signals from an orbiting object back to separate receiving stations. These receiving stations use large arrays of antennas as an interferometer to determine the angle and angle rates of arrival from the reflected signals. By observing the target satellite from several stations, the position can be determined; using multiple penetrations, the orbit can be inferred. This rather simple concept led to a highly reliable system that could detect virtually any satellite coming within the transmitter's illuminated field.

Even though the NAVSPASUR system performs the functions of detection and satellite orbit determination very well, there are limitations on coverage and time required to determine an orbit

with the CW fence approach. NRL experiments into methods of improving the system included the idea of transmitting ranging signals as well as the primary VW signal, so that not only could the angles at the receiving sites be measured, but the distance to the target satellite as well (*). An experimental parallel fence with a ranging capability was begun in South Texas in 1960 to demonstrate system performance and early orbit determination. The three stations built in South Texas were a transmitter and two receiving stations...

[For Timation satellite navigation experiments,] Two ground stations were initially used, at NRL [in Washington, D.C.] and the South Texas space surveillance site at Raymondville, Texas (**)

(*) Space Applications Branch, Ranging and Velocity Experimental Equipment, NRL Report 6633, 18 April 1968

(**) Gardner, I., Silverman, I., and Weaver, C., Timation I Ground Station, NRL Report 6876, 3 April 1969.

excerpts from

A History of Satellite Navigation by Bradford W. Parkinson, Thomas Stansell, Ronald Beard and Konstantine Gromov Navigation: Journal of the Institute of Navigation (ISSN 0028-1522) Vol.42, No.1; Spring 1995 Special Issue pp. 109-164

SPASUR

The U.S. Navy Spasur (Space Surveillance) System (*, **) is a CW fence radar consisting of a chain of stations located on an east-west great-circle path across the southern United States. Three transmitter stations (one high-powered in the center of the chain and two low-powered on the ends for gap filling) and six receiving stations are used in the network. The system originally operated at 108 MHz [the Minitrack frequency] but was converted to 216 MHz in 1965, along with upgrading and expansion of the original experimental network.

The high-power transmitter consists of two 500-kW transmitters operating in parallel and feeding a north-south linear array 10,560 feet long.

The receiving stations are equipped with a number of linear antenna arrays for phase sensing and alerting. The north-south length of the phase-sensing antennas at two of the sites is 2,400 ft, and the east-west baseline (which sets the angular-accuracy limit) is 1,200ft or approximately 260 wavelengths. Angular measurements from the various receiving sites are transmitted to a central computer facility located at Dahlgren, Va.

Control and Computation [General requirements for CW fence radars]

Since angle measurements from at least two receiver stations are needed to determine position and to eliminate false alarms due to meteors or aircraft, the outputs must be collected at a central point and processed• One detection (encoded in digital form) requires a total of less than 100 bits. One telephone line from a receiving station to a central control could easily handle 70 or more detections per minute, a rate much higher than would be expected from any foreseeable space population.

The computation requirements for correlating the various receiver angle measurements and providing a detection report are relatively modest. Even [if orbital elements for new detections must be generated and correlated with objects in a catalog].. these computing requirements are well within the capability of a computer of the size of the IBM 7090 for space populations of a few thousand objects.

(*) Easton, R.L., and J.J. Fleming: The Navy Space Surveillance System, Proc. IRE, vol.48, pp. 663-669, April, 1960

(**) Aviation Week and Space Technology, Aug.16, 1965

excerpts from

Satellite Surveillance Radar
Charles S. Lerch, Jr.
Chapter 32 of
Radar Handbook
Merrill I. Skolnik, editor
McGraw-Hill, 1970
Library of Congress Catalog Number 69-13615

IV. NAVSPACECOM FENCE

A. Dedicated low-earth orbit (LEO) detection sensor; does not track.
B. Unique multi-static radar interferometer sensor system consisting of three transmitters and six receivers located across the US at 33N.
1. Covers 5000 nm (15% of earth's circumference).
2. Measures frequency, time and angle of detection
3. Transmits on 216.98 MHz:
Kickapoo Lake 767 kW
Gila River 40 kW
Jordan Lake 40 kW

C. Detection capabilities:
1. 0.1 m2 RCS @ 2,000 nm
2. 1.0 m2 RCS @ 10,000 nm
3. 200 m accuracy RMS

D. "Standing radar energy fence" is excellent sensor for break-ups and maneuvers.

E. Performance:
1. Detects 70% of catalog objects (100% of LEO objects with I > 33 deg).
2. Several (approx. 150) Space Surveillance Catalog objects only tracked by Fence.
3. Approx. 60K observations/day => 1.7M/month
12K triangulated obs/day => 360K/month
Provides approx. 21% of all SCC LEO observations.
4. Break-ups: > 48 first detects in last 10 yrs
Piece separations: > 59 first detects in last 6 yrs
Often the first sensor to detect a maneuver.
5. Fence has 99.9% operationally ready rate.

excerpt from

NAVSPACECOM / N32 Brief:
Naval Space Operations Center
25 June 1994

Lake Kickapoo Space Surveillance Station Archer City, Texas

The Lake Kickapoo Field Station, located on 180 acres of government owned land approximately thirty miles southwest of Wichita Falls, TX in Archer County is the primary Naval Space Command transmitter. It creates a fan of energy, "the fence", that is narrow in the north-south direction and extends from coast to coast over the southern United States. The Station is aligned on a great circle path inclined to the equator at approximately 33 degrees inclination. In conjunction with eight other field stations it forms the NAVSPACECOM satellite sensor system. Two small transmitters supplement the Lake Kickapoo generated "fence" and six receiver stations collect energy reflected from satellites crossing the beam. Lake Kickapoo is the largest continuous wave (CW) transmitter in the world with an average radiated power of 766.8 KW and operates at a frequency of 216.98 MHz.

The antenna is a single two mile long linear dipole array. The Station was built in two phases that resulted in halves once known as the North Site and South Site. Each had 9 antenna bays that were aligned end to end to form the full antenna array. Now the 18 bays have central control from the original South Site and 2556 dipole elements form the total antenna array.

The operation and maintenance of the Field Station is provided under contract by Rick Montoya Services Incorporated of McLean, VA. The Station is manned solely by contract personnel with only the Center at Dahlgren, VA utilizing civil service and military personnel.

The Lake Kickapoo Station is manned during the daytime work week by a Station Manager, Technical Supervisor, Senior Technician, two Shift Technicians, a Shift Assistant, two Maintenance Mechanics, a Maintenance Assistant and a Part-time Secretary. At other times, two Electronic Technicians and one Shift Assistant are on duty at the Station.

Total annual cost to operate this station is approximately $1.8M with $800K of this being the cost of electricity.

A new phase reference system using infrared fiber optics replaced the aged RF coaxial system in May 1993. This reference system monitors and maintains phase integrity for the 2 mile long Kickapoo antenna. Recent improvements at the Kickapoo site include a system controller upgrade to be completed by mid 1996.

General Information

1. Telephone: (817) 574-4526 phone
(817) 574-4527 fax
(817) 733-5800 cellular phone

2. Management: Station Manager Ardie O. Wood
Technical Supervisor Ralph T. Widner

3. Mailing Address: Naval Space Command Field Station
Lake Kickapoo Space Surveillance Station
P.O. Box 365
Archer City, TX 76351-0365

4. Shipping Address: Naval Space Command Field Station
Lake Kickapoo Space Surveillance Station
ATTN: Station Manager
Route 2178, 12 miles W of Archer City
Archer City, TX 76351

5. Station Coordinates: Latitude 33d 32m 48.079s
Longitude 098d 45m 47.772s

6. Nearest Airport: Wichita Falls Municipal Airport

7. Regional Airport: Dallas-Fort Worth Intl Airport

8. Lodging: Days Inn, Wichita Falls (817) 723-5541
La Quinta, Wichita Falls (817) 322-6971
Sheration, Wichita Falls (817) 761-6000
Holliday Inn, Wichita Falls (817) 766-6000

9, Restaurants: McBride Land & Cattle Company
Uncle Len's Catfish House
El Chico Restaurant

10: Adjacent Stations(s):
From Lake Kickapoo to Elephant Butte: (Approx. 615 miles, 11 hours driving time) From Olney, TX, Rt 114 to Seymour, US Rt 82

West to Las Cruces NM, and I-25 North to Truth or Consequences, NM

From Lake Kickapoo to Red River: (Approx. 315 miles, 5 1/2 hours driving time) From US Hwy 82 East to Lewisville

NAVSPACECOM fact sheet dated 23 January 1996

[RECEIVER] ANTENNA VERIFICATION TESTING

The Dahlgren Division of the Naval Surface Warfare Center, Dahlgren, Va is seeking sources on a competitive basis for an antenna verification testing and installation of replaced/ installed spare components at the NAVSPACECOM Elephant Butte, New Mexico Field Station. These antennas are used in a one-of-a-kind earth satellite signal detection receiver. This receiver is in use at six NAVSPACOM Field Station. The antennas are constructed of Dipole Elements (144 per 600 foot array), coaxial transmission line combiners, tees, elbows, expansion joints and 7/8 inch, 3-1/8 inch transmission lines. The contractor will test fifty 600 foot arrays at the Elephant Butte, NMNAVSPACECOM Receiver Station...

excerpted from

Commerce Business Daily, April 17, 1997 PSA-1826

Spectrum Allocation

Footnote US239 [not available] provides for protection of the Navy's Space Surveillance (SPASUR) system operating in the southern part of the United States in the frequency band 216.88-217.08 MHz.[EN416] The Navy has modernized its SPASUR system, and has operated since 1965. The NAVSPASUR system provides data on satellites and other space objects as they pass over the continental United States. The system uses three transmitter sites and five receiver sites positioned on a great circle in the southern part of the United States. It is a bistatic system, locating objects by triangulation.[EN417]

[EN]417. A.R. Francoeur, Naval Space Surveillance System (NAVSPASUR) Solid State Transmitter Modernization, IEEE National Radar Conference, Institute of Electrical and Electronics Engineers, at 147 (1989).

excerpted from

U.S. National Spectrum Requirements: Projections and Trends
U.S. Department of Commerce
National Telecommunications and Information Administration
NTIA Special Publication 94-31
March, 1995

Chapter 4

http://www.ntia.doc.gov/openness/sp_rqmnts/radar4.html

Amateur Use of NAVSPASUR; Transmitter coordinates and frequencies

Subject: Re: NAVSPASUR Fence - 216.980 Mhz
From: diamond@interserf.net (Dave Perrussel)
Date: 1996/03/31
Message-Id: <4jn1di$so@ns.interserf.net>
Newsgroups: rec.radio.amateur.space

bheaton@fibr.net (Brian D Heaton) wrote:

>All,

> I am looking for info regarding the NAVSPASUR fence operating
>at 216.980 Mhz. I had been looking for info for the last couple
>months and just saw a mention of it in Popular Communications. There
>was some discussion (on DRIG) of experiments at using it to refine
>elsets for OSCAR birds.

First of all, its now called NAVSPACECOM fence (since late 1993)
but we still call it the SPASUR fence (grin)

A person from Florida (the name escapes me) had used the Lake
Kickapoo transmitter for following satellites. Again, I'll have
to look up the name at work on Monday.

> The article mentions transmitters in Texas (Kickapoo Lake I
>believe), Alabama and Arizona. The only thing I have been able to
>find thats even close is the AFSPACECOM PAVE PAWS phased array radar
>system. Its sites are listed as Mass, Calif, Texas, and Georgia.
>This is most likely a mircowave system, however.

The Fence has 3 frequencies: Gila River (Phoenix) Arizona -
216.97 MHz Lake Kickapoo (Archer City) Texas - 216.98 MHz Jordan
Lake (Wetumpka) Alabama - 216.99 MHz

receivers throughout the southern US (too many to mention here)

> I am interested in detecting satellites crossing the fence and
>would appreciate any data available on the subject. If there is
>enough interest I can try to put together a summary or possibly a FAQ
>if one doesn't already exist. Thanks in advance for your assistance..

Well, I'm in development of a web page (one of these days they'll
put it on line!)

If you want more details, let me know. I work for the fence on a
daily basis. E-mail me at the address below.

David Perrussel
E-mail: diamond@interserf.net

via DejaNews

Subject: Re: NAVSPASUR Fence - 216.980 MHz From:
gary@ke4zv.atl.ga.us (Gary Coffman) Date: 1996/03/30
Message-Id: <1996Mar30.171434.17085@ke4zv.atl.ga.us>
Newsgroups: rec.radio.amateur.space
[More Headers]

In article <315a5ea0.8907956@nimitz.fibr.net> bheaton@fibr.net writes:
>All,
>
> I am looking for info regarding the NAVSPASUR fence operating
>at 216.980 MHz. I had been looking for info for the last couple
>months and just saw a mention of it in Popular Communications. There
>was some discussion (on DRIG) of experiments at using it to refine
>elsets for OSCAR birds.
>
> The article mentions transmitters in Texas (Kickapoo Lake I
>believe), Alabama and Arizona. The only thing I have been able to
>find that's even close is the AFSPACECOM PAVE PAWS phased array radar
>system. Its sites are listed as Mass, Calif, Texas, and Georgia.
>This is most likely a microwave system, however.

70cm actually. PAVE PAWS is an early warning radar. It is frequency
agile and uses a steered phased array at very high power. It makes
a raucous buzzing noise. The one in Georgia (Robbins AFB) is inactive,
and likely to stay that way. The high ERP was determined to be actively
dangerous to nearby aircraft, like the SAC B-52 bombers taking off and
landing at Robbins. The other sites may or may not still be in use.

NAVSPASUR is a different animal. It is a CW signal (not Morse, a
real continuos carrier) on 216.983 MHz aimed straight up in a fan
pattern aligned with a line of latitude, IE east-west. There are
three transmission sites, Jordan Lake AL, lat 32.659 long 86.264,
Kickapoo Lake TX, lat 33.558 long 98.7367, and Gila River AZ,
lat 33.11 long 112.03.

Phase slaved interferometers at remote receive sites give 3D position,
and doppler measurements give range rate. With this information, an
orbit for the object can be calculated. Because of the way the sites
are staggered longitudinally, any satellite with an inclination of
33 degrees or more will show up on successive orbits through 2 or more
of the fences. That allows the initial orbital element set to be
refined.

You can use these signals to check and correct satellite element
sets. Use your satellite prediction program to find out the time
the satellite should cross one of these latitudes and be in a
mutual footprint with your station and one of these sites, aim

your antennas at the predicted position, and measure the actual AOS, LOS, and doppler of the reflected signal. The offset of this actual data from the predicted data can then be used to correct the element set.

Of course if the satellite has an active beacon, and you know its frequency precisely, you can do the same thing without resort to NAVSPASUR. It is most useful for locating passive targets.

Gary

Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

via DejaNews

Additional information on amateur and other "unofficial" use of the NAVSPASUR signal may be found at

http://kpt1.tricon.net/Personal/alan/archive/amsat/Jan96/

Pictures of the Lake Kickapoo transmitter site may be found in Chapter 8 of

Observing Earth Satellites
Desmond King-Helle
Van Nostrand Reinhold, 1983
ISBN 0-442-24877-6

1676. Radio Meteor Obs. Bull. May 1997: eta Aquarids

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.119.339A8FD8@vvs.innet.be>
Source record: 18736

Radio Meteor Observation Bulletin No. 46 June 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

May 1997 eta Aquarids

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

May 1997	20h	21	22	23	00	01	02	03	04	05	06
1- 2	68	87	42	68	63	70	106	135	154	211	197
2- 3	30	36	54	70	78	67	119	148	146	224	263
3- 4	-	31	48	64	94	89	113	216	170	219	241
4- 5	-	27	38	53	73	83	103	284	266	289	256
5- 6	18	30	46	48	102	71	113	193	187	213	216
6- 7	28	17	43	48	61	101	92	125	171	190	184
7- 8	14	27	36	41	51	64	86	114	151	169	191
8- 9	12	25	31	44	48	78	65	145	134	192	163
9-10	25	37	37	53	53	68	97	105	167	176	148

```
10-11 | 23 44 45 60 58 89 119 152 201 175 213
11-12 | 25 38 57 57 61 86 99 139 163 166 127
12-13 | 21 32 36 66 60 62 80 124 140 116 195
13-14 | 21 33 33 56 53 75 128 130 151 145 152
14-15 | 22 40 52 42 54 63 86 185 124 137 117
.........
20-21 | 22 31 44 40 37 68 78 75 82 82 -
21-22 | 6 17 24 28 45 35 65 65 78 98 85
22-23 | 12 22 32 33 47 55 78 151 99 104 88
23-24 | 19 23 40 45 54 62 58 98 122 108 89
24-25 | 23 35 50 41 59 86 62 105 92 103 75
25-26 | 23 41 48 56 48 79 87 181 139 128 83
26-27 | 28 42 45 77 67 65 105 127 119 142 101
27-28 | 16 32 47 74 78 73 104 99 120 106 73
28-29 | 14 38 44 72 58 64 101 123 120 90 65
29-30 | 38 238 210 53 63 82 104 110 153 141 318
30-31 |
31- 1 | 18 37 40 46 66 72 92 111 121 108 -
------+-----------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06
May |
```

Notes:
. observed eta Aquarids maximum on May 5, 5h UT. Radiant rises at 1h30 UT
and sets at 13h30 UT. Fairly constant forward scatter conditions for
this setup between 4h - 7h UT.
. local time = UT + 2 hours.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic E.

```
-----------------------------------------------------------
| May 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---------------------------------------------------------------
0 | 22 32 22 21 22 23 25 23 30 22 20 29 24 17 30
1 | 31 24 32 31 40 37 37 26 45 39 32 26 25 23 44
2 | 41 46 48 46 57 43 48 39 49 54 35 42 50 35 42
3 | 42 62 62 87 118 114 91 91 86 71 68 71 59 77 83
4 | 74 58 73 91 140 164 125 150 103 122 60 90 63 78
5 | 75 76 79 104 222 109 118 149 138 86 101 99 104 58 70
6 | 71 82 151 126 169 158 97 208 140 100 118 81 104 71 90
7 | 95 54 83 114 173 130 125 203 151 160 134 68 77 89
8 | 85 44 60 107 223 87 106 132 121 133 122 58 67 45 66
9 | 109 67 118 117 148 102 81 142 107 109 98 67 56 53 42
10 | 76 36 106 100 106 95 55 73 71 75 89 33 40 52 46
11 | 171 34 92 97 42 43 36 84 47 78 68 38 29 19 29
12 | 37 26 43 55 17 29 31 28 36 34 21 21 9 17
13 | 95 16 32 27 7 28 25 15 28 34 7 13 10 20
14 | 16 6 18 16 5 8 9 18 17 18 15 8 4 27 14
15 | 12 10 14 9 9 11 12 11 7 10 18 8 13 9 14
16 | 9 13 9 8 6 8 9 4 7 14 11 9 8 7
17 | 8 8 10 11 5 10 16 12 9 9 7 7 5 10
18 | 9 14 12 8 18 15 8 21 9 19 10 10 14 6
19 | 11 12 8 7 8 9 9 6 7 10 16 15 8 4
20 | 10 11 12 14 14 16 8 7 10 9 12 15 13 20 8
21 | 14 16 12 12 11 14 14 8 10 12 21 12 13 10 13
22 | 14 17 19 18 16 14 15 18 12 12 22 13 16 16 17
23 | 16 25 19 15 20 18 17 13 25 14 31 16 19 15 17
---+---------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

-----------------------------------------------------------
| May 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+---------------------------------------------------------------
0 | 28 21 8 12 6 17 13 30 16 14 11 9 9 28 39 22
1 | 30 38 18 12 4 17 26 38 19 19 7 14 16 36 41 36
2 | 51 52 23 16 8 17 24 24 19 14 13 19 21 37 32 47
3 | 42 83 65 29 25 19 40 34 27 36 30 32 80 58 50
4 | 65 47 33 38 15 35 47 37 37 36 31 51 24 72 42 73
5 | 60 75 38 44 21 42 58 35 29 35 35 25 65 37 101
6 | 62 83 45 31 29 48 48 28 20 49 22 77
7 | 49 35 33 43 33 54 71 21 29 32 28 53
8 | 38 31 52 34 51 37 34 42 24 16 49 97
9 | 53 27 32 25 55 31 26 51 18 24 36 46
10 | 89 31 37 59 37 30 29 30 14 56 30
11 | 33 12 20 15 22 22 17 22 11 30 21 31
12 | 56 13 38 10 10 15 9 18 12 12 50 18 17
13 | 13 31 5 5 9 6 7 8 9 1 16 35
```

```
14 | 12 16 3 4 4 9 7 3 3 19 7 8 19
15 | 28 7 6 4 8 5 2 3 4 5 5 15 20 14
16 | 8 8 8 10 3 4 18 3 4 16 12 31 13 15
17 | 7 11 13 7 8 4 4 2 4 13 16 11 6
18 | 5 8 21 8 10 5 1 7 2 11 15 5
19 | 5 5 15 5 6 3 3 4 5 6 17 8 7
20 | 5 3 10 4 7 7 5 5 4 6 11 9 24 8 8
21 | 8 8 6 7 6 7 8 3 5 4 4 16 24 14 13
22 | 5 13 5 7 10 10 9 4 4 8 7 12 29 22 11
23 | 12 6 6 8 17 13 9 10 5 12 8 23 14 26 12
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

Notes:
. eta Aquarids maximum on May 5.
. towards the end of the month: thunderstorms and temperature inversions hampering the observations.
. local time = UT + 2 hours.

Pierre De Groote

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitter: 30 kW TV video carrier in Arezzo, Italy, distance 400 km, direction south. Several high mountains in transmitter direction prevent direct and tropospheric reception. This transmitter is available for 24 hours.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record the audio signal. 20 channels of 2 Hz width are used for meteor identification, pictures with interference are manually rejected.
More details see <http://www.net4you.co.at/user/kuneth/info.html>

All counts below are corrected for a full hour observing time. If the availability of the data is 20-40 minutes, a dot is shown after the value. Data for less than 20 minutes observing time are not shown here.

Meteor counts of reflections longer than 6.5 seconds: assumed to be overdense.

```
| May 1997
UT| 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
---+------------------------------------------------------------
0| 22 4 1 5 4 5 2 3 1 12 7 6 7 6
1| 10 3 5 7 0 4. 2 2 6 8 13 3 8
2| 4 5 6 2 4 6 6 1 11 9 9 4 4
3| 18 14 14 6 6 5 6 0 14 10 7 6 9
4| 17 11 11 6 10 7 8 3 12 9 11 12 5
5| 15 13 22. 10 10 6 9 22 2. 12 10 9 9 4.
6| 29 13 18 10 9 10 13 15 4 16 25 9 13 12
```

```
7| 28 27 20 13. 11 11 9 8 14 13 28. 17 21 14
8| 32 12 7 16 9 19 10 15 11 8. 18. 13
9| 17 10 1 12 13 8 8 15. 18.
10| 12 6 9 8 8 5 20 12 16.
11| 12 6 17 5. 3 11 10 26 18.
12| 6 16. 9. 8 18 14. 15.
13| 4 0. 0. 2. 3. 3
14| 1 0 3 0.
15| 0. 0 3 2. 7. 0.
16| 0. 0 0 7.
17| 2 0. 0. 1
18| 0 0. 0.
19| 0 1 0 0. 5 0 2. 4. 0
20| 1 5. 0 0 0 0. 0. 3 9 5. 2 2
21| 1 0 0 0 0. 0 3. 1 1 3 1 4 0 1
22| 3 3 0 0 1 1 1 1 4 2 4 5 8
23| 7 2 0 1 6 4 5. 3 0 8 4 12 13 3
---+------------------------------------------------------------
UT| 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
| May 1997

| May 1997
UT| 20 21 22 23 24 25 26 27 28 29 30 31
---+-----------------------------------------------
0| 3 5 3. 3 4 2 4 6
1| 5 14 1 8 3 6 2
2| 8 6 7 4 5 3 3
3| 8 10. 6 6 8 8 1
4| 7 9 5 2 12 4 3
5| 3. 10 4 4 15. 14 1 3
6| 8 15 12 12 6 5 7.
7| 15 8. 13 10 6 3
8| 8 17 16
9| 9. 20.
10| 5.
11| 5 21.
........
20| 2. 1
21| 1 3. 1
22| 7 2. 4 0 2 3 5
23| 4 3 10 7 5 5 6 2
---+-----------------------------------------------
UT| 20 21 22 23 24 25 26 27 28 29 30 31
| May 1997

Meteor counts of 0.5 seconds length: shortest duration available,
assumed to be underdense.

| May 1997
UT| 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
---+------------------------------------------------------------
```

```
0| ,252,167,140,203,148,152,150,176,115,237,211,243,250,198
1| ,236, ,175,223,151,155,172,174,170,272,215,292,281,204
2| ,258, ,198,220,182,190,212,228,193,219,283,326,286,207
3| ,286, ,241,232,206,216,241,236,229,262,277,316,297,200
4| ,257, ,233,231,239,202,242,195,213,251,254,322,244,294
5| ,234,225,237,205,211,220,210,229,203,231,251,259,252,250
6| ,206,221,203,218,232,227,217,219,234,253,291,299,240,215
7| ,239,236,218,246,202,220,220,249,226,237,268,282,241,224
8| ,245,248, ,221,208,226,187,200,233,236, ,269,287,245
9| ,230,180, ,177, ,198,174,166,190,180, ,241, ,
10| ,198,175, , , ,160,149,185,174, , ,248,197,178
11| ,160,145, , ,151,165,134,178,175, , ,215,219,
12| ,156, , , ,126,108, ,133,153, ,211,209, ,
13| ,141, 77, , ,115, ,110,111,184, , , , ,
14| , 81, 52, , , 86, , , ,131, , , , ,
15| , 65, 51, , , 58, , , 63, , 90, , , 90,
16| 46, , , , , 37, , 68, , , , 95, , ,
17| 52, , , , , 20, , 44, ,108, , , , ,
18| 34, , , , , , , 46, ,122, , , , ,
19| 81, , 31, , , 46, , 57, ,204,104, 99, 88, 58,
20| 96, 93, 83, 78, , 53, 85, 78, 79,199,153, ,102, 98,
21|149,102, 66, 93, 78, 85, 96, 88, 99,205,167,199,172,125,
22|157,109,105,137,130,130, ,132,127,200,220,211,220,150,
23|198,151,142,152,115,150,166,151,147,271,189,203,222,174,
---+------------------------------------------------------------
UT| 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
| May 1997

| May 1997
UT| 20 21 22 23 24 25 26 27 28 29 30 31
---+---------------------------------------------
0| ,164,228, , , ,243,224,204,187,174,169
1| , ,253, , , ,263,251,217,259,188,141
2| , ,242, , , ,278,269,227,277,200,170
3| , ,281, , , ,279,290,239,274,226,198
4| , ,217, , , ,245,260,240,204,220,160
5| ,290,221, , , ,239,201,244,228,210,217
6| ,236,284, , , ,279,232, ,245,212,166
7| ,233,264, , , ,288,298, ,261,238,
8| ,253, , , , ,269,244, , , ,
9| ,228, , , , ,205, , , , ,
10| , , ,267, , , , , , , ,
11| , , ,194, , ,200, , , , ,
.....
20| 74, , , , , 83, , , , , ,
21| , , , , ,131, ,132,106, , ,
22|116,220, , , ,199,182,135,172, ,134,
23|168,192, , , ,199,193,188,189,136,130,
---+---------------------------------------------
UT| 20 21 22 23 24 25 26 27 28 29 30 31
```

| May 1997

Notes:
. summary for May 1997: a lot of activity in the morning hours for
the whole month. Started recording on May 6. There was meteor shower
activity from May 6-9 (eta Aquarids) and from May 15-19.

. blank value means either few or no data available, interference,
data loss due to hard disk failure (!) or offline during thunderstorms.

. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)

Werfried Kuneth

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

May	UT													
1997	11	12	13	14	15	16	17	18	19	20	21	22	*(1)	**(2)
1	14	14	8	24	12	15	20	13	22	32	22	26	14.5	22.5
2	12	21	14	14	28	12	19	19	20	25	27	21	16.8	21.8
3	10	15	13	21	16	20	26	21	26	32	29	37	15.8	28.5
4	10	8	19	17	17	20	24						15.2	
5	9	9	20	27	23	23	22	23	36	45	46	37	18.5	34.8
6	9	18	16	21	16	21	23	27	24	37	45	31	16.8	31.2
7	8	15	13	31	16	21	20	26	40	32	39	29	17.3	31.0
8	10	15	18	22	28	15	16	15	27	37	34	35	18.0	27.3
9	13	13	23	21	27	26	23	19	26	30	31	34	20.5	27.2
10	4	12	17	28	20	16	14	23	22	31	31	30	16.2	25.2
11	11	12	17	14	25	20	17	15	32	31	26		16.5	24.2
12	3	11	25	33	19	17	20	19	18	28	28	42	18.0	25.8
13	5	12	17	30	23	21	20	20	28	38	34	34	18.0	29.0
14	11	12	23	16	24	24	11	23	19	25	28	30	18.3	22.7
15	10	24	24	23	14	25	19	21	34	25	30	30	20.0	26.5
16	12	14	19	22	24	16	16	12	16	33	25	30	17.8	22.0
17	8	17	15	19	26	25	21	21	25	22	33	29	18.3	25.2
18	9	13	19	20	21	12	26	22	21	21	23	25	15.7	23.0
19	11	15	22	17	19	18	26	24	31	20	34	30	17.0	27.5
20	10	10	16	17	17	15	25	22	20	34	37	31	14.2	28.2
21	10	11	19	18	24	24	25	21	14	26	38	35	17.7	26.5
22	11	12	21	24	25	20	16	22	19	27	14	29	18.8	21.2
23	11	19	21	21	20	18	20	26	16	29	36	31	18.3	26.3
24	6	14	25	17	14	20	11	12	22	27	24	32	16.0	21.3
25	9	16	27	27	17	19	16	18	16	18	30	22	19.2	20.0

```
26 | 9 20 10 22 27 13 22 24 24 29 27 31 | 16.8 26.2
27 | 10 9 13 25 13 21 18 22 21 29 37 26 | 15.2 25.5
28 | 7 13 14 23 27 23 19 22 22 27 24 28 | 17.8 23.7
29 | 12 15 16 21 14 24 18 25 23 24 45 23 | 17.0 26.3
30 | 8 10 14 23 17 21 19 12 27 20 34 34 | 15.5 24.3
31 | 14 14 28 24 20 22 21 25 23 21 24 31 | 20.3 24.2
-----+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
May | UT
```

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

- local time = JST = UT + 9 hours

Chikara Shimoda

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)

Counts in one hour intervals starting at:

Eta Aquarids

```
| 1997
UT | 3 May 4 May 5 May 6 May
----+-----------------------------------
0 | 185 195 205 180
1 | 214 192 270 228
2 | 284 262 287 270
3 | 310 330 406 342
4 | 431 371 454 394
5 | 444 344 753 514
6 | 479 365 809 705
7 | 407 358 593 524
8 | 366 317 418 384
9 | 204 197 705 338
10 | 148 181 303 331
11 | 117 128 203 199
12 | 129 125 261 213
```

13 | 104 133 195 302
14 | 189 184 195 204
15 | 134 138 114 118
16 | 134 91 82 97
17 | 85 83 84 67
18 | 91 72 53 67
19 | 77 99 75 96
20 | 107 123 89 121
21 | 143 166 120 149
22 | 159 158 141 157
23 | 171 164 160 175
----+-----------------------------------
UT | 3 May 4 May 5 May 6 May
| 1997

Ilkka Yrjola / via M. De Meyere

2. ERRATUM

In RMOB9704.TXT, observations of M. De Meyere: read April 1997 instead
of March 1997.

3. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

4. CONTRIBUTORS / USEFUL ADDRESSES

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: 100021.514@compuserve.com

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
homepage: http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

--
Christian Steyaert (RMOB9705) 8 June 1997
--

1677. Re: Mir Contact - workmir.txt (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: kwise@california.com
Message-ID: <339a7eef.0@seashell.california.com>
Source record: 18737

jrayol@netium.COM.BR (Jefferson R.) wrote:

>Dear Friends.
>Fellow my contact with Mir.
>73's PP8KWA

>cmd:C R0MIR-1
>*** CONNECTED to R0MIR-1
>Logged on to R0MIR's Personal Message System

>CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
>S WORLD

>Subject:
>Hello

>Message:
>Hello World from Amazonas Brasil
>By PP8KWA
>jrayol@netium.com.br
>/ex
>Message saved as Msg # 103

>CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
>l

>Msg # Stat Date Time To From @ BBS Subject
> 103 P 06/04/97 23:53 WORLD PP8KWA Hello
> 102 PR 06/04/97 22:20 TODOS PT7WA Hello Everybody
> 101 PR 06/04/97 13:35 N6C0 R0MIR Frequencies?
> 100 PR 06/04/97 12:04 R0MIR N6CO TNX
> 99 PR 06/04/97 12:03 R0MIR N6CO bio
> 98 PR 06/04/97 12:02 ALL N6CO 2 Line MIR Keps 6-03
> 97 PR 06/04/97 10:28 R0MIR A6LIE Hello Mike and CREW!
> 96 PR 06/04/97 10:26 R0MIR A6LIE Hello Mike and CREW!
> 94 PR 06/04/97 07:26 R0MIR VE1AMA Question
> 93 PR 06/04/97 07:25 R0MIR VE1AMA Hello MIR crew...
>7023 Bytes free
>Next message Number 104

>CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>
>s crew

>Subject:
>Hello Friends...

>Message:
>Hello Friends in Mir Station.
>My Name is Fred I live in Amazonas Brasil.
>All the best for all.
>73's
>/ex
>*** Retry count exceeded
>*** DISCONNECTED: R0MIR-1

Congrats Fred...You are a lucky one..I have been tyring to
connect for months now.. I live in California USA on the west coast
There are to many alligator stations here. They forget that the
mailbox on MIR is for the CREW of MIR. Not for the sending of
mail to ALL or WORLD just R0MIR...Questions, Comments, Helps
NOT KEPS, CQ's, or anything directed at a Terestriall station...
I have a text that will help...it follows

73...ken...sk

1678. Re: Mir Contact - workmir.txt (1/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: kwise@california.com
Message-ID: <339a7ef8.0@seashell.california.com>
Source record: 18738
Body handling: HTML body converted to readable text

```
begin 644 workmir.txt

1
```

1679. Re: Mobile pacsat radio?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: oddjob@cix.compulink.co.uk
Message-ID: <EBGHvJ.Fp5@cix.compulink.co.uk>
Source record: 18739

Ic821 is what you want....

1680. Re: Sunspots and Global Climate - An Appology

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: Charles Tomkins <Tomkins@btinternet.com>
Message-ID: <01bc6ed3$b2813be0$592d63c3@default>
Source record: 18740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.shortwave,sci.astro,sci.astro.amateur,sci.environment,sci.geo.meteorology

Dont get downhearted- read Nigel Calders recent book 'The manic sun' sadlt
its written by a crusading(?) journalist, but it contains a thin outline
of some post 1995 work by the Danes ISBN 1-899044-11-6

>
>
>
>
> --
>
>

1681. ANS-159 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-06-08 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc742c$c09e15a0$38280ace@home.the-bridge.net>
Source record: 18741

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-159.01
STS-94 SAREX MISSION PT.1

HR AMSAT NEWS SERVICE BULLETIN 159.01 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.01

STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

The full set of nominal state vectors and mission profile schedule is also available on the AMSAT Web page at:

http://www.amsat.org/amsat/sarex/vectors.html

As in the past, updates will be made to the AMSAT Web page using actual orbital data during the mission E-Mail updates are no longer made to the SAREX mailing list during the mission. These updates were discontinued when NASA Spacelink began sponsoring a mailing list called *STSTLE* for this specific purpose. Subscriptions to STSTLE are available on request. To subscribe send an E-Mail message to the following address:

listproc@spacelink.msfc.nasa.gov

The text of the mail message should be as follows:
subscribe STSTLE FirstName LastName

Where "FirstName" and "LastName" provide the list manager with your name.

Those considering subscribing to STSTLE should be cautioned that the list typically provides three to four updates per day on the Shuttle (and also for any satellites deployed by the Shuttle). The frequency of updates ensures current data for several NASA agencies that subscribe to this mailing list. If this many updates are undesirable, you should get your Keplerian elements from a different source.

Ken Ernandes, N2WWD, created one additional source for Shuttle orbital data. In some high-interest SAREX missions, Ken had received E-Mail

messages from individuals having difficulty accessing the AMSAT Shuttle Orbital Data Web page. These individuals did not want to subscribe to STSTLE because of the frequency of updates. Therefore, Ken provides a backup source of a current STSTLE update message on his personal Web page. This page may be accessed at:

http://www.mindspring.com/~n2wwd

Because of the workload in providing updates to both the AMSAT Web page and

the STSTLE mailing list, Ken's personal Web page is sometimes only updated with the STSTLE message at ~13:00 UTC and ~20:00 UTC during the missions. Thus, the AMSAT page is the primary data source on the World Wide Web.

[ANS thanks Ken Ernandes, N2WWD, for this information about STS-94.]

/EX

SB SAT @ AMSAT $ANS-159.02
STS-94 SAREX MISSION PT.2

HR AMSAT NEWS SERVICE BULLETIN 159.02 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.02

During SAREX missions, the astronauts will typically make the following types of Amateur Radio contacts:
Scheduled radio contacts with schools.
Random radio contacts with the Amateur Radio community.
Personal contacts with the astronauts' families.

CREW MEMBERS (titles and Amateur Radio call signs):
James D. Halsell, Commander, KC5RNI
Susan L. Still, Pilot
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF
Michael L. Gerhardt, Mission Specialist
Roger Crouch, Payload Specialist
Greg Linteris, Payload Specialist

The SAREX Working Group has designated the following frequencies during this mission.

FM Voice Downlink: (Worldwide) 145.55 MHz
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz
FM Packet Uplink: 144.49 MHz

The crew will use separate receive and transmit frequencies. PLEASE do not transmit on the shuttle's DOWNLINK frequency. The DOWNLINK is your receiving frequency. The UPLINK is your transmitting frequency.

The crew will not favor either uplink frequency, so your ability to communicate with SAREX will be the "luck of the draw." Transmit only when the shuttle is within range of your station, and when the shuttle's station is on-the-air.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1

QSL VIA: Send reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

[ANS thanks the ARRL for this information.]

/EX

SB SAT @ AMSAT $ANS-159.03
RS NEWS FROM G3IOR

HR AMSAT NEWS SERVICE BULLETIN 159.03 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.03

RS-10 still silent:
RS-10's beacon, ROBOT and transponder remain silent whilst designer and builder Andy Papkov carries out experimental work with the satellite from the RS3A command station. Leonid Labutin UA3CR reports that it is hoped that RS-10 will be active again soon, long before it's tenth birthday.

Special Event Station:
From 21st June until 29th June a group of keen RS enthusiasts consisting of G4CUO, G4ZHG, G6HMS, G0MKA, G7MUB, G8DYK and G0MKA will be celebrating the ten years of faultless operation provided by the Russian RS-10 satellite. They will be active with the callsign GB0RAS on all modes on each and every pass of RS-10, RS-12, RS-15 and the Japanese FUJI satellites

also. A serial number will be given for all QSO's on each satellite, and a very special QSL card will be sent to each station contacted or SWL report received.

RS-14/AO-21 Resurrection?
Rumors are circulating that a strong possibility exists that the commanding problems with OSCAR-21 alias RS-14 may soon be resolved. It is not impossible that this highly popular but long silent satellite may re-appear shortly.

RS-15 Problems:
Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced

whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w ERP is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

RS-16 progress:
Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW"
All reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

[ANS thanks Pat, G3IOR, and Andy Mirinov, RK3KPK, for this news about the RS satellites.]

/EX

SB SAT @ AMSAT $ANS-159.04
UO-22 INFO

HR AMSAT NEWS SERVICE BULLETIN 159.04 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.04
A recent problem with UO-22 seems to be related to the software changes that were made last week prior to the last flight software reload. During the last pass over Surrey on Saturday morning, June 7th, Chris Jackson, G7UPN / ZL2TPO , closed the spacecraft store and forward communications system for general use to allow him to diagnose the problem. Chris reports

he will make changes to the spacecraft software and a reload of the communications system will be carried out, as soon as practical.
A complete software reload should not be required and it will be a simple case of reloading the communications task only. This will only take a couple of minutes assuming a good uplink and European operators are asked NOT to transmit to the spacecraft until it is open for use.

[ANS thanks Chris Jackson, G7UPN / ZL2TPO, Groundstation and Operations Manager. Surrey Satellite Technology Ltd, University of Surrey, for this update.]

/EX

SB SAT @ AMSAT $ANS-159.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 159.05 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.05

MIR:
(Uplink 145.2 MHz FM Downlink 145.8 MHz FM)

Note, the above split is used for both packet and voice operation.
ANS has received many reports that both the voice and packet
stations are operating on 145.800 MHz simplex. Also note that
the MIR packet station, R0MIR-1, is operational.
[ANS thanks Claudio Ariotti, IK1SLD, for this report.]
Greg, KO6TH, told ANS that the MIR packet station, R0MIR-1, may be
using 145.800 SIMPLEX, not the minus offset.
Greg did manage to digipeat through R0MIR to KJ7UI,
and exchanged a quick greeting. Gene, N7CKA reports he worked MIR,
on packet and voice, on simplex twice June 8th. He made a contact at
0652 UTC and again on the next pass at 0828 UTC had a contact with KB5UAC.

SAFEX, MIR 70cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Francisco Costa, CT1EAT, reports he is
happy to announce you that
MIR's UHF Voice Repeater is again on!
CT1EAT just work ON6GP on the June 7th pass over Europe,
between 1952-2001 UTC..
[ANS thanks Francisco Costa, CT1EAT, for this report.]

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.
RS3A needs some SWL reports of RS-10.
What time you heard RS-10, and also the date.
Send info via packet to Andy, .RS3A.
Packet: RK3KPK@RA3KP.MSK.RUS.EU

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 Mhz CW/SSB)
Signals on RS-12 in North America during May and June (almost
exclusively daylight passes) are weakened by increased ionospheric
activity which is keeping 15m active during the daylight hours.
This makes it especially important for the 'old timers' to warn the
newcomers on RS-12 to set their uplink frequency and leave it alone to
prevent sweeping across the 15m band and QRM-ing the terrestrial QSOs
in progress
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is
in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active.

The transponder and the 10 meter beacons are not
active at this time.
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
[ANS thanks Chuck Duey, KI0AG, for this report.]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operating normally. Strong downlink signal. Very busy
during passes over North America. Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally. Ronald Osborne, an
Amsat Area Coordinator, reports copying KO-23 from 01:04-01:17Z, 01 JUN.
There is a message "KO-23 will be reset between June 4 and June 6".
[ANS thanks Ronald Osborne, N2OGB, for this report.]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.
AO-27 (1-Jun-1997- 10:58 UTC Orbit-19182)
The satellite is working normally over North America.
and Europe.
Current AO-27 schedule information can be found at
www.umbra.com

Tepr 4 = 32 counts 16 Minutes
Tepr 5 = 66 counts 18 Minutes
The Transmitter xtal is changing with time. From the first day AO-27
was in orbit the Transmit Frequency has been shifting lower. Many

have not checked the zero doppler frequency closely enough to see that it
is dropping. Every few months Michael Wyrick, N4USI, has to change
a setting that moves the freq. a KHz or so up in freq. This setting only
has a range of about 7 KHz total. This means that after a while Michael
can't compensate for the change and has to reset the setting back to zero.
This causes the freq. to drop about 7 KHz when he does this. There is not
a way around this and the Tx freq. will continue to drop as the xtal ages.

The satellite is coming up on the end of range for this setting and in
several months the freq. will seem to drop again. If N4USI had not put the

correction hardware on-board, you would see a continuous shift in tx
frequency. AO-27 Will turn on Every pass 16 Minutes after entering the sun
and will stay on for 18 minutes. This corrects the early shut off that
has been going on for the passed few weeks.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
June 6(Fri) 08:25z JA
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-159.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 159.06 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 08, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-159.06

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Mike West ,WL7BQM, reports on

June 4th at 22:33 UTC phases 184, alt of 29500 km, range at 35000
km (ALASKA) signal was strong when sun was on solar panels.

Mike, N1JEZ, made a quick check of AO-10 tonight June 3rd at 0122 UTC.
The bird was 17,000 km away from him. He heard the beacon. Very Weak,
maybe a slight bit of FM'ing, but very small change. Mike did a quick voice

check, and did hear his downlink. No perceptible FM'ing on his voice.

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
Telemetry nominal. The battery voltage has recently improved to
around 13.9 volts, and the internal temperatures have continued to
fall, due to solar eclipses. The battery temperature is now 4
degrees C, or 18 degree below the full sunlight condition.

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 Mhz.)
(A)non-daylight orbit and (B) daylight orbit
(A)
uptime is 993/17:29:03. Time: Sat Jun 07 22:54:13 1997
Bat 1 V 1.275 V Bat 2 V 1.276 V
Bat 3 V 1.291 V Bat 4 V 1.296 V Bat 5 V 1.272 V
Bat 6 V 1.276 V Bat 7 V 1.272 V Bat 8 V 1.276 V
Total Array C= 0.000 Bat Ch Cur=-0.338 Ifb= 0.253 I+10V= 0.105
TX:010B BCR:1E PWRC:59E BT:3C WC:25 EDAC:47
(B)
uptime is 993/17:34:03. Time: Sat Jun 07 22:59:13 1997
Bat 1 V 1.381 V Bat 2 V 1.384 V
Bat 3 V 1.408 V Bat 4 V 1.362 V Bat 5 V 1.365 V
Bat 6 V 1.434 V Bat 7 V 1.476 V Bat 8 V 1.412 V
Total Array C= 0.252 Bat Ch Cur=-0.046 Ifb= 0.020 I+10V= 0.332
TX:010B BCR:75 PWRC:59E BT:3C WC:25 EDAC:47

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
WJ9F is continuing to work on reloading DOVE.
[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after a system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
(A)non-daylight orbit and (B) daylight orbit
(A)
uptime is 718/09:14:14. Time: Sat Jun 07 23:19:24 1997
Bat 1 V 1.282 V Bat 2 V 1.286 V
Bat 3 V 1.302 V Bat 4 V 1.290 V Bat 5 V 1.294 V
Bat 6 V 1.290 V Bat 7 V 1.297 V Bat 8 V 1.282 V
Total Array C= 0.071 Bat Ch Cur=-0.145 Ifb= 0.008 I+10V= 0.144
TX:016 BCR:1E PWRC:36E BT:3C WC: 0
(B)
uptime is 718/21:32:57. Time: Sun Jun 08 11:38:07 1997
Bat 1 V 1.374 V Bat 2 V 1.375 V
Bat 3 V 1.398 V Bat 4 V 1.380 V Bat 5 V 1.405 V
Bat 6 V 1.441 V Bat 7 V 1.386 V Bat 8 V 1.382 V
Total Array C= 0.319 Bat Ch Cur= 0.116 Ifb= 0.054 I+10V= 0.129
TX:011 BCR:38 PWRC:313A31 BT:35 WC:37

Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
A problem with UO-22 seems to be related to the software changes that
were made last week prior to the last flight software reload. During
the last pass over Surrey on Saturday morning, June 7th, Chris Jackson
closed the spacecraft store and forward communications system for general
use to allow him to diagnose the problem..
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new

ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX
--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1682. Re: satellite sets

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: jrespler@injersey.com
Message-ID: <5nflsdfkh1@news.injersey.com>
Source record: 18742

No Such Agency (anti_scam@mercenary.net) wrote:
> rob@pe1chl (Rob Janssen) wrote:
>
> >In <338f36ea.2400675@news.worldaccess.nl> nl11891@worldaccess.nl (Robert Joosten)
writes:
> >
> >>Currently, I subscribed to AMSAT to receive their keppler-sets.
> >>In this newsgroup, such a sets are also posted.
> >
> >>Now, I have three sources where I could obtain sets from....
> >>Because all these sets seemed to origin from other sources,
> >>which are THE BEST ??? Which are the most accurate (especially MIR) ?
> >
> >In the end they are all from the same source. Compare them and you
> >will see a striking similarity.
>
> What is the name of the source and what is their URL?

They originate at US SpaceCommmand. You can't go there. They are
furnished to NASA OIG (orbital info group). You can go there.

The URL can be found at VSOHP below.

Virtually everyone else gets them from OIG also, so it doesn't matter
whether you get them from OIG or any other site.

--

Jay Respler
--
Details of how to get on the Satellite Observer Mail List, satellite elements,
prediction programs and other satellite information, at the Visual Satellite
Observers Home Page: http://www.physics.ox.ac.uk/sat/vsohp/satintro.html
--
JRespler@InJersey.com
Satellite Tracker * Early Typewriter Collector
Freehold, New Jersey

1683. SAT TRAK IV

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: Rudy Pycke <regie@interpac.be>
Message-ID: <01bc74a7$12acb480$4b144ec2@inf008199>
Source record: 18743

The Sat Trak IV is no more in production but it is a very interesting
control box.
Where can I find the necessary info (schematic, print layout) to build it
my own ?

Who has experience with that box in combination with WISP ?

on6py@amsat.org

1684. Re: Mobile pacsat radio?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EBI4DB.JHr@pe1chl>
Source record: 18744
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc

In <3395A94C.41C6@shoreline-studios.com> Ken Harris <kjh@shoreline-studios.com> writes:

>Can you recommend a mobile radio that will do (9600)
>pacsat? I guess it has to be dual band, full duplex (separate
>antennae connections seem like a good idea.

Mobile dual-band FM radio's have inadequate transmitters for 9600 baud,
even when the manufacturer says they are "9k6 ready". Your uplink
performance will always be marginal.

For 9k6 pacsat operation, you also have to check it has reasonably small
steps (preferably 1 KHz, 2.5 KHz will be acceptable, 5 KHz will be marginal,
anything above will be useless), and that it be computer-controllable
(CAT, CI-V etc).

Yaesu used to include CAT even on their mobile equipment, I don't know if
they still do. I have used an FT-712RH as a receiver. It worked
reasonably well with a steerable 2x15 el crossed yagi and a preamp. The
2m version FT-212RH was completely unsuitable as a transmitter.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1685. Re: SAT TRAK IV

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: rlong@magnus.acs.ohio-state.edu
Message-ID: <rlong-0906971017130001@ts11-13.homenet.ohio-state.edu>
Source record: 18745

In article <01bc74a7$12acb480$4b144ec2@inf008199>, "Rudy Pycke"
<rudy_pycke@hotmail.com> wrote:

> The Sat Trak IV is no more in production but it is a very interesting
> control box.
> Where can I find the necessary info (schematic, print layout) to build it
> my own ?
>
> Who has experience with that box in combination with WISP ?
>
> on6py@amsat.org

I am sorry but that would not be possible. The circuit uses special PALs
and I am not willing to release the code. Also the main firmware is
copyrighted.
You might ask if anyone has one for sale. Try the amsat-bb as well as this
newsgroup.

Ron Long W8GUS
Kiron Corporation

1686. Re: KLM CS-2 switch wiring

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: Jim Garver <k7@teleport.com>
Message-ID: <339CDBAA.16B0@teleport.com>
Source record: 18746

Jim wrote:
>
> Hi,
>
> I just recieved a new KLM CS-2 CP polarity switch that I intend to use
> with the 18C. The 18c is actually very old and was not assembled and
> did not come with the switcher....

> The feedlines to be connected to the driven elements from the switcher
> have NO markings at all. What I'd like to do is wire for RHCP when the
> relay is un-energized. Therefore I need to know which feedline has the
> delay line in series when the relay is "relaxed".

Looking at the box with the coax connector at the bottom, the feedline on the left is the one wired through the relay. The feedline on the right is a direct connection.

I have mine apart for cleaning and repair at this time. Fortunately, my relay is okay but the relay on my KLM2M14C was not and I removed it. I had to make my own phasing lines of 75 ohm coax. This is not so easy to do with the 435 Mhz antenna because the lengths are extremely critical.

Good luck,

Jim K7YO

1687. * SpaceNews 09-Jun-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <$spc0609.1997@ampr.org>
Source record: 18747
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0609
* SpaceNews 09-Jun-97 *

BID: $SPC0609

=========
SpaceNews
=========

MONDAY JUNE 9, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* AO-27 NEWS *
==============
The 70-cm downlink signal from AO-27 is slowly drifting lower in frequency
with time. This drift is due to the natural aging of the transmitter crystal.
Controllers can adjust the downlink frequency slightly to compensate for the
drift, however the frequency change that has occurred to date greater than
the amount that can be compensated for by controllers. Users are asked to
be aware of this and take this into consideration when monitoring the AO-27
downlink (which is currently 436.792 MHz).

[Info via N4USI]

* MIR NEWS *
============
The Mir space station is currently active on both packet radio and FM voice.
Uplink is on 145.200 MHz. Downlink is on 145.800 MHz. PP8KWA in Amazonas,
Brazil downloaded the following list of messages from the Mir personal
message system on-board the space station:

Msg # Stat Date Time To From @ BBS Subject
103 P 06/04/97 23:53 WORLD PP8KWA Hello
102 PR 06/04/97 22:20 TODOS PT7WA Hello Everybody
101 PR 06/04/97 13:35 N6C0 R0MIR Frequencies?
100 PR 06/04/97 12:04 R0MIR N6CO TNX
99 PR 06/04/97 12:03 R0MIR N6CO bio
98 PR 06/04/97 12:02 ALL N6CO 2 Line MIR Keps 6-03
97 PR 06/04/97 10:28 R0MIR A6LIE Hello Mike and CREW!
96 PR 06/04/97 10:26 R0MIR A6LIE Hello Mike and CREW!
94 PR 06/04/97 07:26 R0MIR VE1AMA Question
93 PR 06/04/97 07:25 R0MIR VE1AMA Hello MIR crew...
7023 Bytes free
Next message Number 104

CMD(B/H/J/K/KM/L/M/R/S/SR/V/?)>

Mir can also be heard on communicating with ground control on 143.625 MHz FM. Ron Parise, WA4SIR, reports that Mir communicates with groundstations at the NASA Wallops Flight Facility at Wallops Island, Virginia, and the Dryden Flight Research Center at Edwards Air Force Base, California. A third site at the White Sands Missle Range in New Mexico is expected to become operational within the next few weeks, and a fourth US site is currently under consideration.

Keep an eye out for Mir as it is making visible passes after sunset. In some cases, Mir is visible on every evening pass, particularly when the passes occur in the northern sky.

* RS-10 NEWS *
==============
Users of RS-10 are asked to monitor the satellite's downlinks as it may return to the air shortly. The reason for its dissappearance remains a mystery, but may have something to do with experiments carried out by spacecraft controllers. Leonid Labutin, UA3CR, remains confident that the satellite will return to the air and be operational before its 10th anniversary is celebrated next month.

* FEEDBACK/INPUT WELCOMED *
============================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

1688. Amateur Satellite Projects Wanted For "Satellite Times"

Newsgroup: rec.radio.amateur.space
Date: 1997-06-09 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <st0609.1997@grove.net>
Source record: 18748
Cross-posted to:
rec.radio.amateur.space,rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.antenna,rec.radio.amateur.misc

"Satellite Times" magazine is interested in publishing construction projects (antenna designs, frequency downconverters, transverters, amplifiers, modems, etc.) related to Amateur Communication Satellites.

"Satellite Times" is a bi-monthly publication that covers low-earth orbit to geostationary orbit and beyond. If you have an idea for a feature article, please contact "Satellite Times" editor-in-chief Larry Van Horn at:

steditor@grove.net

For more information on "Satellite Times" magazine, feel free to visit the "Satellite Times" home page at:

http://www.grove.net/hmpgst.html

Thanks!

73, de John, KD2BD
Columnist, "Satellite Times" magazine

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-
"Satellite Times Magazine - We cover space from LEO to GEO and beyond."

1689. Re: arrow antenna info request

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: dquagliana@aol.com
Message-ID: <19970610004601.UAA09886@ladder02.news.aol.com>
Source record: 18749

Philip Chien, KC4YER@amsat.org writes:

>At last year's AMSAT Symposium in Tuscon somebody (I forgot who)
>presented a paper on a very portable AO-27 setup which consisted of a
>handheld radio, and a portable antenna setup -- perfect for the back of
>the car or field days.

That would be me. See "Quick, Inexpensive and Effective: A Simple
Satellite Mobile QRP Station for the Beginner". However, my setup
used a homemade quagi antenna, not the Arrow antenna. You
are probably thinking of Chuck Duey KI0AG. He's the guy with the
Arrow Antenna, and has also done much to promote AO-27.

>What this ham did was put everything together in a nice, easy to
>transport package which he could just toss in the back of his car, or
>carry while hiking, on field day, or whatever.

Completely true. Check out the paper and you will see the back
trunk of my car with my mobile station. The uplink was an old
Tempo S1 HT at one and one-half watts. AO-27 has a super
sensitive receiver! Remember: don't transmit on the uplink until
you can hear the downlink!! AO-27 *WILL* hear you and it
will retransmit your signal.

>The paper is in the 1996 AMSAT meeting proceedings which is
>available from your lovely local Martha. Call Martha at
>301-589-6062 and tell her that you'd like to purchase a copy
>of the 1996 Symposium papers. It's about $12 and well worth
>the cost!

While you're talking to Martha, why not join AMSAT?

If anyone has any questions about AO-27 or my portable
satellite station, please feel free to ask me via email.
However, if you want to know about the Arrow antenna
you better ask Chuck Duey KI0AG.

Doug KA2UPW
dquagliana@aol.com
Satellite/QRP/Mobile <--- all at the same time!! Ask me about it!!

1690. ??? Power Amplifiers for use with ICOM AG25 and AG35 Preamplifiers

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <5nihsp$c0j@server.cntfl.com>
Source record: 18750

I am looking to purchase 2 meter and 70CM amplifiers for use with my satellite station. I have an ICOM 970A and a pair of mast mounted AG series preamplifiers. These preamplifiers derive power from the coax and switch off during TX when the DC voltage is dropped off.

I need to get copies of the schematics of some of the popular amplifiers to determine how easily I can provide DC continuity through the receive relay contacts of any available commercial amplifiers. I am looking for schematics of the following:

TE systems
Mirage
RF Concepts
RF Limited
TelTec
etc.

Amplifiers under consideration are those models with an input range of 10 to 25 watts and 100 to 170 watts output.

Please check the schematics of any amplifiers you might own and advise if DC continuity exists from the input to output in the receive mode, or if it can be modified easily. If your model has a preamplifier option that can be removed to restore DC continuity, that would be Ok too.

Please respond via e-mail and advise if any models exist which would meet my requirements.

1691. MIR info...

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: seymourusm@aol.com
Message-ID: <19970610082701.EAA19182@ladder02.news.aol.com>
Source record: 18751

hello... being new to ham radio, i was wondering if someone could help with a problem i have been having with contacting mir?

specifically, i am tuned to the proper u/l and listening to the proper d/l, i am using about 5 watts (sometimes 10), and using an omni 2m antenna... when mir comes overhead (based on traking data and current keps) i can't seem to reach their packet (or voice) station. is my station properly set up for space comms or will i need to get a directional (dish?) for talking to sats?

73, KF4PTH
S. Bowers

<#include standard.disclaimer>

1692. Re: MIR info...

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <339d4e0c.1092107@news.bctel.ca>
Source record: 18752

Currently, what you hear is the digital signal, and that's it on
145.800 MHz.

I don't have a packet so I don't know what kind of messages we are
getting from up there.

On 10 Jun 1997 08:27:36 GMT, seymourusm@aol.com (SeymourUSM) wrote:

>hello... being new to ham radio, i was wondering if someone could help
>with a problem i have been having with contacting mir?
>
>specifically, i am tuned to the proper u/l and listening to the proper
>d/l, i am using about 5 watts (sometimes 10), and using an omni 2m
>antenna... when mir comes overhead (based on traking data and current
>keps) i can't seem to reach their packet (or voice) station. is my
>station properly set up for space comms or will i need to get a
>directional (dish?) for talking to sats?
>
>73, KF4PTH
>S. Bowers
>----------------
><#include standard.disclaimer>

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.

1693. Re: satellite sets

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: kwise@california.com
Message-ID: <339d1af6.0@seashell.california.com>
Source record: 18753

anto_scam@mercenary.net (No Such Agency) wrote:

><!--
>jrespler@injersey.com (Jay Respler) wrote:

>>No Such Agency (anti_scam@mercenary.net) wrote:
>>> rob@pe1chl (Rob Janssen) wrote:
>>>
>>> >In <338f36ea.2400675@news.worldaccess.nl> nl11891@worldaccess.nl (Robert Joosten)
writes:
>>> >
>>> >>Currently, I subscribed to AMSAT to receive their keppler-sets.
>>> >>In this newsgroup, such a sets are also posted.
>>> >
>>> >>Now, I have three sources where I could obtain sets from....
>>> >>Because all these sets seemed to origin from other sources,
>>> >>which are THE BEST ??? Which are the most accurate (especially MIR) ?
>>> >
>>> >In the end they are all from the same source. Compare them and you
>>> >will see a striking similarity.
>>>
>>> What is the name of the source and what is their URL?
>>
>>They originate at US SpaceCommmand. You can't go there. They are
>>furnished to NASA OIG (orbital info group). You can go there.
>>
>>The URL can be found at VSOHP below.

>My WWW browser kept giving me an error message for Jay's Web page, but
>I found the URL for the Keppler elements.
>http://oigsysop.atsc.allied.com/
>-->
>---

>Use the talents you possess, for the woods would be a very silent place
>if no birds sang except the best. -Henry Van Dyke

HELLO>>>>LOOK AT www.amsat.org...

this is the site for ham sats and they do MIR...

1694. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: Rick Szpyrka <wb8tif@cris.com>
Message-ID: <339D8C70.73918267@cris.com>
Source record: 18754

CrACKeD wrote:

> I've been searching high and low for decent satellite tracking
> software,
> and all I've been able to find is half-assed crippled shareware and
> demos.
> SatSpy turned out to be a piece of junk, and SatTrack, which looks
> great,
> turns out to only be for UNIX/X-11 platforms. I need something for
> DOS or
> Windows 3.x. It must give a graphical representation of a satellites'
>
> window in relation to where I am. All I'm concerned about tracking
> right
> now is Mir. What should I try?
>
> CrACKeD <cracked@primenet.com>

Check out http://www.dransom.com/ for stsorbit plus. Very nice
program and free.
73 Rick WB8TIF

--
Rick Szpyrka WB8TIF
Bloomfield Hills, MI USA
Email: wb8tif@cris.com or wb8tif@amsat.org
URL: http://www.concentric.net/~wb8tif

1695. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: nospam@freemark.com
Message-ID: <339dd8a0.2261317@news.mia.bellsouth.net>
Source record: 18755

On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:

>I've been searching high and low for decent satellite tracking software,
>and all I've been able to find is half-assed crippled shareware and demos.
>SatSpy turned out to be a piece of junk, and SatTrack, which looks great,
>turns out to only be for UNIX/X-11 platforms. I need something for DOS or
>Windows 3.x. It must give a graphical representation of a satellites'
>window in relation to where I am. All I'm concerned about tracking right
>now is Mir. What should I try?
>
>CrACKeD <cracked@primenet.com>

Try STS Orbit Plus. It is found on the NASA Spacelink websight:

http://spacelink.msfc.nasa.gov/Instructional.Materials/Software/IBM.PC/Satellite.Tracking/STSOrbit.Plus/.index.html

2-line tracking elements are also available elsewhere at that site.

73,
WB4YUC

1696. ARLK045 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk045.1997@arrl.org>
Source record: 18756
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK045
ARLK045 Keplerian data

ZCZC SK45
QST de W1AW
Keplerian Bulletin 45 ARLK045
From ARRL Headquarters
Newington, CT June 10, 1997
To all radio amateurs

SB KEP ARL ARLK045
ARLK045 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97151.15454646 .00000108 00000-0 10000-3 0 04885
2 14129 25.9242 144.9168 6068807 121.7683 311.4183 2.05879972077036
RS-10/11
1 18129U 87054A 97161.24513063 .00000020 00000-0 50994-5 0 3609
2 18129 82.9265 243.8604 0010292 240.4854 119.5269 13.72378917499286
UO-11
1 14781U 84021B 97161.02032672 .00000069 00000-0 19522-4 0 09956
2 14781 97.8356 142.5426 0012654 30.4462 329.7442 14.69557725710204
RS-12/13
1 21089U 91007A 97160.93694937 .00000019 00000-0 47994-5 0 00034
2 21089 82.9201 284.0155 0028658 320.5584 39.3473 13.74081909318165
UO-14
1 20437U 90005B 97161.17124507 .00000039 00000-0 31806-4 0 02943
2 20437 98.5187 242.9928 0010204 228.4811 131.5496 14.29962507385218
RS-15
1 23439U 94085A 97161.06653657 -.00000039 00000-0 10000-3 0 02270
2 23439 64.8142 164.3523 0149346 134.0015 227.3333 11.27527707101131
AO-16
1 20439U 90005D 97161.18620801 .00000045 00000-0 34296-4 0 00822
2 20439 98.5353 245.9184 0010617 230.4462 129.5781 14.30010290385236
RS-16
1 24744U 97010A 97161.17189730 .00003004 00000-0 10143-3 0 00538
2 24744 97.2756 66.3652 0008942 106.9061 253.3162 15.31411076015011
```

```
DO-17
1 20440U 90005E 97161.24279634 .00000037 00000-0 31056-4 0 737
2 20440 98.5407 246.8320 0010512 227.6449 132.3843 14.30152894385279
WO-18
1 20441U 90005F 97161.17055089 .00000012 00000-0 21337-4 0 00808
2 20441 98.5386 246.6568 0011085 229.0738 130.9490 14.30120083385267
LO-19
1 20442U 90005G 97161.13840946 .00000047 00000-0 34988-4 0 00746
2 20442 98.5422 247.2909 0011509 228.5390 131.4875 14.30235310385289
FO-20
1 20480U 90013C 97160.93807252 -.00000022 00000-0 19141-4 0 09834
2 20480 99.0448 123.8886 0541424 33.8283 329.6136 12.83238448343770
AO-21
1 21087U 91006A 97161.13954022 .00000093 00000-0 82657-4 0 08346
2 21087 82.9400 56.7946 0034410 290.8896 68.8577 13.74583204319184
UO-22
1 21575U 91050B 97161.14392754 .00000040 00000-0 27473-4 0 07780
2 21575 98.3018 221.9375 0007028 279.6023 80.4375 14.37072851309474
KO-23
1 22077U 92052B 97161.05807713 -.00000037 00000-0 10000-3 0 06746
2 22077 66.0774 160.1617 0009760 215.8782 144.1578 12.86302977226833
KO-25
1 22828U 93061F 97160.71042357 .00000015 00000-0 23457-4 0 05428
2 22828 98.5417 235.4246 0009446 247.9701 112.0485 14.28180678161146
IO-26
1 22826U 93061D 97161.16485434 .00000000 00000-0 17594-4 0 05635
2 22826 98.5451 235.7844 0008548 264.9544 95.0662 14.27837792193085
AO-27
1 22825U 93061C 97161.19587364 .00000016 00000-0 23833-4 0 05979
2 22825 98.5455 235.5738 0007403 263.0524 96.9818 14.27728125193076
FO-29
1 24278U 96046B 97161.11339228 -.00000014 00000-0 22253-4 0 840
2 24278 98.5398 203.3087 0350870 204.4811 153.9312 13.52630810 40167
MO-30
1 24305U 96052B 97161.00688969 .00000204 00000-0 20364-3 0 1105
2 24305 82.9348 359.8973 0028652 225.3368 134.5420 13.73093431 38077
Mir
1 16609U 86017A 97161.31942465 .00023483 00000-0 29586-3 0 3652
2 16609 51.6537 120.3723 0005927 130.7247 229.4493 15.59485600645951

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
June 14, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1697. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: Roberto Franceschetti <pamela@netwide.net>
Message-ID: <01bc75ec$7110f680$068bd4d0@miseno.netwide.net>
Source record: 18757

A new version of LogSat Professional has just been released this weekend.
It features astounding maps that you will not find on any other software.
Check out http://www.logsat.com for more information and an online order
form. You can also see it on the latest AES catalog.

--
Roberto Franceschetti

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

CrACKeD <cracked@primenet.com> wrote in article
<5niooq$42@nntp02.primenet.com>...
> I've been searching high and low for decent satellite tracking software,
> and all I've been able to find is half-assed crippled shareware and
demos.
> SatSpy turned out to be a piece of junk, and SatTrack, which looks great,
> turns out to only be for UNIX/X-11 platforms. I need something for DOS
or
> Windows 3.x. It must give a graphical representation of a satellites'
> window in relation to where I am. All I'm concerned about tracking right
> now is Mir. What should I try?
>
> CrACKeD <cracked@primenet.com>
>

1698. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-10 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5nkdmgife1@news.mhv.net>
Source record: 18758

In article <5niooq$42@nntp02.primenet.com>, CrACKeD <cracked@primenet.com> wrote:
>I've been searching high and low for decent satellite tracking software,
>and all I've been able to find is half-assed crippled shareware and demos.
>SatSpy turned out to be a piece of junk, and SatTrack, which looks great,
>turns out to only be for UNIX/X-11 platforms. I need something for DOS or
>Windows 3.x. It must give a graphical representation of a satellites'
>window in relation to where I am. All I'm concerned about tracking right
>now is Mir. What should I try?
>
>CrACKeD <cracked@primenet.com>

STSORBIT PLUS! Awesome sat tracking program! Do a web search for it!

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio web site:
http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ TW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1699. Re: MIR info...

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970610213914.29778A-100000@spacelink>
Source record: 18759

No, you don't need any special equipment to work MIR. YOu should be doing just fine where reception is concerned. You are probably a little under power to get to the station, especially when some hotdogs are sending with 200 watts and you're using 5 to 10. I have worked the station with an HT and a rubber duck, but those occassions are still very rare. The screech you are hearing is digital transmission, or packet. Different antenna designs might be of help to you, but they aren't completely necessary.

N1MDZ

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1700. Attention All Photographers

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: Photoagent@ibm.net
Message-ID: <5nm6jn$2is$894@news.internetmci.com>
Source record: 18760

PHOTO PHOENIX INTERNATIONAL

We are an international New York based agency representing professional and amateur photographers in the following areas: Galleries, Business and Organizations, Book Publishers, Paper Products, Consumer Publication, Newspapers & Newsletters Publication, Special Interest Publication, and Trade Publication.

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Whether your work portrays conservative, experimental, stylish, or innovative themes, your project proposal should be well thought out before submitting to us.
For first contact, please submit a query letter, and samples of your work. Please include SASE.
Do not send entire portfolio unless we ask for it. If we are not interested, you may not hear from us because of time limitations, so please submit what does not need to be returned. If we think your work is sellable we will respond as quickly as possible.

Send to:
Photo Phoenix International
33-29 58 Street
Woodside, New York 11377
Tele: Florida Branch-(941) 642-660

1701. Writers/Seeking/Publication

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: Litagent@ibm.net
Message-ID: <5nn0qmids921@news.internetmci.com>
Source record: 18761

We are the International Literary Agency of New York. We also have 2
other branches, one in the Lake George region of New York and the
other in Marco Island, Florida, consequently we are able to accept new
clients. Please adhere strictly to the following guidelines for submission
of all fiction & nonfiction.
Fiction: Brief synopsis, first chapter, self-addressed, stamped envelope (S.A.S.E.)
Nonfiction: Brief synopsis, first chapter, S.A.S.E.
Screenplays: (for TV & Movies) Brief synopsis, first 20 pages, S.A.S.E.
Short Stories: Brief synopsis, first 3 pages, S.A.S.E.
Poetry: Send in 3 of your best poems only, S.A.S.E.

Woodside International Literary Agency
33-29 58 Street
Woodside, New York 11377
(718) 651-8145

Please do not send in complete manuscript unless invited.

1702. Re: MIR info...

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <339ef94b.23870025@news.atl.bellsouth.net>
Source record: 18762

On 10 Jun 1997 08:27:36 GMT, seymourusm@aol.com (SeymourUSM) wrote:

>hello... being new to ham radio, i was wondering if someone could help
>with a problem i have been having with contacting mir?
>
>specifically, i am tuned to the proper u/l and listening to the proper
>d/l, i am using about 5 watts (sometimes 10), and using an omni 2m
>antenna... when mir comes overhead (based on traking data and current
>keps) i can't seem to reach their packet (or voice) station. is my
>station properly set up for space comms or will i need to get a
>directional (dish?) for talking to sats?

You may need a bit more uplink power (40-50 watts), and you may need an antenna mounted preamp if you're using lots of lossy feedline. But you should be able to work MIR with an omni antenna. Alternatively, you could go to a directional antenna, probably a yagi not a dish (a 2m dish would need to be *huge* to have much gain). That will require accurate steering however, and is probably more trouble than adding a bit of power and a preamp to a fixed station. For portable operation, however, a hand steered yagi might be a better choice, a 4 or 5 element beam should be sufficient with a short low loss feedline. You don't need a big array such as is required for Oscar 10 in order to work MIR.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1703. Re: Looking for Christian Bock author of WXsat

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5nn429ilf1@tilde.csc.ti.com>
Source record: 18763

In article <01bc7638$34c800a0$1150b710@donkervoort>, beyer@mail.dec.com says...
>
>Hi all,
>
>does somebody knows the e-mail address of Christian Bock, the author of
>WXsat?
>
>/Peter -PA3AEF-
>~~~~~~

Peter, try http://members.aol.com/jkktl/ham.htm or send an email to jkktl@aol.com. The K2TL seems to know a lot about the program so maybe he knows the software author's email address.

73s Ken K5MBV

1704. Writers/Seeking/Publication

Newsgroup: rec.radio.amateur.space
Date: 1997-06-11 00:00:00 UTC
From: Litagent4@ibm.net
Message-ID: <5nn7s0nke921@news.internetmci.com>
Source record: 18764

We are the International Literary Agency of New York. We also have 2
other branches, one in the Lake George region of New York and the
other in Marco Island, Florida, consequently we are able to accept new
clients. Please adhere strictly to the following guidelines for submission
of all fiction & nonfiction.
Fiction: Brief synopsis, first chapter, self-addressed, stamped envelope (S.A.S.E.)
Nonfiction: Brief synopsis, first chapter, S.A.S.E.
Screenplays: (for TV & Movies) Brief synopsis, first 20 pages, S.A.S.E.
Short Stories: Brief synopsis, first 3 pages, S.A.S.E.
Poetry: Send in 3 of your best poems only, S.A.S.E.

Woodside International Literary Agency
1190 North Collier Blvd.
Marco Island, Florida 34145
(941) 642-9660

Please do not send in complete manuscript unless invited.

1705. * Amateur CW/Voice Satellite Frequencies 06.09.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1206970122410001@cqtlm-pm2-066.dowco.com>
Source record: 18765
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

Sorry for the issue delay, network news server was down.

SB freqs @ amsat $FREQ06.09
Amateur CW/Voice Satellite Frequencies for June 9, 1997.

BID: $FREQ0609

Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

---
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-10's beacon, ROBOT and transponder remain silent while designer and builder Andy Papkov carries out experimental work with the satellite from the RS3A command station. Leonid Labutin UA3CR reports that it is hoped that RS-10 will be active again soon, long before it's tenth birthday.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Reports out of
Russia speculate that the transponder may be turned on for amateur use sometime in June. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW" All reports received by Andy of this latest Russian satellite will be
answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

1997 June 6(Fri) 08:25z JA
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox

27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA

* Mir Simplex has returned to active status due to the efforts of
Ham-astronaut Mike Foale, KB5UAC, who recently joined the MIR crew. Lately
he has been very active on 2 Meter Simplex and has been given permission to
operate SAFEX as well.

* SAREX Mission STS-94 Nominal orbital data is now available on the AMSAT
Web Page. The time-independent State Vector and the Keplerian elements
corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are
available at:

http://www.amsat.org/amsat/sarex/orbit.html

CREW MEMBERS with Amateur Radio call signs:
James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

Special Event Station

From 21st June until 29th June a group of keen RS enthusiasts consisting
of G4CUO, G4ZHG, G0MKA, G7MUB, G8DYK and G0MKA will be celebrating the ten
years of faultless operation provided by the Russian RS-10 satellite.
They will be active with the callsign GB0RAS on all modes on each and every
pass of RS-10, RS-12, RS-15 and the Japanese FUJI satellites also. A serial
number will be given for all QSO's on each satellite, and a very special
QSL card will be sent to each station contacted or SWL report received.

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

Scott Leaf VE7VDX - VHF DX Grid Square CN89
ve7vdx@dowco.com
Coquitlam, British Columbia, Canada.

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

1706. Kenwood TS790 CAT-commands

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: Rudy Pycke <regie@interpac.be>
Message-ID: <01bc7700$fdf61700$56144ec2@inf008199>
Source record: 18766

Where can I find the cat-commands for the FT790 Kenwood transceiver?

Thanks for reading this !

Rudy

rudy_pycke@hotmail.com

1707. testing, please disregard

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <199706121041.GAA25111@ns1.qsl.net>
Source record: 18767

test, disregard.

Thanks...

k

---

w1_k_sorter@qsl.net

www.qsl.net/w1_k_sorter/

1708. 8 ele Quad info needed.

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: Ernie Willamson <kd4tjn@juno.com>
Message-ID: <01bc7763$502b1680$fd1c64c0@is-pc>
Source record: 18768

I have 4 2meter, 8 element quads that I want to use for satellite and EME work. They cover 144-146 Mhz.

What is the best configuration for the antenna's as well as the phasing and spceing.

Thanks in advance.

73,

Ernie kd4tjn

kd4tjn@juno.com

1709. Balloon Launch Saturday!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: mai@iquest.net
Message-ID: <5npj7l$19k_006@news.iquest.net>
Source record: 18769

WINDTRAX BALLOON LAUNCH!!!

WindTrax 12 scheduled for liftoff this Saturday, JUNE 14, 1997

See WindTrax website for last minute details and realtime I-NET photos!

www.windtrax.org

Launch Date: June 14, 1997 (this Saturday!)
Time: Estimated @ 1200 UTC/0700 EST (Indiana local)

Location: Challenger Center, Harris Middle School, Brownsburg, Indiana
Elev ~ 800 MSL Lat 39.49.57N Long 86.23.58W

Crusing Alt: Max Alt estimated at 100,000 feet

FORECASTED TRAJECTORY & CLIMB TO 60,000 FEET:
A. 50 mile SE of launch site, while climbing to 100,000 feet, then decending to surface via
parachute
B. 1 hour to 60,000 feet, and 90 minutes to maximum altitude.

PRELAUNCH FREQ's:
Check-ins (HF) 3.860 to 3.870MHz WD9CXU/Dennis Local Talk-in
147.015/R N9KRS/Bob
NETS BEGIN AT 1145UTC/0645 Local
Balloon type: Kaymont 1500GR
Parachute is 8 ft diameter custom made by KB9BSV/Barb
Flight Packages on flight:
Crossband Repeater by W9DUU/Paul Bohr
2m rcvr to 6 m & 70 cm Xmtrs, with voice ID Nicad powered, half wave
vertical ant., 100mW
GPS/Packet by WB9HIS/Chuck Crist
Garmin GPS rcvr, controlled via Paccom Packet & TNC, dwn linked on 446.0
ATV by KT9B/Terry
CCD's - one B&W up-view, one color Horz. View, plus WB8ELK color
graphics board &downlinked on Wyman ATV xmtr via ' wave antenna
FLIGHT PACKAGE FREQ's:
Crossband Repeater - Dwn 52.525 & 444.85MHz (VP) 50 & 100mW Pout
UP - 144.3MHz (VP)
NOTE! PLEASE REMEMBER! VOICE ONLY ON THE CROSSBAND REPEATER!!!

GPS/Packet - Dn 446.00MHz @ 1200 baud packet (VP) 750mW Pout
ATV - Dn 439.25MHz (VP) 1.5W Pout

ALL AMATEURS WELCOME TO PARTICIPATE! WEB, FM, PACKET, ATV! JOIN THE FUN!

1710. Hamfest in Hermon, Maine, Saturday

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: Richard David Glueck <glue9600@spacelink.msfc.nasa.gov>
Message-ID: <Pine.SOL.3.91.970612170502.19608B-100000@spacelink>
Source record: 18770

The Pine State Amateur Radio Club annual hamfest will be held on the grounds of the Hermon High School, on Saturday, June 13th. Hermon is on Route 2, about 5 miles west of Bangor.

Usually a great time for all involved

-Dick
N1MDZ

Richard David Glueck Email:glue9600@spacelink.msfc.nasa.gov

1711. KD1KT, Keith Brown

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <199706122307.TAA02308@ns1.qsl.net>
Source record: 18771

Hi Everyone,

I'm looking for Keith, KD1KT of Lowell, MA. He has many pounds of unclaimed DX QSL cards at the incoming qsl bureau. If anyone has contact with him, or knows an email address for him, please holler back at me.

TNX de K.

---

w1_k_sorter@qsl.net

www.qsl.net/w1_k_sorter/

1712. KZ1K, John Winman

Newsgroup: rec.radio.amateur.space
Date: 1997-06-12 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <199706122311.TAA02365@ns1.qsl.net>
Source record: 18772

Hi Everyone,

I'm trying to get word to KZ1K of Cranston, RI that he has unclaimed
DX QSL cards being held for him by the incoming bureau.

If anyone knows him, please pass the word to him or let me know
his email address.

Thanks de K

---

w1_k_sorter@qsl.net

www.qsl.net/w1_k_sorter/

1713. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: John Hansen <hansen@ait.fredonia.edu>
Message-ID: <33A174CF.295C@ait.fredonia.edu>
Source record: 18675

CrACKeD wrote:
>
> Roberto Franceschetti <pamela@netwide.net> wrote:
> : A new version of LogSat Professional has just been released this weekend.
> : It features astounding maps that you will not find on any other software.
> : Check out http://www.logsat.com for more information and an online order
> : form. You can also see it on the latest AES catalog.
>
> I tried the demo, and wasn't impressed. LogSat couldn't even install
> itself properly, let alone run. Nova for Windows looks good, and its maps
> are also impressive once you get into the "large" sizes. The only thing I
> don't like about this software is that it doesn't seem to be able to
> predict passes. Someone correct me if I'm wrong. I think being able to
> predict passes is a pretty vital feature in software like this.
>
> CrACKeD <cracked@primenet.com>

Yes it does do this. In fact, it does so in both tabular and
graphics mode. Push the "script tracking" button.

73, John WA0PTV

1714. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: Roberto Franceschetti <pamela@netwide.net>
Message-ID: <01bc77c4$95737b40$068bd4d0@miseno.netwide.net>
Source record: 18676

The installation software used to setup LogSat is one of the best two available for Windows. If it fails it is very likely that there are problems with the user's computer. Of the (tens of) thousands downloads of the past two years this is only the third (reported) problem encountered during the installation procedure. We'd say this is an excellent result. There are bound to be messages posted following this, reporting of more errors, but there is no software free of problems. And a few troubles out of dozens of thousands of installations is still a great success, considering the variety of machines used.

If you let us know what problems you're having while running LogSat we might be able to help you out.

--
Roberto Franceschetti

http://www.logsat.com
roberto@netwide.net
roberto@logsat.com

CrACKeD <cracked@primenet.com> wrote in article
<5nq9bh$c7o@nntp02.primenet.com>...
> Roberto Franceschetti <pamela@netwide.net> wrote:
> : A new version of LogSat Professional has just been released this
weekend.
> : It features astounding maps that you will not find on any other
software.
> : Check out http://www.logsat.com for more information and an online
order
> : form. You can also see it on the latest AES catalog.
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> I tried the demo, and wasn't impressed. LogSat couldn't even install
> itself properly, let alone run. Nova for Windows looks good, and its
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> are also impressive once you get into the "large" sizes. The only thing
I
> don't like about this software is that it doesn't seem to be able to
> predict passes. Someone correct me if I'm wrong. I think being able to
> predict passes is a pretty vital feature in software like this.
>
> CrACKeD <cracked@primenet.com>
>

1715. re Leicester Radio Society, UK

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: jalex@easynet.co.UK
Message-ID: <33A1AC23.535B@easynet.co.uk>
Source record: 18677

Worldwide E-Mail PRESS / INFORMATION RELEASE - Dated: 12 June 1997

From:- Leicester Radio Society (LRS), Gilroes Cottages, Off Groby Road, Leicester. England. LE3 9QJ (Callsigns - G2AA / G5UM / G3LRS / G6XRS)

John Alexander / G7GCK. Chair of Leicester Radio Society. E-mail lrs@jalex.easynet.co.uk

Subject:- Leicester Radio Society Associate Membership Discount Card

Dear Sirs,

LRS is one of the oldest radio societies in the UK (formed 1913) and now requires a move to newer premises with better facilities for training and operating - ready for the next millennium.

We have negotiated a series of discounts with hotel groups and car rental companies within the UK. Anyone who needs to hire a car or book hotel rooms within the UK could benefit from our card and make savings - up to 35% for car hire.

Companies currently with us include Avis Rent A Car Ltd, Hertz (U.K.) Ltd, EuroDollar Rent A Car, Stakis Hotels, Wayfarer Inns and Jarvis Hotels. Together, these excellent companies offer a superb range of accommodation and vehicle hire possibilities.

It is not necessary to be a licensed Radio Amateur in order to obtain a card - it is available to anyone, anywhere around the world, who may visit the UK. Some Car rental companies are also offering discounted rates within the USA and Europe.Every card purchased increases the funds available for those new premises, equipment and training.

As the cards are taken up we expect that other companies will offer discounts, broadening the range and type of savings that can be made - these will be updated onto our new web site.

The discount card has been priced at £10 (Sterling) and can be obtained using a Mastercard, Eurocard or Visa credit card. We intend that this modest cost is recovered very rapidly as bookings, and consequent savings, are made.

Our new website contains details about LRS, its members and what we are hoping to achieve. An order form for the Discount Card is included and can be printed, completed and posted to us here in the UK. Subscribers should allow 28 days for delivery.

Check out http://www.foobar.co.uk/dialin/silver/lrs The web site gives information about membership / associate membership and the benefits of joining up with us.

We are a reputable Amateur Radio Society with big ideas for the future. LRS seeks only to further Amateur Radio in general and all monies raised will be used to this end. JA

We hope that you will include this information within your publication(s) and websites and bring it to the attention of your readers.

Please direct any enquiries to me, John Alexander, via snail-mail, fax or E-mail at the above numbers / addresses. Anyone requiring hardcopy text on LRS Letterheads can be supplied with these via standard mail or fax upon request.

With regards

John Alexander / G7GCK
LLB Hons, BSc Hons

1716. ARLS017 Seventeen schools on STS-94 SAREX schedule

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls017.1997@arrl.org>
Source record: 18678
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS017
ARLS017 Seventeen schools on STS-94 SAREX schedule

ZCZC AS17
QST de W1AW
Space Bulletin 017 ARLS017
From ARRL Headquarters
Newington, CT June 13, 1997
To all radio amateurs

SB SPACE ARL ARLS017
ARLS017 Seventeen schools on STS-94 SAREX schedule

Thanks to SAREX--the Shuttle Amateur Radio EXperiment--students at 17 schools, including one in the People's Republic of China, are scheduled to talk with the astronauts on the upcoming STS-94 mission aboard the shuttle Columbia. STS-94 is a ''refly'' of the April STS-83 mission that had to be cut short when a problem developed in one of the shuttle's fuel cells. STS-94 is set to launch on July 1. During the earlier mission, Columbia prematurely returned to Earth April 8 without making any of the scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for the July mission, which will again carry the microgravity science lab. Three hams are among the STS-94 crew members. They are Jim Halsell, KC5RNI, the mission commander; Janice Voss, KC5BTK; and Donald Thomas, KC5FVF.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in learning.

Schools selected by the SAREX Working Group for a ham radio contact during this mission include: Mountain View Elementary School, Prescott Valley, Arizona; Center Street School, El Segundo, California; Ione Junior High School, Jackson, California; Foursquare Radio Amateur Youth, Oxnard, California; Crittenden Middle School, Mountain View, California; Robert J. Burch Elementary School, Tyrone, Georgia; Edgewater High School, Orlando, Florida; Lexington Traditional Magnet School, Lexington, Kentucky; Discovery Place Inc, Charlotte, North Carolina; Lawrence Intermediate School, Lawrenceville, New Jersey; Yeso Elementary School, Artesia, New Mexico; Public School No 9, New York, New York; Du Bois Middle School, Du Bois, Pennsylvania; Dunn's Corners Elementary School, Westerly, Rhode Island; Alvin C. York Agricultural Institute, Jamestown, Tennessee; S.J. Davis Middle School, San Antonio, Texas; and Tsinghua University, Beijing, People's Republic of China.

During most SAREX missions, many of the crew members will make random contacts with earth-bound hams. This crew will use KC5RNI, KC5BTK and KC5FVF on FM voice and W5RRR-1 on packet. They make these contacts during their breaks, before and after meal time, and during their pre-sleep time. In fact, over the past years the astronauts have contacted thousands of amateurs around the world. On many missions, they have even carried a 2-meter packet radio station. Innovative computer software allows the crew to operate the packet gear in an ''unattended'' mode, allowing amateurs to make contacts with the ROBOT station when the astronauts are working or sleeping.

The SAREX Working Group has designated the following frequencies during this mission. FM voice downlink (worldwide): 145.55 MHz; FM voice uplink (except Europe): 144.91, 144.93, 144.95, 144.97, and 144.99 MHz; FM voice uplink (Europe only): 144.70, 144.75, and 144.80 MHz; FM packet downlink: 145.55 MHz; FM packet uplink: 144.49 MHz.

Hams should avoid transmitting on the shuttle's downlink frequencies. The uplink is your transmitting frequency. The crew will not favor any uplink frequency, so your ability to communicate with SAREX will be the ''luck of the draw.'' Transmit only when the shuttle is within range of your station, and when the shuttle's station is on-the-air.

QSLs go to ARRL EAD, STS-94 QSL, 225 Main St, Newington, CT 06111-1494. Include the following information in your QSL or report: STS-83, date, time in UTC, frequency and mode (FM, voice or packet). You must also include a business-sized SASE.

Additional STS-94 mission information is available from NASA at the NASA Shuttle Web site, http://shuttle.nasa.gov.
NNNN
/EX

1717. KLM vs M2 Satellite Antennas?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: Mike Blanchard <phoenix@flash.net>
Message-ID: <33A21D98.402B@flash.net>
Source record: 18679

I looks like both KLM and M2 have 2m & 70cm circular polarized yagi antennas that are long and longer. It looks like the gain for the longer ones is only ~2db more than their long version. Is the longer version worth the extra $70.00 ?

Is there any difference in the mechnical or electrical quality of the two brands of satellite antennas (KLM vs M2)?

I just purchased a Yeasu G5400B rotor and need to know what kind of coax to use to connect to the satellite antennas (KLM vs M2)?

Thanks,
Mike
N5KDY

1718. mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: cruzz@aa.net
Message-ID: <866182952.190454@moon.aa.net>
Source record: 18773

```
im looking for the frequencies to both the shuttle and mir and idea?

73 james kb7tfw
.
```

1719. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-13 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <33A16EC7.5B8D@ibag.com>
Source record: 18774

CrACKeD wrote:
>
> Roberto Franceschetti <pamela@netwide.net> wrote:
> : A new version of LogSat Professional has just been released this weekend.
> : It features astounding maps that you will not find on any other software.
> : Check out http://www.logsat.com for more information and an online order
> : form. You can also see it on the latest AES catalog.
>
> I tried the demo, and wasn't impressed. LogSat couldn't even install
> itself properly, let alone run. Nova for Windows looks good, and its maps
> are also impressive once you get into the "large" sizes. The only thing I
> don't like about this software is that it doesn't seem to be able to
> predict passes. Someone correct me if I'm wrong. I think being able to
> predict passes is a pretty vital feature in software like this.
>
> CrACKeD <cracked@primenet.com>

Nova "predicts" passes to the extent that it gives the next AOS time and
the next LOS time. It does not give a minute-by-minute az-el location
of the sat on the next pass however, like Instant-track does. For that
reason, I still use Instant-track a lot. As far as the Windows trackers
goes, I think Nova is still the best I've seen.

Rick T.

1720. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33a3237b.3445638@news.capital.net>
Source record: 18680

On Fri, 13 Jun 1997 06:22:28 GMT, cruzz@aa.net (james) wrote:

>im looking for the frequencies to both the shuttle and mir and idea?
>
>
>73 james kb7tfw
>.
Mir is on 145.800 downlink and 145.200 uplink. I don't know about the
Shuttle.

--
Butch N2YMJ

To send mail
delete the xyz
from my address.

1721. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33a42443.3646133@news.capital.net>
Source record: 18681

On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:

>I've been searching high and low for decent satellite tracking software,
>and all I've been able to find is half-assed crippled shareware and demos.
>SatSpy turned out to be a piece of junk, and SatTrack, which looks great,
>turns out to only be for UNIX/X-11 platforms. I need something for DOS or
>Windows 3.x. It must give a graphical representation of a satellites'
>window in relation to where I am. All I'm concerned about tracking right
>now is Mir. What should I try?
>
>CrACKeD <cracked@primenet.com>
STSPlus is a very good program. It has a lot of nice features and it's
free. Do a search on the web for it.

--
Butch N2YMJ

To send mail
delete the xyz
from my address.

1722. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5nteui$qn5@news.onramp.net>
Source record: 18682

and on June 15 it changes again

Bob

1723. *** NEED HELP WITH AO21 AO27***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: pconkika@dial.cylink.COM.cy
Message-ID: <199706140940.MAA02861@dial.cylink.com.cy>
Source record: 18683

Dear friend ,
Thanks for reading my help message.For the past one month i have been
trying to work with these two sattelites but nothing happens.
I am working with 35 W for UHF and 50 W for VHF.My QTH is Cyprus (5B4AET).
I'm sure that i'm tracking them correctly.
Please give me the frequencies for UP and DOWN so that to confirm i'm using
the correct ones and any other info you may know.(Are they operative in my
area???)
Thanking you in advance.
Panicos C 5B4AET

pconkika@dial.cylink.com.cy

1724. Judica-Cordiglia

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: Giovanni Abrate <tryphon@worldpass.net>
Message-ID: <33a2b466.0@207.22.162.16>
Source record: 18684

The Judica-Cordiglia brothers started tracking the early artificial satellites from their listening station in Northern Italy in the late fifties. In 1961 they picked up and recorder radio signals from a manned russian capsule, before Youri Gagarin's flight. The signals clearly showed that the cosmonaut was dying. The mission was never disclosed by the soviet authorities. A few weeks after Gagarin's flight, which they tracked and recorded, they picked up the voice transimissions of a female cosmonaut in dire trouble. They actually recorded her last words! RealAudio files can be heard in 'The Lost Cosmonauts' a new web site which exposes these early soviet tragic space flights. The Judica-Cordiglia brothers, who are still active in Turin, Italy, should be recognized as the First of the Space Radio Amateurs.
Please visit this interesting web site and help us promote it.
Thanks,
Giovanni Abrate
URL:
http://www.areacom.it/html/arte_cultura/lostcosmo/indextlc.htm

1725. Distributors Wanted NOW!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: Tony Scott <summer@laoffices.com>
Message-ID: <5nue64$84p$9408@cadmium.aware.nl>
Source record: 18685

Hi,

This is a Solicitation Email, we are looking for new TUFF'97 DISTRIBUTORS.
TUFF'97 is a promotional concept for a prospect follow-up system called
"Simple Track". Software designed for Windows 95, 3.11 and NT
machines. (Macintosh users read the NOTE below(*))

Concept:

The TUFF'97 software includes a copy of Simple Track, so you can use this
for your own personal administration (free). However, the TUFF'97 software
is designed to give you BIG TIME credits for just taking the efforts to
PROMOTE it.

How do I get those credits?. Easy, just distribute/promote it. How?
(Give away the software for free, put it on your website/homepage
and let everyone download it. Give it to your friends, attach it by
email etc). With a one time $40.00 (USD) validation code purchase,
YOUR name becomes part of all sofware you sent out to your customers.
When your TUFF'97 software gets validated, all your personal information is
automatically integrated in the software, so everyone knows how to reach
you by phone/fax or email and where to sent the check/money or cash orders.

Basically this is the concept. Offcourse you need the software to grasp
the whole thing. Believe it, there is absolutely no marketing knowledge
required, just ask for the software package, join and start promoting your
own TUFF'97 line. The only thing you DO need is a PC or Mac(*) and Internet.

(*) TUFF'97 is only available for MacOS users running Connectix VirtualPC
or Insignia's Sofwindows 95/3.11. A true MacOS version is not available.

When you're interested in becoming a TUFF'97 distributor and create your own
distribution line, sent a mailto:FiReStArTeR@frodo.com and ask for your
copy of the TUFF software (We'll sent you a download location and install
instructions). This is a serious opportunity, so only serious responses
are processed. If you're not interested, have a nice day.
Best Regards,
Tony Scott
Worldwide Pants Promotions
24H Support/Download requests,
mailto:FiReStArTeR@frodo.com
voice:(+01)779 698 4655
Fax :(+01)779 698 4555

1726. ARLK046 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk046.1997@arrl.org>
Source record: 18686
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK046
ARLK046 Keplerian data

ZCZC SK46
QST de W1AW
Keplerian Bulletin 46 ARLK046
From ARRL Headquarters
Newington, CT June 14, 1997
To all radio amateurs

SB KEP ARL ARLK046
ARLK046 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97163.29210246 -.00000048 00000-0 10000-3 0 4861
2 14129 25.9507 142.8290 6066846 125.1978 307.4888 2.05879921 77287
RS-10/11
1 18129U 87054A 97164.16141747 .00000037 00000-0 24041-4 0 03857
2 18129 82.9259 241.7052 0010284 230.9243 129.0998 13.72379244499683
UO-11
1 14781U 84021B 97163.94814020 .00000139 00000-0 31305-4 0 09887
2 14781 97.8352 145.3515 0012623 21.5300 338.6429 14.69559285710632
RS-12/13
1 21089U 91007A 97163.84961575 .00000031 00000-0 17365-4 0 09987
2 21089 82.9203 281.8552 0028546 312.2710 47.6024 13.74082154318569
UO-14
1 20437U 90005B 97164.18004012 .00000020 00000-0 24598-4 0 02833
2 20437 98.5185 245.9361 0010218 217.8385 142.2080 14.29962818385643
RS-15
1 23439U 94085A 97164.08212056 -.00000039 00000-0 10000-3 0 02437
2 23439 64.8138 159.4762 0149290 133.4725 227.8719 11.27527734101475
AO-16
1 20439U 90005D 97163.77508487 .00000015 00000-0 22642-4 0 00755
2 20439 98.5352 248.4565 0010717 221.4481 138.5889 14.30010266385601
RS-16
1 24744U 97010A 97164.17758495 .00003339 00000-0 11239-3 0 00731
2 24744 97.2749 69.3148 0009002 98.2185 262.0077 15.31432956015476
```

```
DO-17
1 20440U 90005E 97164.18122675 .00000032 00000-0 28974-4 0 00870
2 20440 98.5401 249.7135 0010628 219.6184 140.4223 14.30153445385695
WO-18
1 20441U 90005F 97164.17901209 .00000050 00000-0 36244-4 0 765
2 20441 98.5385 249.6083 0011152 219.9165 140.1198 14.30120908385699
LO-19
1 20442U 90005G 97164.77625739 .00000038 00000-0 31347-4 0 746
2 20442 98.5428 250.8637 0011472 217.1057 142.9334 14.30235498385808
FO-20
1 20480U 90013C 97163.90065220 -.00000057 00000-0 -57604-4 0 9728
2 20480 99.0454 126.2942 0541277 27.1427 335.6912 12.83237921344156
AO-21
1 21087U 91006A 97164.12394362 .00000093 00000-0 82657-4 0 08354
2 21087 82.9404 54.5872 0033929 281.9606 77.7747 13.74583178319599
UO-22
1 21575U 91050B 97164.13785320 .00000076 00000-0 39866-4 0 07965
2 21575 98.3009 224.8245 0007000 270.9717 89.0663 14.37073843309901
KO-23
1 22077U 92052B 97164.47907681 -.00000037 00000-0 10000-3 0 6683
2 22077 66.0767 152.9970 0009762 214.2351 145.8038 12.86302959227271
KO-25
1 22828U 93061F 97164.28343899 .00000019 00000-0 24986-4 0 5409
2 22828 98.5416 238.9198 0009481 236.4715 123.5531 14.28181223161658
IO-26
1 22826U 93061D 97164.73872693 .00000012 00000-0 22370-4 0 5617
2 22826 98.5452 239.2806 0008451 253.1885 106.8369 14.27838197193595
AO-27
1 22825U 93061C 97164.13928754 .00000057 00000-0 40745-4 0 05828
2 22825 98.5455 238.4528 0007444 254.6254 105.4108 14.27728969193496
FO-29
1 24278U 96046B 97164.14624338 -.00000011 00000-0 24819-4 0 01045
2 24278 98.5385 205.9251 0351200 196.5593 162.3836 13.52631206040570
Mir
1 16609U 86017A 97164.45940839 .00001819 00000-0 28886-4 0 3712
2 16609 51.6533 104.5936 0005520 140.6785 219.4465 15.59483260646446

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
June 17, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1727. Test-Do Not Read

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33a3f54e.1693924@news.capital.net>
Source record: 18687

TEST TEST TEST

--
Butch N2YMJ

To send mail
delete the xyz
from my address.

1728. PC Rotor Controller?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: Mike Blanchard <phoenix@flash.net>
Message-ID: <33A36726.6AB@flash.net>
Source record: 18688

Is anyone designing a low-cost (~$100) az/elv rotor and radio controller
that is pc based for satellite communications?

I know of only two sources for such a device:

KC Tracker
TAPR

Thanks,
Mike
N5KDY

1729. FS: tubes, test equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33a35f92.0@news.cyberannex.com>
Source record: 18689

Hello!

Used Tubes, Pulled from Surplus Equipment, unteseted,
Priced accordingly, Substatnial quantities available:

6AL5 $0.50; 6AU6A $1.00; 6CL6 $ $1.00; 6X4 $1.00;
5963 (12AU7A) $1.25; 8136 $0.75; 8532W $1.00'

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

Amphenol 31-5061 TNC MALE CONNECTOR
for: RG59, RG62, RG140, RG210 COAXIAL CABLE.
New, In original bags, FREE SHIPPING on 4 or more.
$0.75 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 5000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.10 each

For more ELECTRON TUBES (both new and/or used), various
ANTIQUE RADIO COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail:
sales@emodus.com
For a complete list.

Thank you!

1730. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-14 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5nu179$g1c$1@news.mhv.net>
Source record: 18690

In article <33a3237b.3445638@news.capital.net>, orion@xyzcapital.net wrote:
>On Fri, 13 Jun 1997 06:22:28 GMT, cruzz@aa.net (james) wrote:
>
>>im looking for the frequencies to both the shuttle and mir and idea?
>>
>>
>>73 james kb7tfw
>>.
>Mir is on 145.800 downlink and 145.200 uplink. I don't know about the
>Shuttle.

See my web page for satellite freqs. The URL is in my sig...

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1731. MIR PMS docs?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: Ken Harris <kjh@shoreline-studios.com>
Message-ID: <01bc7926$9203c510$020000c0@nt2>
Source record: 18691

Where is the documentation for the PMS system on MIR?

What commands are available?

1732. New Drake "satellite" radio

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <5nvqau$pql@server.cntfl.com>
Source record: 18692

I applaud Drake for their latest 2 meter (FM) base station radio offering.

However I note with dismay what appears to be misleading information in the AD copy in the latest AES catalog. Drake is calling this radio a "satellite" rig. And although it may indeed be useful for a few of the FM birds, MIR and packsats, the impression that many who shell out $1400 will have is that they may indeed work ALL the satellites in the radios passband. I doubt the LEILA circuit in Phase 3d is ready to deal with the onslaught of these new Drake users trying to get their moneys worth.

1733. Re: *** NEED HELP WITH AO21 AO27***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5nvtfm$7sb@dfw-ixnews8.ix.netcom.com>
Source record: 18693

In <199706140940.MAA02861@dial.cylink.com.cy>
pconkika@dial.cylink.COM.cy (PANICOS CONSTANTINOU) writes:
>
>Dear friend ,
>Thanks for reading my help message.For the past one month i have been
>trying to work with these two sattelites but nothing happens.
>I am working with 35 W for UHF and 50 W for VHF.My QTH is Cyprus
(5B4AET).
>I'm sure that i'm tracking them correctly.
>Please give me the frequencies for UP and DOWN so that to confirm i'm
using
>the correct ones and any other info you may know.(Are they operative
in my
>area???)
>Thanking you in advance.
> Panicos C 5B4AET
>
> pconkika@dial.cylink.com.cy

Hello Panicos,

First of all AO-21 is dead. Several years ago the Russian space craft it is riding on had the systems shut down. At that time we lost the transponder.

The AO-27 transponder is working quite well but it may be turned off when it is over you. Due to power limitations it is only on during daylight hours when it is over North America. I do not know if it is on over Europe or the Middle East at all. If it is available you can hear the downlink on 436.800 +/- Doppler. I use a hand held Yagi-Uda 70cm beam for the down link and find the satellite carrier easily even when the satellite is not in use. Perhaps someone else can advise you if it is even available in your part of the world. If it is I can help you learn to use it.

73 Jerry KK5YY

1734. This is great-Like ice tea

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: donald@bellatlantic.net
Message-ID: <5o01p5$h5b$1@nw003.infi.net>
Source record: 18694

Hey, just thought i'd share with everyone,
I found a site with loads of nude CHEERLEADERs. The
address is:

http://www.mid-night.com/

--Jason--

(Sorry for the intrusion, everyone needs some short skirts in their life)

P.S. They also a have spanish / latina women archive

1735. WTKnow: What Freq. For Phase III Sat???

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: wega@loop.com
Message-ID: <33a3c5eb.1236416@nntp.loop.com>
Source record: 18695

Looking to know what frequencies will be used in the Phase III sat?
Also does anyone know when it is sced for launch? Bought the ARRL
Satellite Anthology and no practical info on that subject.
WE6A

1736. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5o0sot$b0f$85@news.internetmci.com>
Source record: 18696

Hello!
Another special offer:

Used Tubes, Pulled from Surplus Equipment, unteseted,
Priced accordingly, Substatnial quantities available:

6AL5 $0.50; 6AU6A $1.00; 6CL6 $ $1.00; 6X4 $1.00;
5963 (12AU7A) $3.00; 12AU7A $3.00; 12AX7A $3.00;
6080 $4.00; 8136 $0.75; 8532W $1.00

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

Amphenol 31-5061 TNC MALE CONNECTOR
for: RG59, RG62, RG140, RG210 COAXIAL CABLE.
New, In original bags, FREE SHIPPING on 4 or more.
$0.75 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 5000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.10 each

For more ELECTRON TUBES (both new and/or used), various
ANTIQUE RADIO COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail:
sales@emodus.com
For a complete list.

Thank you!

1737. FS: MFJ-1270CQ w/WARRANTY

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: Thomas Johnson <n2rif@kwiknet.net>
Message-ID: <01bc79a7$c1907360$f28d56cf@tee-jay>
Source record: 18697

Hello All;
I'm selling the "MFJ-1270CQ: MFJ TNC-2 Packet Controller Turbo Plus"
with the 9600bps modem installed. This tnc/modem has all the features
of the "MFJ-1270C" plus builtin 9600bps G3RUH modem for 9600bps AX.25
and 9600bps AFSK operations.
The MFJ-1270CQ is fully TAPR TNC-2 compatible with KISS interface,
MFJ Host mode * Anti-collision technology * Enhanced personal Mailbox
Plus Much more.
Included are all original docs, manuals, box and accessories. This
unit is still under MFJ's Unlimited 100% Warranty. It has less than
4 hours use. It's Basicly New Out Of The Box!..Reason 4 Sale: I just
bought the new AEA/Timewave DSP-2232 that includes all PacSat modes,
Wefax, SSTV & more.. Also I am a non-smoker
New it sells for around $229.99 +shipping. Asking $195 +shipping.
All cash offers will be considered..
Please call 1-609-386-9382 10am to 10pm Eastern Time..
Or RE: via Email to: n2rif@amsat.org
Packet: N2RIF@WM2F.SNJ.NJ.USA.NA
Thank You For Reading My Bulletin
de Thom J aka T.j.
....73

1738. ANS-166 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc79c5$550d8980$46280ace@home.the-bridge.net>
Source record: 18698

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-166.01
MIREX INFO/MIR FREQ. CHANGE

HR AMSAT NEWS SERVICE BULLETIN 166.01 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.01

To: Amateur Radio Stations
From: MIREX Mir International Amateur Radio Experiment
Subject: Mir Frequency change experiment
Date: June 13, 1997

A frequency change experiment is tentatively scheduled to take place the weekend of June 15th at 1200 UTC with the 2-meter station on board the Mir Space Station. The duration of the experiment has not been finalized, we would like your inputs on the results. The MIREX team has received numerous
complaints from around the world, stating the existing Mir 2-meter channels

are not usable. In November 1996 Mir changed from the successful channel 145.550 simplex to a 145.200/800 split frequency. This combination of channels (145.200/800) does not work very well for most parts of the world. In many countries the 145.200 is used for repeater Outputs or Inputs. The 145.790 channel is in use by many semi-permanent packet operations. The new temporary frequency which MIREX has requested is 145.985 Simplex. All operations, Voice and Packet will be on 145.985 Simplex. This frequency was chosen for three primary reasons. First it complies with the ITU International Band plan for Satellite operations. Second, It gets Mir away from most of the terrestrial based interference. Third, The Mir 2-meter station is desensed by commercial VHF activities on board Mir (in the 143 MHz range).

Stations are encouraged to listen to the Mir activities on the new channel and send your Signal and Interference reports to the CEO of MIREX, Dave Larsen. It is very important to participate and send reports. This is

an opportunity to provide useful input.
Address:
E-mail doc @ volcano.net

Packet n6co @ N0ARY.#NOCAL.CA.USA.NOAM
Postal N6CO POB1501 PINE GROVE CA 95665

Please do not send Signals reports via the Mir PMS mail box. And do not bother the Mir crew members about the frequency change. This frequency experiment is solely the responsibility of the MIREX Working Group. The MIREX Working Group would like the thank all of the people involved with assisting in this information gathering experiment, including the Mir 23 Crew members and the Chief of Cosmonaut Amateur Radio Department RSC.

Suggested Report format: (pre-amps turned off, state antenna style, then describe interference if any)
Elevation Degrees / S-Unit
5 5
10 9
30 +10
50 +20
30 8
10 6
5 2

[ANS thanks Dave Larsen, N6CO/K6MIR, for this news about MIR,.]

/EX

SB SAT @ AMSAT $ANS-166.02
SCHOOLS ON STS-94 SAREX

HR AMSAT NEWS SERVICE BULLETIN 166.02 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.02

Thanks to SAREX--the Shuttle Amateur Radio EXperiment--students at 17 schools, including one in the People's Republic of China, are scheduled to talk with the astronauts on the upcoming STS-94 mission aboard the shuttle Columbia. STS-94 is a ''refly'' of the April STS-83 mission that had to be cut short when a problem developed in one of the shuttle's fuel cells. STS-94 is set to launch on July 1. During the earlier mission, Columbia prematurely returned to Earth April 8 without making any of the scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for the July mission, which will again carry the microgravity science lab. Three hams are among the STS-94 crew members. They are Jim Halsell, KC5RNI, the mission commander; Janice Voss, KC5BTK; and Donald Thomas, KC5FVF.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in learning.

Schools selected by the SAREX Working Group for a ham radio contact during this mission include: Mountain View Elementary School, Prescott Valley, Arizona; Center Street School, El Segundo,

California; Ione Junior High School, Jackson, California; Foursquare Radio Amateur Youth, Oxnard, California; Crittenden Middle School, Mountain View, California; Robert J. Burch Elementary School, Tyrone, Georgia; Edgewater High School, Orlando, Florida; Lexington Traditional Magnet School, Lexington, Kentucky; Discovery Place Inc, Charlotte, North Carolina; Lawrence Intermediate School, Lawrenceville, New Jersey; Yeso Elementary School, Artesia, New Mexico; Public School No 9, New York, New York; Du Bois Middle School, Du Bois, Pennsylvania; Dunn's Corners Elementary School, Westerly, Rhode Island; Alvin C. York Agricultural Institute, Jamestown, Tennessee; S.J. Davis Middle School, San Antonio, Texas; and Tsinghua University, Beijing, People's Republic of China.

During most SAREX missions, many of the crew members will make random contacts with earth-bound hams. This crew will use KC5RNI, KC5BTK and KC5FVF on FM voice and W5RRR-1 on packet. They make these contacts during their breaks, before and after meal time, and during their pre-sleep time. In fact, over the past years the astronauts have contacted thousands of amateurs around the world. On many missions, they have even carried a 2-meter packet radio station. Innovative computer software allows the crew to operate the packet gear in an ''unattended'' mode, allowing amateurs to make contacts with the ROBOT station when the astronauts are working or sleeping.

The SAREX Working Group has designated the following frequencies during this mission. FM voice downlink (worldwide): 145.55 MHz; FM voice uplink (except Europe): 144.91, 144.93, 144.95, 144.97, and 144.99 MHz; FM voice uplink (Europe only): 144.70, 144.75, and 144.80 MHz; FM packet downlink: 145.55 MHz; FM packet uplink: 144.49 MHz.

Hams should avoid transmitting on the shuttle's downlink frequencies. The uplink is your transmitting frequency. The crew will not favor any uplink frequency, so your ability to communicate with SAREX will be the ''luck of the draw.'' Transmit only when the shuttle is within range of your station, and when the shuttle's station is on-the-air.

QSLs go to ARRL EAD, STS-94 QSL, 225 Main St, Newington, CT 06111-1494. Include the following information in your QSL or report: STS-94, date, time in UTC, frequency and mode (FM, voice or packet). You must also include a business-sized SASE.

Additional STS-94 mission information is available from NASA at the NASA Shuttle Web site, http://shuttle.nasa.gov.

During the mission STS-94 SAREX information, including the latest bulletins, Keplerian elements, and rise and set times, can be obtained on the SAREX Web Page http://www.nasa.gov/sarex/sarex.html"

[ANS thanks the ARRL for this report on STS-94.]

/EX

SB SAT @ AMSAT $ANS-166.03
P3D MILESTONES REACHED

HR AMSAT NEWS SERVICE BULLETIN 166.03 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.03

Regular users of FO-20 may have been puzzled by a strange buzzing sound on its mode JA transponder over the last couple of weeks. This was due to command stations testing the new P3D Range Determination software and hardware. P3D's orbit will change significantly after motor firings, and NORAD will lose track of us. So would we! The P3 ranging system enables our world wide network of Command Stations to measure distance to the satellite from different locations and at different times and so compute the new orbit's keplerian elements. This information is used by us, the AMSAT community, and of course given back to NORAD so that they can re-acquire our satellite by radar. This methodology was used to remarkable

effect in picking up Oscar-13 after both its motor firings.

Back in 1988, the P3C engineering software was still based on the Atari-800XL computer. This was a legacy from the very successful designs originating as far back as 1979 and the ill-fated P3A satellite (1981). However the prospect of working on P3D yet again using a dual audio cassettes for storage and 8-bit 2 MHz processors has never been very attractive, and a re-engineering of many of the tools has been undertaken by James Miller, G3RUH, over the last couple of years. The P3 Range Determination package marks the successful completion of a substantial development program that includes the following principal packages:
- Tracking
- Telemetry Display
- Command Uploader
- IPS-X1802
- Ranging
- OrbitFit

Tracking of course needs no introduction.
Telemetry Display is essentially as already available for AO-13, but with P3D specific changes. This will be publicly released for several platforms

when P3D is finally "nailed down". Command Upload software is used for commanding the spacecraft both during lab-testing and in space. These first three packages were used for AO-13.

P3D, like its predecessors, has a flight computer based on a radiation hardened CDP-1802 microprocessor. It runs an operating system called IPS. But generation of the flight operating system and on-board control software is done on a ground-based host computer. The IPS-X1802 package is, as its name suggests, a cross compiler. Source files for P3D are written using the

IPS language. They are compiled by the IPS-X1802 development system (itself written in IPS) which outputs a target binary in 1802 machine code.

In the days of P3A/B/C, this compilation used to take half an hour on the Atari-800XL. Imagine how tedious a simple edit used to be. Flight software compilation, from source files to uploadable binary, now takes half a second. The IPS-X1802 cross-compiler is a major part of the P3D development program. Without it, the flight software which controls the spacecraft, and is much different than that of P3A/B/C, would be impossible

to produce efficiently in the short timescale left to us.

The Ranging software, mentioned earlier, measures range to the satellite with a basic accuracy of about 150m (1 microsecond). Comparison of ranges measured via FO-20, with ranges displayed by regular tracking programs, shows agreement within 5 km, often better. During tests, signal strengths have been kept to the absolute minimum needed for "lock", and are weaker than AO-13's general beacon used to be. The uplink power to FO-20 is typically under 1 watt to a KLM14C antenna, rather less than a typical SSB user's. The ranging software can track down to a level where the signal is

virtually inaudible. Sample GIF (5 Kbytes) taken during an FO-20 pass is at: http://www.jrmiller.demon.co.uk/IPS/range.gif

The final program OrbitFit takes range measurements from the network of command stations, and computes an orbit that best fits the data. It was written 10 years ago by Stefan Eckart, DL2MDL, and has been adapted for our current needs by G3RUH. Tests processing FO-20 ranging data have been completely successful. Software is written in Basic and ARM assembler for the Acorn Risc Computer. Current machines use the DEC SA-110 processor at typ. 200 MHz/700 mW/$50, highest MIPs/mW and MIPs/$$ (taken together) in the business and currently the embedded systems processor of choice. Makes

a cool personal computer too. Acorn Risc Computer:
http://www.acorn.co.uk/acorn/products/strongarm/

DEC SA-110 information:
http://www.europe.digital.com/info/semiconductor/sa110.htm

Software is not as photogenic or as sexy as hardware, and thus gets little or no exposure. Yet Miller hopes this short precis gives an idea of how the
backroom boys have been keeping busy. There are many such heroes in the P3D program, but G3RUH will just cite fellow P3D command stations Peter Guelzow DB2OS, Graham Ratcliff VK5AGR, Stacey Mills W4SM and Ian Ashley ZL1AOX for enthusiastically thrashing every development as it has staggered

off the production line.

[ANS thanks James Miller, G3RUH, for this information.]

/EX

SB SAT @ AMSAT $ANS-166.04
40th ANNIVERSARY of SPUTNIK 1

HR AMSAT NEWS SERVICE BULLETIN 166.04 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997

TO ALL RADIO AMATEURS BT
BID: $ANS-166.04

On October 4th 1957 Russia launched the worlds first man made satellite Sputnik 1. Its CW signals on 20 MHz and 40 KHz were heard by radio amateurs around the world.

Join in celebrating this fine achievement. The club call, M1ASE, (Amateur Satellite Experimenters) will be on air for 24 hours on October 4th 1997. Activity will continue throughout the month and into November ending at 2359 UTC on November 3rd, the date of the 40th anniversary of the launch of Sputnik 2.

M1ASE will be active in voice mode on all of the available analogue sats. concentrating on the Russian satellites RS-10, RS-12, RS-15, RS-16. There will be an SWL award, special QSL cards and an award certificate when you work us on more than one satellite. Make a note in the shack diary and look out for further bulletins nearer the event.

[ANS thanks John Heath, G7HIA, FOR THIS UPDATE.]

/EX

SB SAT @ AMSAT $ANS-166.05
KF0JT SK

HR AMSAT NEWS SERVICE BULLETIN 166.05 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-16605

It is with sadness that ANS reports the death of Dennis Caton, KF0JT, author
of UP/DOWN. Dennis lost a three year battle with cancer June 4 at his home near Colorado Springs. He was a native of England and is survived by his wife and two grown children. Dennis was a long time supporter of AMSAT and satellite projects. For a time he was AMSAT's coordinator for activities at the Air Force Academy. When he hit upon the idea for the UP/DOWN program

he was delighted to have found a way to contribute to AMSAT and satellite operations. A service will be held at Our Lady of The Pines in Black Forest, Colorado on June 11. Messages may be sent to Jim White, WD0E (wd0e@amsat.org) for forwarding to the family.

[Jim White, WD0E reports this sad news.]

/EX

SB SAT @ AMSAT $ANS-166.06
A0-10 INFO

HR AMSAT NEWS SERVICE BULLETIN 166.06 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT

BID: $ANS-166.06

Several people have asked about when AMSAT might be able to discern AO-10's current attitude, illumination. Stacey E. Mills, W4SM, has run some routines and put this information on one of his web pages, along with a lot of other AO-10 related stuff, FAQ's etc at:

http://www.cstone.net/~w4sm/AO-10.html

As time permits, Stacey will update this with some more historical information. The information regarding attitude must be taken with a large "grain of salt", but it's based on what little he can determine. It's interesting to postulate how AO-10's attitude may have changed fairly dramatically in the last few months.

Stacey E. Mills, W4SM,

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SB SAT @ AMSAT $ANS-166.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 166.07 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.07

MIR:
(All operations, Voice and Packet will be on 145.985 MHz, Simplex FM)
[ANS thanks Dave Larsen, N6CO/K6MIR, for this report}

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.
RS3A needs some SWL reports of RS-10.
What time you heard RS-10, and also the date.
Send info via packet to Andy, .RS3A.
Packet: RK3KPK@RA3KP.MSK.RUS.EU

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 Mhz CW/SSB)
Signals on RS-12 in North America during May and June (almost exclusively daylight passes) are weakened by increased ionospheric activity which is keeping 15m active during the daylight hours.
This makes it especially important for the 'old timers' to warn the newcomers on RS-12 to set their uplink frequency and leave it alone to prevent sweeping across the 15m band and QRM-ing the terrestrial QSOs in progress
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Be aware that RS-15 has battery charging problems. When the satellite is

in the dark it has low output power..
[ANS thanks Geoff Perry for this report.]
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active.
The transponder and the 10 meter beacons are not
active at this time.
70 cm beacon: RS16 ZEAA ZEJA ZEAA(AA is sent as one
characrer);P163,o0,n0,m0,l0,k7,j5,i7,h49,g0,f159,e8,d6,c8,b11,a7.

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
[ANS thanks Bernie Hall, WY4D, for this report.]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operating normally. Strong downlink signal. Very busy
during passes over North America. Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.
The latest version of Fodtrack, (homebrew rotator controller software), can
be found on KO-23. This version corrects some of the bugs found on earlier
versions.

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.

AO-27 (1-Jun-1997- 10:58 UTC Orbit-19182)
The satellite is working normally over North America.
and Europe.
Current AO-27 schedule information can be found at
www.umbra.com

Tepr 4 = 32 counts 16 Minutes
Tepr 5 = 66 counts 18 Minutes
The Transmitter xtal is changing with time. From the first day AO-27
was in orbit the Transmit Frequency has been shifting lower. Many
have not checked the zero doppler frequency closely enough to see that it
is dropping. Every few months Michael Wyrick, N4USI, has to change
a setting that moves the freq. a KHz or so up in freq. This setting only
has a range of about 7 KHz total. This means that after a while Michael
can't compensate for the change and has to reset the setting back to zero.
This causes the freq. to drop about 7 KHz when he does this. There is not
a way around this and the Tx freq. will continue to drop as the xtal ages.

The satellite is coming up on the end of range for this setting and in
several months the freq. will seem to drop again. If N4USI had not put the

correction hardware on-board, you would see a continuous shift in tx
frequency. AO-27 Will turn on Every pass 16 Minutes after entering the sun
and will stay on for 18 minutes. This corrects the early shut off that
has been going on for the passed few weeks.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
June
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

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SB SAT @ AMSAT $ANS-166.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 166.08 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.08

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Rosario Orlando, IW9ELR, heard AO-10 during the evening of June
10th at 09.00 p.m. There was a QSO with I8CVS on 145.950 MHz.
.[ANS thanks Rosario Orlando, IW9ELR, for this report.]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
Telemetry nominal. The battery voltage has recently improved to
around 13.9 volts, and the internal temperatures have continued to
fall, due to solar eclipses. The battery temperature is now 4
degrees C, or 18 degree below the full sunlight condition.

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 Mhz.)
The telemetry data received from the satellite show
a TX Out power of 0.442 Wtts.
Total Array C= 0.252 Bat Ch Cur=-0.024 Ifb= 0.040 I+10V= 0.280
TX:010B BCR:82 PWRC:59E BT:3C WC:25 EDAC:AC

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
WJ9F is continuing to work on reloading DOVE.
[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
Webersat (WO-18) is currently in MBL mode after a system
crash. The satellite appears to be in good condition broadcasting
MBL telemetry.
[ANS thanks Tommy Davis, IK3WVJ, for this report.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
The telemetry data received of the satellite report
a spin rate/rev = 2 min.
With a rotation sense of the solar panels in
the magnetic north (+X, -Y, -X, +Y)

Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
A problem with UO-22 seems to be related to the software changes that
were made last week prior to the last flight software reload. During
the last pass over Surrey on Saturday morning, June 7th, Chris Jackson
closed the spacecraft store and forward communications system for general
use to allow him to diagnose the problem..
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

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BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk

Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1739. Re: New Drake "satellite" radio

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: Mike Pender <steam@megsinet.net>
Message-ID: <01bc79e6$d0c8f0c0$d94f85d0@ns1.megsinet.net>
Source record: 18699

Joe Leikhim <jleikhim@nettally.com> wrote in article
<5nvqau$pql@server.cntfl.com>...
> I applaud Drake for their latest 2 meter (FM) base station radio
> offering.
>
This radio is a ripoff. Someone should go to jail for the claims being made
for the rig. Could only be used currently for ao-27. Might as well
just get a mobile dual bander for one third the price.

--
Mike Pender, N9IVO

1740. *NEW* Fox_Tango Reflector

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A49741.6EB0@primenet.com>
Source record: 18700

NEW Fox_Tango Reflector

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

1741. Major WWW Updates

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A4BFDB.79A9@primenet.com>
Source record: 18701

```
Major WWW Updates
http://www.qsl.net/k7on

New pages, new sections, new, new...
(CW section, BoatAnchor section, Digital section enhanced,
Radio Modifications, Frequency Lists, Local Az Section,
Fox_Tango mailing list, more, more, more...)
```

1742. Mir trying new freq.!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-15 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5nvgfabsl1@news.mhv.net>
Source record: 18702

The weekend of June 15th Mir will be trying a new frequency, 145.985
SIMPLEX. I got this info from packet. Dave Larsen will be taking reports and
comments on this. Hopefully this will solve some of the problems we've been
having beeing so close to the APRS freq.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1743. NAVSPASUR protoFAQ -- a bit more

Newsgroup: rec.radio.amateur.space
Date: 1997-06-16 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaEBvnp3.F4o@netcom.com>
Source record: 18703

A couple more infobits on NAVSPASUR:

Naval Space Surveillance System (NAVSPASUR) solid state transmitter modernization.
Francoeur, A. R.
Proceedings of the 1989 IEEE National Radar Conference, Dallas, TX
The author describes the design of the modernized solid-state transmitter for the US Naval Space Surveillance System (NAVSPASUR) station transmitters at Jordan Lake, AL, Gila River, AZ, and Lake Kickapoo, TX. The modernized NAVSPASUR is the highest average power solid-state transmitter ever produced. With the antenna gain of the system, it produces an effective radiated average power in excess of 98 dBw. Solid-state modernization of the NAVSPASUR transmitter has produced significant cost and performance improvements, which are expected to extend the operating life of the system into the next century.

Linear Least-Squares Determination of Doppler Time Derivative for NAVSPASUR-Like Signals
Knowles, S. H.; Waltman, W. B.
IEEE Transactions on Instrumentation and Measurement, Vol.IM-34, No.1, March 1985, pp.64-69
A method is derived for optimum estimation of doppler, doppler time derivative, and other parameters for doppler-type radar returns, using linear least-squares estimation procedures. It is used on radar returns from the Naval Space Surveillance System to obtain improvement of at least one order of magnitude in doppler measurement from previous practice; doppler derivative has been measured for the first time. The accurate measurement of doppler derivative (typically PLUS OR MINUS 0. 2 Hz**2) has enabled a resolution of the inherent geometric degeneracy in the coplanar NAVSPASUR system, to provide a significant improvement in single-pass orbit determination accuracy.

1744. unknown freq

Newsgroup: rec.radio.amateur.space
Date: 1997-06-16 00:00:00 UTC
From: mano@spidernet.COM.cy
Message-ID: <199706162030.XAA29523@mail0.spidernet.net>
Source record: 18704

>A digital signal heard on 150.00 mhz FM i belive is a weather
sattelite anyone any ideas ?

thanks Manos
mano@spidernet.com.cy

1745. WEFAX AND PK232 MBX

Newsgroup: rec.radio.amateur.space
Date: 1997-06-16 00:00:00 UTC
From: mano@spidernet.COM.cy
Message-ID: <199706162033.XAA29587@mail0.spidernet.net>
Source record: 18705

>Hello there anyonecan help me wear i cant find a good wether fax
software to use with my pk232mbx ?
the one that comes with pakrat seems very low resolution..
I intent to use it with the vhf wether satelites.

thanks Manos
mano@spidernet.com.cy

1746. Re:helical antenas

Newsgroup: rec.radio.amateur.space
Date: 1997-06-16 00:00:00 UTC
From: mano@spidernet.COM.cy
Message-ID: <199706162036.XAA29716@mail0.spidernet.net>
Source record: 18706

>Can anyone help me for information on constructing a helical
antena for vhf wether sat freq. and also fot the inmarsat 1500 mhz?

Anyone knows if i will be able to hear theinmarsat in cyprus island ?

thanks Manos
mano@spidernet.com.cy

1747. *NEW* Kenwood Reflector!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-16 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A5F86F.58A4@primenet.com>
Source record: 18707

NEW Kenwood Reflector!!!

Kenwood is a mailing list (reflector) devoted entirely
to equipment manufactured by the Kenwood Communications
Corporation (Amateur Radio Products Group).

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe kenwood

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe kenwood

To post items to the reflector, send email as follows:
TO: kenwood@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

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TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP, APRS
-Packet, Pactor, GTOR, Clover, AMTOR, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for
email service by the byte you may want to consider carefully
before subscribing.

To submit materials:
TO: bitbucket@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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bit bucket /n./

1. The universal data sink (originally, the mythical receptacle
used to catch bits when they fall off the end of a register
during a shift instruction). Discarded, lost, or destroyed data
is said to have `gone to the bit bucket'. On Unix, often used
for /dev/null. Sometimes amplified as `the Great Bit Bucket in
the Sky'.

2. The place where all lost mail and news messages eventually go.
The selection is performed according to Finagle's Law;
important mail is much more likely to end up in the bit bucket

than junk mail, which has an almost 100% probability of getting delivered. Routing to the bit bucket is automatically performed by mail-transfer agents, news systems, and the lower layers of the network.

3. The ideal location for all unwanted mail responses: "Flames about this article to the bit bucket." Such a request is guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bitbucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

-Brian
shortckt@primenet.com

1748. NORAD Two-Line Orbital Element Sets (TLE013)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5o4oub$6a9@blackbird.afit.af.mil>
Source record: 18708

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #013 -
Alouette 1
1 00424U 62049A 97167.25924230 .00000072 00000-0 74505-4 0 2962
2 00424 80.4637 284.5027 0023215 175.2449 184.8933 13.67896864732111
ATS 1
1 02608U 66110A 97158.79493445 -.00000085 00000-0 10000-3 0 242
2 02608 14.5071 349.0064 0006950 96.9844 263.0831 1.00290791 28431
ATS 3
1 03029U 67111A 97164.37000706 -.00000116 00000-0 10000-3 0 6619
2 03029 14.8902 355.8520 0008885 280.5909 13.2163 1.00272720108387
Starlette
1 07646U 75010A 97167.22239144 -.00000195 00000-0 -40095-4 0 634
2 07646 49.8241 152.1709 0205804 352.6796 7.1106 13.82192244129312
LAGEOS
1 08820U 76039A 97167.14864407 .00000020 00000-0 00000+0 0 2946
2 08820 109.8179 150.7014 0043723 49.6581 310.7795 6.38664491237073
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97164.39649142 .00000057 00000-0 10000-3 0 8466
2 10061 12.8243 33.0366 0014461 130.2370 65.8821 1.00286700 18062
IUE
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Meteor 2-21
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UFO F2
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SPOT 3
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2 24814 51.5690 133.6719 0003013 249.2564 120.5605 16.44027021 383
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1 24815U 97026D 97146.29787527 .00000016 00000-0 00000+0 0 18
2 24815 17.6027 148.5583 5305507 359.0246 0.2120 1.89996685 21
INMARSAT 3 F4
1 24819U 97027A 97166.27833912 .00000157 00000-0 00000+0 0 198
2 24819 0.2284 278.6655 0019914 205.3368 266.5615 1.00504050 211
INSAT 2D
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2 24820 0.1678 234.4126 0012043 322.7139 229.4805 1.00345630 236
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1 24821U 97027C 97156.08575784 -.00000162 00000-0 10000-4 0 57
2 24821 7.0016 57.2168 7293149 178.9035 184.0189 2.27916214 16
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1 24822U 97027D 97156.08711988 -.00000221 00000-0 00000+0 0 78
2 24822 6.9939 57.5143 7302535 178.6341 185.1378 2.27959452 59
Cosmos 2344
1 24827U 97028A 97166.80424700 -.00000045 00000-0 00000+0 0 151
2 24827 63.4165 179.2754 0727736 336.0093 20.8436 11.06542024 1000
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1 24828U 9728B 97158.36849693 .21389060 80095-5 74826-4 0 109
2 24828 64.8170 182.0744 0009997 276.0518 84.4268 16.58178275 115
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2 24829 63.4079 185.1948 0728410 335.9079 20.9290 11.07198100 628
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1 24830U 97028D 97167.20060964 .00071276 35087-5 17258-3 0 303
2 24830 64.5368 161.9402 1488365 255.9597 87.1965 12.82971493 1228
1997028E
1 24832U 97028E 97167.22214180 .00035379 34737-5 15949-3 0 296
2 24832 64.5294 161.9904 1477357 255.8901 87.3988 12.79677530 1208
1997028F
1 24833U 97028F 97166.08333493 -.00000045 00000-0 00000+0 0 77
2 24833 63.4092 180.4885 0729071 336.2068 20.6642 11.06274718 922
Feng Yun 2B
1 24834U 97029A 97167.13397538 -.00000277 00000-0 00000+0 0 253
2 24834 1.2011 264.1909 0024551 322.4072 191.6720 0.99927755 50
1997029B
1 24835U 97029B 97161.73705902 .00282540 00000-0 46945-1 0 10
2 24835 28.5573 71.7876 7301809 179.8716 180.5779 2.26757205 11
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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1749. NORAD Two-Line Orbital Element Sets (TLE013)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5o4p9h$6b4@blackbird.afit.af.mil>
Source record: 18709

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #013 -
Alouette 1
1 00424U 62049A 97167.25924230 .00000072 00000-0 74505-4 0 2962
2 00424 80.4637 284.5027 0023215 175.2449 184.8933 13.67896864732111
ATS 1
1 02608U 66110A 97158.79493445 -.00000085 00000-0 10000-3 0 242
2 02608 14.5071 349.0064 0006950 96.9844 263.0831 1.00290791 28431
ATS 3
1 03029U 67111A 97164.37000706 -.00000116 00000-0 10000-3 0 6619
2 03029 14.8902 355.8520 0008885 280.5909 13.2163 1.00272720108387
Starlette
1 07646U 75010A 97167.22239144 -.00000195 00000-0 -40095-4 0 634
2 07646 49.8241 152.1709 0205804 352.6796 7.1106 13.82192244129312
LAGEOS
1 08820U 76039A 97167.14864407 .00000020 00000-0 00000+0 0 2946
2 08820 109.8179 150.7014 0043723 49.6581 310.7795 6.38664491237073
ETS-2
1 09852U 77014A 97113.24460556 -.00000183 00000-0 10000-3 0 1085
2 09852 13.6079 29.4339 0004363 145.6412 214.3327 0.99996769 20740
GOES 2
1 10061U 77048A 97164.39649142 .00000057 00000-0 10000-3 0 8466
2 10061 12.8243 33.0366 0014461 130.2370 65.8821 1.00286700 18062
IUE
1 10637U 78012A 97154.57167521 -.00000353 00000-0 10000-3 0 3973
2 10637 36.0326 77.9546 1364402 66.5709 73.9209 1.00070513 23451
GOES 3
1 10953U 78062A 97166.35423337 -.00000082 00000-0 10000-3 0 8163
2 10953 11.8448 36.0091 0000908 293.2812 313.1627 1.00267710 22695

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SeaSat 1
1 10967U 78064A 97166.66448179 -.00000040 00000-0 31159-4 0 5828
2 10967 107.9886 206.8950 0001781 255.8881 104.2050 14.38174751993709
Nimbus 7
1 11080U 78098A 97164.10387786 -.00000120 00000-0 -71595-4 0 6767
2 11080 98.9003 13.9031 0009783 71.8102 288.4120 13.83679876941089
GOES 5
1 12472U 81049A 97164.70643182 -.00000082 00000-0 10000-3 0 59
2 12472 8.7641 46.6176 0004562 71.1981 288.7754 1.00339818 16728
Cosmos 1383
1 13301U 82066A 97165.71542615 .00000014 00000-0 -11187-5 0 5916
2 13301 82.9305 227.9722 0027615 324.3874 35.5435 13.68083549746942
LandSat 4
1 13367U 82072A 97163.18181959 .00000061 00000-0 23097-4 0 743
2 13367 98.0193 208.1089 0008316 95.2068 265.0081 14.57205523792967
DMSP B5D2-1
1 13736U 82118A 97166.52368587 .00000056 00000-0 41927-4 0 2556
2 13736 98.6224 355.0360 0009648 50.2951 309.9078 14.25840006752846
IRAS
1 13777U 83004A 97167.03712515 -.00000179 00000-0 -93640-4 0 6895
2 13777 98.9716 350.8988 0011764 168.9343 191.2074 13.99279755404257
Cosmos 1447
1 13916U 83021A 97161.91822035 -.00000009 00000-0 -25074-4 0 6853
2 13916 82.9417 285.6915 0036428 231.9781 127.8068 13.74355560713016
TDRS 1
1 13969U 83026B 97167.22119050 -.00000291 00000-0 10000-3 0 7565
2 13969 9.4997 40.1809 0003400 52.7224 202.2797 1.00278079 25032
GOES 6
1 14050U 83041A 97166.35273483 .00000068 00000-0 10000-3 0 6771
2 14050 7.6253 50.2997 0003416 53.8606 153.9358 1.00252992109834
AO-10
1 14129U 83058B 97166.20508880 .00000111 00000-0 10000-3 0 4870
2 14129 25.9578 142.3159 6066293 126.0194 306.5017 2.05879084 77341
LandSat 5
1 14780U 84021A 97166.21864707 .00000086 00000-0 29295-4 0 6205
2 14780 98.2831 229.0043 0001011 217.7570 142.3557 14.57077626706820
UO-11
1 14781U 84021B 97166.80786448 .00000088 00000-0 22787-4 0 9794
2 14781 97.8356 148.0973 0012587 12.6292 347.5226 14.69559616711053
Cosmos 1574
1 15055U 84062A 97162.57246824 .00000012 00000-0 -31680-5 0 8850
2 15055 82.9527 340.8874 0029086 61.2967 299.1104 13.73648825650320
Cosmos 1602
1 15331U 84105A 97164.93521710 .00000216 00000-0 22456-4 0 5679
2 15331 82.5335 134.0855 0019137 187.3542 172.7378 14.84893351686650
ERBS
1 15354U 84108B 97163.07720994 -.00000068 00000-0 15514-4 0 2823
2 15354 56.9948 19.8867 0008564 117.6074 242.5830 14.95047555690665
NOAA 9
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2 16609 51.6537 92.6844 0005507 149.3034 210.8242 15.59478751646811
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2 16613 98.7905 237.7553 0000393 24.6807 335.4388 14.19995839271698
Cosmos 1766
1 16881U 86055A 97163.16678368 .00000123 00000-0 11962-4 0 4825
2 16881 82.5218 193.3331 0017487 227.0942 132.8806 14.83855745587220
EGP
1 16908U 86061A 97163.86025856 -.00000083 00000-0 10000-3 0 1854
2 16908 50.0132 328.1416 0011440 211.7697 148.2449 12.44416158161315
NOAA 10
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2 16969 98.5449 159.9702 0013995 16.3520 343.8112 14.25038362558407
MOS-1
1 17527U 87018A 97165.74233673 -.00000043 00000-0 00000+0 0 5587
2 17527 98.8940 224.8256 0018303 46.5613 313.7366 14.00469843525731
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1 17561U 87022A 97166.35621862 -.00000130 00000-0 10000-3 0 3657
2 17561 3.7676 67.0101 0003301 326.9818 259.4890 1.00255439 20941
Kvant-1
1 17845U 87030A 97165.86920586 -.00004174 00000-0 -45251-4 0 287
2 17845 51.6526 97.5137 0005704 145.7883 214.3429 15.59472543580773
DMSP B5D2-3
1 18123U 87053A 97166.92541270 .00000025 00000-0 35030-4 0 9461
2 18123 98.7640 357.1476 0013772 299.9445 60.0363 14.15480796515954
RS-10/11
1 18129U 87054A 97165.25502541 .00000027 00000-0 13018-4 0 3616
2 18129 82.9258 240.8966 0010298 227.3621 132.6662 13.72379161499834
Meteor 2-16
1 18312U 87068A 97166.21819025 .00000066 00000-0 46220-4 0 5717
2 18312 82.5543 64.1374 0011405 287.7389 72.2526 13.84100247496399
Meteor 2-17
1 18820U 88005A 97166.91779357 .00000037 00000-0 20082-4 0 2817
2 18820 82.5411 117.7548 0017317 350.7015 9.3815 13.84775719473861
DMSP B5D2-4
1 18822U 88006A 97167.07775635 .00000034 00000-0 33309-4 0 5527
2 18822 98.3832 347.7816 0007584 35.7354 324.4331 14.23230419486336
Glonass 34
1 19163U 88043A 97166.26481715 -.00000045 00000-0 10000-3 0 1903
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Glonass 36
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2 19165 65.3967 73.5421 0003334 335.5650 24.4440 2.13101783 70609
METEOSAT 3
1 19215U 88051A 97166.63411522 -.00000087 00000-0 00000+0 0 3217
2 19215 3.9919 65.8303 0003524 149.5824 210.1421 0.96947679 20700
OKEAN 1
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2 19274 82.5126 293.9476 0020934 20.9421 339.2645 14.82625862482814
Meteor 3-2
1 19336U 88064A 97165.85068967 .00000051 00000-0 10000-3 0 5799
2 19336 82.5385 269.7826 0018285 50.5007 309.7729 13.16982739427218
Glonass 39
1 19503U 88085C 97166.35324553 -.00000038 00000-0 10000-3 0 4841
2 19503 65.4545 312.4406 0010560 155.9015 204.1567 2.13101845 68089
NOAA 11
1 19531U 88089A 97166.95714508 -.00000000 00000-0 24808-4 0 9986
2 19531 99.1553 199.9573 0011311 304.5821 55.4282 14.13134720449825
TDRS 3
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2 19548 3.1891 70.0172 0008498 221.1277 287.4680 1.00266282 19045
Glonass 40
1 19749U 89001A 97164.04424588 -.00000046 00000-0 10000-3 0 6857
2 19749 65.3665 73.1835 0007062 250.1047 109.8451 2.13101503 65548
Glonass 41
1 19750U 89001B 97166.91457741 -.00000044 00000-0 10000-3 0 5985
2 19750 65.3818 73.1587 0006666 196.4835 163.4955 2.13101585 65624
GPS BII-01
1 19802U 89013A 97165.11226480 -.00000024 00000-0 00000+0 0 4275
2 19802 55.4987 96.2168 0018207 158.8854 201.0732 2.00574324 60973
Akebono
1 19822U 89016A 97166.80370152 .00011078 00000-0 54466-3 0 9367
2 19822 75.0965 271.5850 3715939 190.1216 159.7641 7.98337595195599
Meteor 2-18
1 19851U 89018A 97163.92228807 .00000045 00000-0 26480-4 0 5667
2 19851 82.5200 353.4492 0015840 47.4524 312.7971 13.84434023418743
MOP-1
1 19876U 89020B 97165.95235940 -.00000133 00000-0 00000+0 0 2669
2 19876 2.7256 70.7201 0018987 287.3284 72.0075 0.97110748 10143
TDRS 4
1 19883U 89021B 97166.05613789 -.00000261 00000-0 10000-3 0 3401
2 19883 0.6253 86.2664 0001952 353.2260 163.0696 1.00267760202742
GPS BII-02
1 20061U 89044A 97165.95288987 -.00000050 00000-0 10000-3 0 4117
2 20061 53.9677 271.4081 0170595 223.7025 134.9513 2.00562539 58730
Nadezhda 1
1 20103U 89050A 97163.63714019 .00000049 00000-0 35518-4 0 1299
2 20103 82.9626 202.8423 0038502 127.5436 232.9228 13.73879871398178
GPS BII-03
1 20185U 89064A 97165.15742617 -.00000023 00000-0 00000+0 0 4376
2 20185 55.3075 96.5987 0046354 54.6132 305.8153 2.00561642 57294
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1 20217U 89070A 97166.89436973 -.00000361 00000-0 10000-3 0 5906
2 20217 2.5142 73.4256 0001452 211.5720 61.4574 1.00272346 29064
INTERCOSMOS 24
1 20261U 89080A 97166.18861947 .00000073 00000-0 22165-4 0 5951
2 20261 82.5980 38.8656 1241187 296.2469 51.6284 12.47418289351161
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1 20302U 89085A 97165.31816692 .00000046 00000-0 10000-3 0 4316
2 20302 53.1655 211.1093 0042935 189.5975 170.4001 2.00554147 56099
Meteor 3-3
1 20305U 89086A 97167.23229204 .00000044 00000-0 10000-3 0 8356
2 20305 82.5466 232.8761 0007147 125.9688 234.2063 13.04421855365669
COBE
1 20322U 89089A 97164.54195852 .00000126 00000-0 10797-3 0 3124
2 20322 98.9286 179.4345 0009472 105.1851 255.0372 14.03462218387619
Kvant-2
1 20335U 89093A 97165.86920586 -.00004174 00000-0 -45251-4 0 9285
2 20335 51.6526 97.5137 0005704 145.7883 214.3429 15.59472543429784
GPS BII-05
1 20361U 89097A 97165.83776650 -.00000071 00000-0 00000+0 0 2378
2 20361 56.1965 38.9554 0098827 138.1776 222.5535 2.00568370 45584
COSMOS 2054 (Altair-1)
1 20391U 89101A 97160.50036116 -.00000150 00000-0 00000+0 0 5407
2 20391 4.5076 61.2095 0000684 322.8710 36.8769 1.00264824 27581
SPOT 2
1 20436U 90005A 97167.21103793 -.00000044 00000-0 00000+0 0 2378
2 20436 98.7262 241.9366 0001642 59.9001 300.2338 14.20028827383501
UO-14
1 20437U 90005B 97163.20043232 .00000037 00000-0 31149-4 0 2751
2 20437 98.5186 244.9784 0010200 221.4417 138.5996 14.29962805385505
AO-16
1 20439U 90005D 97163.21532787 .00000014 00000-0 22238-4 0 710
2 20439 98.5350 247.9072 0010692 223.4634 136.5705 14.30010218385523
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1 20440U 90005E 97165.30062939 -.00000010 00000-0 12894-4 0 748
2 20440 98.5402 250.8122 0010782 215.0505 144.9962 14.30153136385857
WO-18
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2 20441 98.5385 249.6083 0011152 219.9165 140.1198 14.30120908385699
LO-19
1 20442U 90005G 97164.77625739 .00000038 00000-0 31347-4 0 746
2 20442 98.5428 250.8637 0011472 217.1057 142.9334 14.30235498385808
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1 20452U 90008A 97163.24610350 .00000008 00000-0 10000-3 0 3308
2 20452 54.0370 152.0965 0053363 93.7341 266.9095 2.00565525 54049
MOS-1B
1 20478U 90013A 97166.53555966 -.00000044 00000-0 00000+0 0 558
2 20478 99.0889 236.7942 0005987 346.2732 13.8266 13.93976932295177
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1 20479U 90013B 97163.91107735 -.00000019 00000-0 28072-4 0 708
2 20479 99.0457 126.5716 0541367 26.3836 336.3790 12.83354175344179
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1 20480U 90013C 97163.90065220 -.00000057 00000-0 -57604-4 0 9728
2 20480 99.0454 126.2942 0541277 27.1427 335.6912 12.83237921344156
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1 20491U 90013D 97163.64540852 .00000188 00000-0 41619-3 0 3534
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2 20496 43.1021 286.3128 0012387 262.6045 97.3358 15.36844248409744
Nadezhda 2
1 20508U 90017A 97166.04849610 .00000005 00000-0 -11641-4 0 1303
2 20508 82.9513 335.4987 0046047 75.4631 285.1622 13.73522862365707
OKEAN 2
1 20510U 90018A 97165.68953746 .00000170 00000-0 19963-4 0 5909
2 20510 82.5247 248.9825 0017891 206.1062 153.9260 14.78692772393249
GPS BII-07
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2 20533 54.3086 273.0494 0046327 65.6889 294.8182 1.91041376 52670
PegSat
1 20546U 90028A 97167.10288805 .00005627 00000-0 88153-4 0 909
2 20546 94.1080 200.5063 0054178 35.6577 324.8212 15.52095540401356
HST
1 20580U 90037B 97163.92048606 .00000323 00000-0 19154-4 0 9616
2 20580 28.4664 65.0145 0014939 150.9860 209.1555 14.86459396192412
MACSAT 2
1 20608U 90043B 97164.07797067 .00000133 00000-0 20297-4 0 2738
2 20608 89.9209 170.2498 0103075 234.1997 124.9603 14.65005925379121
Glonass 44
1 20619U 90045A 97166.75681005 -.00000039 00000-0 10000-3 0 4067
2 20619 65.0351 311.4815 0024669 205.8463 154.0177 2.13102551 55058
Glonass 45
1 20620U 90045B 97163.59061009 -.00000133 00000-0 10000-3 0 3800
2 20620 65.0251 311.5772 0008079 38.2683 321.8255 2.13101039 55030
Glonass 46
1 20621U 90045C 97165.53503146 -.00000038 00000-0 10000-3 0 9978
2 20621 65.0453 311.5765 0009722 190.9844 168.9984 2.13102989 55065
Kristall
1 20635U 90048A 97165.86920586 -.00004174 00000-0 -45251-4 0 7200
2 20635 51.6526 97.5137 0005704 145.7883 214.3429 15.59472543400618
ROSAT
1 20638U 90049A 97164.22756354 .00000294 00000-0 37845-4 0 6647
2 20638 52.9916 112.9000 0013853 140.6758 219.5236 15.07632582386775
Meteor 2-19
1 20670U 90057A 97166.22609408 .00000095 00000-0 71674-4 0 3139
2 20670 82.5457 59.5412 0015850 322.4116 37.5936 13.84126624351966
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1 20712U 90065A 97165.26588141 .00000227 00000-0 23834-3 0 4444
2 20712 17.7748 101.8334 7189939 292.0205 9.6449 2.35930670 51669
GPS BII-08
1 20724U 90068A 97166.95998411 -.00000032 00000-0 00000+0 0 2474
2 20724 55.1410 94.0405 0122544 180.6769 179.3404 2.00563940 48740
Feng Yun1-2
1 20788U 90081A 97167.22120126 .00000112 00000-0 10239-3 0 3771
2 20788 98.8144 166.2731 0014000 194.9706 165.1051 14.01385960347086
Meteor 2-20
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2 20826 82.5252 357.5281 0012151 227.1510 132.8629 13.83654633338684
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1 20830U 90088A 97164.01643231 -.00000082 00000-0 00000+0 0 1920
2 20830 56.1344 36.9244 0058115 91.9736 268.7419 2.00574153 49323
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2 20959 55.3373 96.2575 0121430 240.2773 118.5044 2.00568301 47934
DMSP B5D2-5
1 20978U 90105A 97166.88501551 .00000104 00000-0 52338-4 0 1131
2 20978 98.5578 240.2545 0078845 175.5740 184.6160 14.32754889341794
Glonass 47
1 21006U 90110A 97163.68168560 -.00000045 00000-0 10000-3 0 9541
2 21006 65.3408 72.5229 0056769 187.7008 172.2384 2.13102452 50695
Glonass 48
1 21007U 90110B 97164.81395873 -.00000047 00000-0 10000-3 0 876
2 21007 65.3706 72.5668 0032210 172.6318 187.4618 2.13101082 50704
Glonass 49
1 21008U 90110C 97165.65110087 -.00000047 00000-0 00000+0 0 3544
2 21008 65.3520 72.4649 0009070 283.7201 76.2049 2.13098651 50711
AO-21
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2 21087 82.9401 53.7784 0034067 279.0622 80.6679 13.74583204319743
RS-12/13
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2 21089 82.9203 280.1268 0028461 305.7367 54.1167 13.74082513318881
MOP-2
1 21140U 91015B 97162.15012167 -.00000086 00000-0 00000+0 0 3529
2 21140 1.2795 78.8888 0000590 317.9300 267.0428 1.00272853 25204
Nadezhda 3
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2 23851 99.4188 159.0412 0006943 243.9521 116.0926 13.97396060 58103
SAX
1 23857U 96027A 97145.49044468 .00001151 00000-0 38291-4 0 787
2 23857 3.9534 132.7511 0014304 290.7931 69.0607 14.91824221 58346
MSTI 3
1 23868U 96031A 97165.56829199 .00000768 00000-0 16845-4 0 1578
2 23868 97.1155 355.7596 0008061 291.8875 68.1515 15.47129358 60829
TOMS-EP
1 23940U 96037A 97166.21049394 .00002241 00000-0 99314-4 0 1232
2 23940 97.4222 73.2057 0013251 145.5264 214.6819 15.22593572 52840
GPS BIIA-26
1 23953U 96041A 97162.79555384 -.00000022 00000-0 00000+0 0 1551
2 23953 55.2542 93.9195 0020610 31.2527 328.8853 2.00549280 6689
ADEOS
1 24277U 96046A 97167.20165050 -.00000044 00000-0 00000+0 0 1862
```

```
2 24277 98.5994 244.7281 0002067 115.2601 244.8798 14.27646997 43225
FO-29
1 24278U 96046B 97165.55171259 .00000006 00000-0 41967-4 0 854
2 24278 98.5388 207.1400 0351162 192.9184 166.2782 13.52631391 40765
FAST
1 24285U 96049A 97165.71132733 .00001411 00000-0 13691-3 0 1008
2 24285 82.9871 40.1723 2207128 357.5291 1.5933 10.82226870 32157
1996049B
1 24286U 96049B 97166.71665748 .00001018 00000-0 97566-4 0 1105
2 24286 83.0022 39.8786 2205685 355.2122 3.0466 10.82668150 32267
Microsat
1 24291U 96050A 97166.36865610 .00017522 62911-5 14334-3 0 2275
2 24291 62.7924 145.2464 0523022 149.6528 213.6029 14.84250781 42677
MO-30
1 24305U 96052B 97165.01471425 .00000204 00000-0 20364-3 0 1118
2 24305 82.9333 356.9315 0028552 214.2379 145.6918 13.73094177 38621
GPS BIIA-27
1 24320U 96056A 97164.64700868 -.00000056 00000-0 00000+0 0 816
2 24320 54.5569 273.7660 0054432 97.0062 263.6328 2.00552343 5380
SAC-B/HETE
1 24645U 96061A 97165.56798275 .00000522 00000-0 32993-4 0 743
2 24645 37.9753 237.9622 0049338 271.2881 88.2232 15.15060843 33660
Soyuz TM-25
1 24717U 97003A 97165.86920586 -.00004174 00000-0 -45251-4 0 1072
2 24717 51.6526 97.5137 0005704 145.7883 214.3429 15.59472543646660
ZEYA
1 24744U 97010A 97166.20314696 .00002171 00000-0 73924-4 0 494
2 24744 97.2753 71.3009 0008931 95.6941 264.5321 15.31437763 15785
DMSP B5D2-9
1 24753U 97012A 97166.76085156 .00000043 00000-0 47208-4 0 710
2 24753 98.9307 211.0513 0010115 53.8853 306.3290 14.12982968 10185
Progress M-34
1 24757U 97014A 97165.86920586 -.00004174 00000-0 -45251-4 0 820
2 24757 51.6526 97.5137 0005704 145.7883 214.3429 15.59472543 10816
MINISAT 01
1 24779U 97018A 97164.64072677 .00001461 00000-0 47015-4 0 174
2 24779 150.9697 106.7811 0014485 149.5089 210.6338 14.98319686 7982
CELESTIS
1 24780U 97018B 97163.59706319 .00001464 00000-0 44080-4 0 213
2 24780 150.9745 100.6749 0020467 137.4870 222.7313 14.99589676 7832
GOES 10
1 24786U 97019A 97166.35977245 -.00000085 00000-0 00000+0 0 684
2 24786 0.3839 277.3302 0003033 44.3189 326.3974 1.00271645 532
THOR 2
1 24808U 97025A 97162.20000000 -.00000017 00000-0 00000+0 0 205
2 24808 0.0540 116.3190 0001526 311.5730 262.8130 1.00270110 248
1997025B
1 24809U 97025B 97164.53096867 .00000104 00000-0 -96195-5 0 146
2 24809 26.3015 273.2410 0676074 121.7285 245.0903 13.27596228 3132
1997025C
```

```
1 24810U 97025C 97164.12798862 -.00000172 00000-0 00000+0 0 146
2 24810 19.7675 25.7239 6953954 10.6209 358.7688 2.16111808 507
TELSTAR 5
1 24812U 97026A 97165.12655208 -.00000140 00000-0 00000+0 0 130
2 24812 0.0380 194.4450 0002618 260.9895 115.5781 1.00279378 222
1997026B
1 24813U 97026B 97151.56543137 .50520782 12739-4 20596-3 0 439
2 24813 51.5856 108.3339 0018253 247.1395 113.2207 16.55950717 1123
1997026C
1 24814U 97026C 97147.03793981 .19653485 12492-4 76733-3 0 219
2 24814 51.5690 133.6719 0003013 249.2564 120.5605 16.44027021 383
1997026D
1 24815U 97026D 97146.29787527 .00000016 00000-0 00000+0 0 18
2 24815 17.6027 148.5583 5305507 359.0246 0.2120 1.89996685 21
INMARSAT 3 F4
1 24819U 97027A 97166.27833912 .00000157 00000-0 00000+0 0 198
2 24819 0.2284 278.6655 0019914 205.3368 266.5615 1.00504050 211
INSAT 2D
1 24820U 97027B 97167.24880787 -.00000075 00000-0 00000+0 0 280
2 24820 0.1678 234.4126 0012043 322.7139 229.4805 1.00345630 236
1997027C
1 24821U 97027C 97156.08575784 -.00000162 00000-0 10000-4 0 57
2 24821 7.0016 57.2168 7293149 178.9035 184.0189 2.27916214 16
1997027D
1 24822U 97027D 97156.08711988 -.00000221 00000-0 00000+0 0 78
2 24822 6.9939 57.5143 7302535 178.6341 185.1378 2.27959452 59
Cosmos 2344
1 24827U 97028A 97166.80424700 -.00000045 00000-0 00000+0 0 151
2 24827 63.4165 179.2754 0727736 336.0093 20.8436 11.06542024 1000
1997028B
1 24828U 9728B 97158.36849693 .21389060 80095-5 74826-4 0 109
2 24828 64.8170 182.0744 0009997 276.0518 84.4268 16.58178275 115
1997028C
1 24829U 97028C 97163.18623345 -.00000040 00000-0 10000-3 0 78
2 24829 63.4079 185.1948 0728410 335.9079 20.9290 11.07198100 628
1997028D
1 24830U 97028D 97167.20060964 .00071276 35087-5 17258-3 0 303
2 24830 64.5368 161.9402 1488365 255.9597 87.1965 12.82971493 1228
1997028E
1 24832U 97028E 97167.22214180 .00035379 34737-5 15949-3 0 296
2 24832 64.5294 161.9904 1477357 255.8901 87.3988 12.79677530 1208
1997028F
1 24833U 97028F 97166.08333493 -.00000045 00000-0 00000+0 0 77
2 24833 63.4092 180.4885 0729071 336.2068 20.6642 11.06274718 922
Feng Yun 2B
1 24834U 97029A 97167.13397538 -.00000277 00000-0 00000+0 0 253
2 24834 1.2011 264.1909 0024551 322.4072 191.6720 0.99927755 50
1997029B
1 24835U 97029B 97161.73705902 .00282540 00000-0 46945-1 0 10
2 24835 28.5573 71.7876 7301809 179.8716 180.5779 2.26757205 11
```

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Dr TS Kelso Adjunct Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

1750. Want Info: What 2meter/430Mhz freq. used in Phase III Sat?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: wega@loop.com
Message-ID: <33a6112a.946522@nntp.loop.com>
Source record: 18710

Anyone know what the 435 Mhz and the 145 Mhz freq. range planned for
the Phase III Sat? Anyone know when it will be launched?
WE6A

1751. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <33a691c3.1220615@news.bctel.ca>
Source record: 18711

On Sat, 14 Jun 97 12:01:02 GMT, Tom@astro.net wrote:

>In article <33a3237b.3445638@news.capital.net>, orion@xyzcapital.net wrote:
>>On Fri, 13 Jun 1997 06:22:28 GMT, cruzz@aa.net (james) wrote:
>>
>>>im looking for the frequencies to both the shuttle and mir and idea?
>>>
>>>
>>>73 james kb7tfw
>>>.
>>Mir is on 145.800 downlink and 145.200 uplink. I don't know about the
>>Shuttle.
>
> See my web page for satellite freqs. The URL is in my sig...
>
>Tom

following up.

go to: http://www.geocities.com/Yosemite/1325/mir.htm

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
I will NOT buy any products or visit web sites from the SPAM.

1752. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: n2ogb@aol.com
Message-ID: <19970617154000.LAA26344@ladder02.news.aol.com>
Source record: 18712

Mir is now on 145.985 simplex, both packet and voice.

Ron N2OGB

1753. Re: WTKnow: What Freq. For Phase III Sat???

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33a6bb59.8546183@news.capital.net>
Source record: 18713

On Sun, 15 Jun 1997 10:40:11 GMT, wega@loop.com (WE6A) wrote:

>Looking to know what frequencies will be used in the Phase III sat?
>Also does anyone know when it is sced for launch? Bought the ARRL
>Satellite Anthology and no practical info on that subject.
>WE6A

If you have access to the world wide web, go to the AMSAT site at
http:/www.amsat.org Lots of info about Phase 3D there.

--
Butch N2YMJ

To send mail,
delete xyz
from my address.

1754. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc7aee$d22cfca0$f5915cc1@dummy.forthnet.gr>
Source record: 18714

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97. FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA
EMAIL OR FAX AT ++30 81 761382.

1755. ARLK047 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk047.1997@arrl.org>
Source record: 18715
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK047
ARLK047 Keplerian data

ZCZC SK47
QST de W1AW
Keplerian Bulletin 47 ARLK047
From ARRL Headquarters
Newington, CT June 17, 1997
To all radio amateurs

SB KEP ARL ARLK047
ARLK047 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97166.20508880 .00000111 00000-0 10000-3 0 4870
2 14129 25.9578 142.3159 6066293 126.0194 306.5017 2.05879084 77341
RS-10/11
1 18129U 87054A 97167.15061225 .00000032 00000-0 18565-4 0 03771
2 18129 82.9261 239.4962 0010322 221.7107 138.3262 13.72379271500095
UO-11
1 14781U 84021B 97166.94404178 .00000087 00000-0 22581-4 0 09809
2 14781 97.8357 148.2283 0012558 12.2362 347.9147 14.69559627711072
RS-12/13
1 21089U 91007A 97166.83509962 .00000032 00000-0 18190-4 0 09918
2 21089 82.9205 279.6412 0028380 303.6876 56.1574 13.74082287318971
UO-14
1 20437U 90005B 97167.25880722 .00000002 00000-0 17443-4 0 2767
2 20437 98.5187 248.9493 0010253 208.6717 151.3901 14.29962903386087
RS-15
1 23439U 94085A 97167.09770377 -.00000039 00000-0 10000-3 0 02379
2 23439 64.8139 154.5986 0149360 133.0347 228.3194 11.27527800101819
AO-16
1 20439U 90005D 97167.27356644 .00000017 00000-0 23172-4 0 728
2 20439 98.5358 251.8887 0010611 210.4166 149.6400 14.30010613386107
RS-16
1 24744U 97010A 97167.18325577 .00001824 00000-0 62512-4 0 00600
2 24744 97.2758 72.2630 0008989 93.1809 267.0464 15.31439338015932
```

```
DO-17
1 20440U 90005E 97167.18961993 .00000030 00000-0 28430-4 0 00838
2 20440 98.5404 252.6664 0010846 208.6092 151.4498 14.30153680386122
WO-18
1 20441U 90005F 97167.18747387 .00000038 00000-0 31476-4 0 00919
2 20441 98.5390 252.5608 0011167 211.1553 148.8967 14.30121201386127
LO-19
1 20442U 90005G 97167.15485092 .00000010 00000-0 20460-4 0 00886
2 20442 98.5422 253.1968 0011537 209.2229 150.8311 14.30235669386141
FO-20
1 20480U 90013C 97166.94118308 .00000013 00000-0 10103-3 0 09914
2 20480 99.0452 128.7619 0541331 20.2707 341.9014 12.83238849344544
AO-21
1 21087U 91006A 97167.10834816 .00000093 00000-0 82657-4 0 08369
2 21087 82.9401 52.3778 0033909 273.9566 85.7714 13.74583358320002
UO-22
1 21575U 91050B 97167.13178158 -.00000002 00000-0 13563-4 0 07879
2 21575 98.3012 227.7143 0006791 259.0593 100.9834 14.37073333310336
KO-23
1 22077U 92052B 97167.04482730 -.00000037 00000-0 10000-3 0 06828
2 22077 66.0764 147.6243 0009660 212.7751 147.2665 12.86302910227602
KO-25
1 22828U 93061F 97167.15586320 .00000055 00000-0 39375-4 0 05549
2 22828 98.5416 241.7305 0009443 227.0637 132.9754 14.28182004162062
IO-26
1 22826U 93061D 97167.19138429 .00000022 00000-0 26443-4 0 05742
2 22826 98.5446 241.6779 0008406 243.5350 116.4971 14.27838593193949
AO-27
1 22825U 93061C 97167.15278375 .00000029 00000-0 29065-4 0 05742
2 22825 98.5451 241.3988 0007612 246.5727 113.4656 14.27729124193926
FO-29
1 24278U 96046B 97167.10512736 -.00000017 00000-0 18683-4 0 00959
2 24278 98.5390 208.4824 0351246 188.8920 170.5895 13.52631238040973
MO-30
1 24305U 96052B 97167.05506283 .00000204 00000-0 20364-3 0 01216
2 24305 82.9336 355.4252 0029167 207.3004 152.6617 13.73093348038903
Mir
1 16609U 86017A 97167.15083357 .00000194 00000-0 88003-5 0 04012
2 16609 51.6529 91.0774 0005725 150.4632 209.6689 15.59478533646860

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
June 21, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1756. Is P3D SW OK beyond year 1999?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-17 00:00:00 UTC
From: Timo <ttk@na.netppl.fi>
Message-ID: <01bc7ad4$fa7d43a0$54eb9cc3@default>
Source record: 18716

Hi,

I wonder if P3D SW has been made so that is does not get confused with years after 1999 (I can hear horror stories about commercial SW almost every week nowadys). If P3D is OK, then, how is it with the existing sats now orbiting the earth? Presumably al least some of the SW can be downloaded but not those which reside in ROM.

Timo, OH8MBP

1757. *ICOM* Mailing List (and others)...

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33A85EA7.2F83@primenet.com>
Source record: 18625

ICOM Mailing List (and others)...

Icom is a mailing list (reflector) devoted entirely
to equipment manufactured and distributed by Icom
America, Inc. of Bellevue, WA.

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe icom

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe icom

To post items to the reflector, send email as follows:
TO: icom@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Kenwood is a mailing list (reflector) devoted entirely
to equipment manufactured by the Kenwood Communications
Corporation (Amateur Radio Products Group).

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe kenwood

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe kenwood

To post items to the reflector, send email as follows:
TO: kenwood@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP, APRS
-Packet, Pactor, GTOR, Clover, AMTOR, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for email service by the byte you may want to consider carefully before subscribing.

To submit materials:
TO: bitbucket@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

bit bucket /n./

1. The universal data sink (originally, the mythical receptacle used to catch bits when they fall off the end of a register during a shift instruction). Discarded, lost, or destroyed data is said to have `gone to the bit bucket'. On Unix, often used for /dev/null. Sometimes amplified as `the Great Bit Bucket in the Sky'.

2. The place where all lost mail and news messages eventually go. The selection is performed according to Finagle's Law; important mail is much more likely to end up in the bit bucket than junk mail, which has an almost 100% probability of getting delivered. Routing to the bit bucket is automatically performed by mail-transfer agents, news systems, and the lower layers of the network.

3. The ideal location for all unwanted mail responses: "Flames about this article to the bit bucket." Such a request is guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bitbucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

-Brian
shortckt@primenet.com

1758. new group?for dx sat. contacts

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: ***drx1001@ibm.net
Message-ID: <33a85aec.0@news2.ibm.net>
Source record: 18626

Thought that a new news group might be needed.Some place to setup dx contacts for rs-15 ,fo20 ,fo29 and rs-16 [when it is turned on] .

example: Will be monitoring and calling on rs-15 at 29.390 usb starting at 22:48 utc till 22:53 utc looking for europe good dx kf4fco em-70

1759. ! FREE MASTER PSYCHIC READINGS 1-800-682-8057

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: lov@interport.net
Message-ID: <5o79ec$m8t$4616@broadway.interport.net>
Source record: 18717

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-682-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-682-8057

1760. Re: *** NEED HELP WITH AO21 AO27***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: <>
Message-ID: <970518021424.tvr@mocha.ecofe.com>
Source record: 18718

The AO-27 transponder is working quite well but it may be turned off when it is over you. Due to power limitations it is only on during daylight hours when it is over North America. I do not know if it is on over Europe or the Middle East at all. If it is available you can ...

My understanding [see http://www.umbra.com for details] is that the coverage is worldwide, but only in latitudes corresponding approximately to those of the United Status and Canada. Current downlink is 436.792 and will drop further in future years as its transmit crystal ages.

Important: Please listen first before transmitting on AO-27. It has a sensitive receiver and unless you have a pre-amp, AO-27 will hear you long before you hear it. At least over North America, there is almost always activity on daylight passes, so please wait until you're sure you'll be able to copy callsigns before transmitting. Be brief; in the States and Canada, just give your callsign and perhaps your grid square, and one of the regulars will come back to you, especially if you have an uncommon grid square.

-- KD6PAG (networking old-timer, RF newbie)

[n.b. I try to keep its status on http://www.alive.com/~tvr/KD6PAG/AO-27.html]

1761. new Mir frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5o8bfv$7o5$2@ddi2.digital.net>
Source record: 18719

SB SAT @ AMSAT $ANS-166.01
MIREX INFO/MIR FREQ. CHANGE

HR AMSAT NEWS SERVICE BULLETIN 166.01 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 15, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-166.01

To: Amateur Radio Stations
From: MIREX Mir International Amateur Radio Experiment
Subject: Mir Frequency change experiment
Date: June 13, 1997

A frequency change experiment is tentatively scheduled to take place the weekend of June 15th at 1200 UTC with the 2-meter station on board the Mir Space Station. The duration of the experiment has not been finalized, we would like your inputs on the results. The MIREX team has received numerous complaints from around the world, stating the existing Mir 2-meter channels are not usable. In November 1996 Mir changed from the successful channel 145.550 simplex to a 145.200/800 split frequency. This combination of channels (145.200/800) does not work very well for most parts of the world. In many countries the 145.200 is used for repeater Outputs or Inputs. The 145.790 channel is in use by many semi-permanent packet operations. The new temporary frequency which MIREX has requested is 145.985 Simplex. All operations, Voice and Packet will be on 145.985 Simplex. This frequency was chosen for three primary reasons. First it complies with the ITU International Band plan for Satellite operations. Second, It gets Mir away from most of the terrestrial based interference. Third, The Mir 2-meter station is desensed by commercial VHF activities on board Mir (in the 143 MHz range).

Stations are encouraged to listen to the Mir activities on the newchannel and send your Signal and Interference reports to the CEO of MIREX, Dave Larsen. It is very important to participate and send reports. This is an opportunity to provide useful input.
Address:
E-mail doc @ volcano.net
Packet n6co @ N0ARY.#NOCAL.CA.USA.NOAM
Postal N6CO POB1501 PINE GROVE CA 95665

Please do not send Signals reports via the Mir PMS mail box. And do not bother the Mir crew members about the frequency change. This frequency experiment is solely the responsibility of the MIREX Working Group. The MIREX Working Group would like the thank all of the people involved with assisting in this information gathering experiment, including the Mir 23 Crew members and the Chief of Cosmonaut Amateur Radio Department RSC.

Suggested Report format: (pre-amps turned off, state antenna style, then describe interference if any)
Elevation Degrees / S-Unit
5 5
10 9
30 +10
50 +20
30 8
10 6
5 2

/EX

notes - the change has taken place and Mir has been heard on both voice and packet on the new frequency.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

1762. ! FREE PSYCHIC READINGS! FREE!! 1-800-677-8048

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: lov@interport.net
Message-ID: <5o8cc3$9dt$4616@broadway.interport.net>
Source record: 18720

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

1763. NEED INFO: ON M^2 EGGBEATER ANTENNAS

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: Thomas Johnson <n2rif@kwiknet.net>
Message-ID: <01bc7be1$49306e20$eb8d56cf@tee-jay>
Source record: 18721

Hello; If anyone owns the "M2 Eggbeater" antennas & also possibly with there
matching radial kits I would like to ask some questions about these antennas for
satellite work on 2mtr & 70cm.. All info will be appreciated.. Tnx In Advance.
Email: n2rif@amsat.org
Best Regards.. Thomas J or Just T.j. AMSAT-NA MEMBER #30287
....73

1764. Re: Want Info: What 2meter/430Mhz freq. used in Phase III Sat?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EByxu9.HE8@pe1chl>
Source record: 18722

In <33a6112a.946522@nntp.loop.com> wega@loop.com (WE6A) writes:

>Anyone know what the 435 Mhz and the 145 Mhz freq. range planned for
>the Phase III Sat? Anyone know when it will be launched?
>WE6A

Look on the www.amsat.org website...

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

1765. * SpaceNews 16-Jun-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0616.1997@ampr.org>
Source record: 18723
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0616
* SpaceNews 16-Jun-97 *

BID: $SPC0616

=========
SpaceNews
=========

MONDAY JUNE 16, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* P3D ENGINEERING SOFTWARE NEWS *
================================
Regular users of FO-20 may have been puzzled by a strange buzzing sound on
its mode JA transponder over the last couple of weeks. This was due to
command stations testing the new P3D Range Determination software and
hardware.

P3D's orbit will change significantly after motor firings, and NORAD will
lose track of us. So would we! The P3 ranging system enables our world
wide network of Command Stations to measure distance to the satellite from
different locations and at different times and so compute the new orbit's
Keplerian elements. This information is used by us, the AMSAT community,
and of course given back to NORAD so that they can re-acquire our satellite
by radar. This methodology was used to remarkable effect in picking up
OSCAR-13 after both its motor firings.

Back in 1988, the P3C engineering software was still based on the Atari-800XL
computer. This was a legacy from the very successful designs originating as
far back as 1979 and the ill-fated P3A satellite (1981).

However, the prospect of working on P3D yet again using a dual audio cassettes
for storage and 8-bit 2 MHz processors has never been very attractive, and a
re-engineering of many of the tools has been undertaken by James Miller G3RUH
over the last couple of years.

The P3 Range Determination package marks the successful completion of a
substantial development programme that includes the following principal
packages:

- Tracking
- Telemetry Display
- Command Uploader

- IPS-X1802
- Ranging
- OrbitFit

Tracking of course needs no introduction.

Telemetry Display is essentially as already available for AO-13, but with P3D specific changes. This will be publicly released for several platforms when P3D is finally "nailed down".

Command Upload software is used for commanding the spacecraft both during lab-testing and in space. These first three packages were used for AO-13.

P3D, like its predecessors, has a flight computer based on a radiation hardened CDP-1802 microprocessor. It runs an operating system called IPS. But generation of the flight operating system and on-board control software is done on a ground-based host computer. The IPS-X1802 package is, as its name suggests, a cross compiler.

Source files for P3D are written using the IPS language. They are compiled by the IPS-X1802 development system (itself written in IPS) which outputs a target binary in 1802 machine code. In the days of P3A/B/C, this compilation used to take half an hour on the Atari-800XL. Imagine how tedious a simple edit used to be. Flight software compilation, from source files to uploadable binary, now takes half a second.

The IPS-X1802 cross-compiler is a major part of the P3D development programme. Without it, the flight software which controls the spacecraft, and is much different than that of P3A/B/C, would be impossible to produce efficiently in the short timescales left to us.

The Ranging software, mentioned earlier, measures range to the satellite with a basic accuracy of about 150m (1 microsecond). Comparison of ranges measured via FO-20, with ranges displayed by regular tracking programs, shows agreement within 5 km, often better. During tests, signal strengths have been kept to the absolute minimum needed for "lock", and are weaker than AO-13's general beacon used to be. The uplink power to FO-20 is typically under 1 watt to a KLM14C antenna, rather less than a typical SSB user's. The ranging software can track down to a level where the signal is virtually inaudible. Sample GIF (5 kbytes) taken during an FO-20 pass is at:

http://www.jrmiller.demon.co.uk/IPS/range.gif

The final program OrbitFit takes range measurements from the network of command stations, and computes an orbit that best fits the data. It was written 10 years ago by Stefan Eckart DL2MDL, and has been adapted for our current needs by G3RUH. Tests processing FO-20 ranging data have been completely successful.

Software is written in BASIC and ARM assembler for the Acorn Risc Computer. Current machines use the DEC SA-110 processor at typically 200 MHz/700 mW/$50, representing the highest MIPs/mW and MIPs/$$ (taken together) in the business and currently the embedded systems processor of choice. It makes a cool

personal computer too.

Acorn Risc Computer:
http://www.acorn.co.uk/acorn/products/strongarm/

DEC SA-110 information:
http://www.europe.digital.com/info/semiconductor/sa110.htm

Software is not as photogenic or as sexy as hardware, and thus gets little or no exposure. Yet it is hoped that this short precis provides a better understanding of how the backroom boys have been keeping busy. There are many such heroes in the P3D program, but special recognition is given to P3 command stations Peter Guelzow DB2OS, Graham Ratcliff VK5AGR, Stacey Mills W4SM and Ian Ashley ZL1AOX for enthusiastically thrashing every development as it has staggered off the production line.

Notes by James Miller G3RUH
1997 Jun 10 [Tue] 0653 UTC

* SAFEX IS BACK ON *
==========
The following notice was posted to the packet radio BBS on the Mir space station by Mike Foale, KB5UAC, and was downloaded by Miles Mann:

Stat : PR
Posted : 06/07/97 13:10
To : ALL
From : R0MIR

@ BBS :

BID :
Subject: SAFEX is ON

Turning SAFEX II on today. Repeater mode tx 437.950, rx 435.750 ctcss 141.3. SAFEX is turned off during all joint ops missions with soyuz, shuttle because of interference.

Mike kb5uac

BJ Arts, WT0N, reports the Mir 70 cm repeater is up and running, and several stations were worked during the 0030 UTC pass on June 8th. Strong downlink signals were reported while Mir was over north America. BJ's uplink was 435.750 MHz FM, while he received downlinks on 437.950 MHz. A CTCSS tone of 141.3 Hz is required for access.

* SCOPE NEWS *
==========
A brief description of the SCOPE project is now available in Japanese and English. The SCOPE Home Page is located at:

http://www.jamsat.or.jp/scope/

SCOPE is an experiment flying on the Phase 3D satellite that will provide images of celestial objects through the use of a CCD imaging camera.

[Info via Tak Okamoto and the JAMSAT SCOPE Project Team]

* STS-94 ORBITAL DATA *
=======================
STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

The full set of nominal state vectors and mission profile schedule is also available on the AMSAT Web page at:

http://www.amsat.org/amsat/sarex/vectors.html

As in the past, updates will be made to the AMSAT Web page using actual orbital data during the mission.

E-Mail updates are no longer made to the SAREX mailing list during the mission. These updates were discontinued when NASA Spacelink began sponsoring a mailing list called *STSTLE* for this specific purpose. Subscriptions to STSTLE are available on request. To subscribe send a E-Mail message to the following address:

listproc@spacelink.msfc.nasa.gov

The text of the mail message should be as follows:

subscribe STSTLE FirstName LastName

Where "FirstName" and "LastName" provide the list manager with your name.

Those considering subscribing to STSTLE should be cautioned that the list typically provides three to four updates per day on the Shuttle (and also for any satellites deployed by the Shuttle). The frequency of updates ensures current data for several NASA agencies that subscribe to this mailing list. If this many updates are undesirable, you should get your Keplerian elements from a different source.

I created one additional source for Shuttle orbital data. In some high-interest SAREX missions, I received E-Mail messages from individuals having difficulty accessing the AMSAT Shuttle Orbital Data Web page. These individuals did not want to subscribe to STSTLE because of the frequency of updates. Therefore, I provide a backup source of a current STSTLE update message on my personal Web page. This page may be accessed at:

http://www.mindspring.com/~n2wwd

Because of the workload in providing updates to both the AMSAT Web page and the STSTLE mailing list, my personal Web page is sometimes only updated with the STSTLE message at ~13:00 UTC and ~20:00 UTC during the missions. Thus, the AMSAT page is the primary data source on the World Wide Web.

Ken Ernandes, N2WWD
n2wwd@amsat.org

* KF0JT SILENT KEY *
====================
It is with sadness that the death of Dennis Caton, KF0JT, author of UP/DOWN is reported. Dennis lost a three year battle with cancer June 4 at his home near Colorado Springs. He was a native of England and is survived by his wife and two grown children. Dennis was a long time supporter of AMSAT and satellite projects. For a time he was AMSAT's coordinator for activities at the Air Force Academy. When he hit upon the idea for the UP/DOWN program he was delighted to have found a way to contribute to AMSAT and satellite operations. A service was held at Our Lady of The Pines in Black Forest, Colorado on June 11. Messages may be sent to Jim White, WD0E (wd0e@amsat.org) for forwarding to the family.

Jim White
wd0e@amsat.org

* FEEDBACK/INPUT WELCOMED *
============================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

1766. @@@ Mir @@@

Newsgroup: rec.radio.amateur.space
Date: 1997-06-18 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <33a83a86.1712487@news.bctel.ca>
Source record: 18724
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

have you heard from MIR (voice) lately ? I hear packet, but
no voice.

Masa
Masa@WriteMe.NOSPAMcom
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
I will NOT buy any products or visit web sites from the SPAM.

1767. Re: WEFAX AND PK232 MBX

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc7c66$f50fe7e0$12c56cce@erik.bc.sympatico.ca>
Source record: 18627

Manos,

As I recall from trying to use my PK-232, it drops two of every three lines
when receiving the regular WEFAX. Different software won't help unless you
can modify the firmware in the actual box. The CPU is a Z-80.

I gave up on mine and decided to buy the AEA Fax-III unit with software.
It works somewhat better although not as well as some of the DSP units.

73 de VE7MDL ....Erik.

MANOLIS MANOLI <mano@spidernet.COM.cy> wrote in article
<199706162033.XAA29587@mail0.spidernet.net>...
> >Hello there anyonecan help me wear i cant find a good wether fax
> software to use with my pk232mbx ?
> the one that comes with pakrat seems very low resolution..
> I intent to use it with the vhf wether satelites.
>
> thanks Manos
> mano@spidernet.com.cy
>
>

1768. New 800/888 Service Avalabale That will blow you away!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: yhjkm@asdr.com
Message-ID: <5ob6lp$eb@mtinsc04.worldnet.att.net>
Source record: 18628

ONLY AVAILABLE IN THE:
U.S.A, CANADA VIRGIN ISLANDS, AND PUERTO RICO

BE SURE TO GO TO OUR SITE AND CHECK OUT OUR FREE TRIAL.

Call everyone and tell them to throw away all of your old home, office, fax, pager, voice-mail, and cellular numbers and give them your New "Virtual Office" 800/888 number! The only number any one will ever need.

Are you tired of giving out all of your different phone numbers to everyone? Wouldn't it be nice to be able to give everyone just ONE phone number that will find you anywhere you are? Even out of town, or in a restaurant, or even on the golf course.

Now you can.

We have the answer to all your communication needs. It's called the "Virtual Office".

And this new service is loaded. It comes with features like:

An automated Call Attendant, Live Call Connect (in real time), Fax Sending, Fax Receiving, Even without a fax machine! E-Mail Notification and Delivery, Without a PC!, Outbound calling, Low Cost Long Distance Service, Inbound/Outbound 800/888 Number, Worldwide Call Transfer, Call Forwarding, Call Screening, Full Service Voice Mail, Nation Wide Pager Notification, Conference Calling, Speed Dialing, Auto Dial, Auto Messaging, Temporary Greeting, Unavailable Greeting, Password Protection, Pager Notification, and No Equipment or Software to buy, "Ever".

Priced from $9.95* per month, Plus 10.9 cents per minute per event.

That's less than one phone line would cost per month.

For more information please visit our web sight:
http://www.mynumber.com

* Based on our best priced plan.

1769. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: Scott <stengen@tengen.com>
Message-ID: <01bc7ca9$da5bd560$51f94ecf@one>
Source record: 18629

How about Nova for Windows 32 - got it from Amsat...

CrACKeD <cracked@primenet.com> wrote in article
<5nv7nk$3av@nntp02.primenet.com>...
> orion@xyzcapital.net wrote:
> : On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:
>
> : >I've been searching high and low for decent satellite tracking
software,
> : >and all I've been able to find is half-assed crippled shareware and
demos.
> : >SatSpy turned out to be a piece of junk, and SatTrack, which looks
great,
> : >turns out to only be for UNIX/X-11 platforms. I need something for
DOS or
> : >Windows 3.x. It must give a graphical representation of a satellites'
> : >window in relation to where I am. All I'm concerned about tracking
right
> : >now is Mir. What should I try?
> : >
> : >CrACKeD <cracked@primenet.com>
> : STSPlus is a very good program. It has a lot of nice features and it's
> : free. Do a search on the web for it.
>
> Tried it. Barf. Yuck.
>
> CrACKeD@primenet.com
>

1770. Hamradio at the University

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: carlos.mascarenas@uca.es
Message-ID: <5obebs$5f2$2@erika.cica.es>
Source record: 18630

Hello:

I need help to recolect a list of Amateur Radioclubs at the Universities of
the world in order to comunicate with them via radioamateur frecuencies.

If you know any Radioclub of Universities and Colleges. Please could you send
to me any information (call sign, state, Universitiy, address, E-mail, etc).

Thank you for your cooperation. 73 QRV

carlos.mascarenas@uca.es

Prof. Dr. D. Carlos Mascare�as y P�rez-I�igo.
Departamento de Ciencias y T�cnicas de la Navegaci�n
Centro Andaluz Superior de Estudios Marinos.
Universidad de C�diz.
Campus R�o San Pedro. 11510 Puerto Real. C�diz.
Espa�a.

fono: +34 56 470826
fax: +34 56 470827

E-Mail: carlos.mascarenas@uca.es

Call Sign: EA7GWJ

1771. ! SAMPLE A MASTER PSYCHIC - FREE READING

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5oc79f$nr3@news.intercall.com>
Source record: 18631

How do you know if you've found a real psychic?
Now you can see for yourself. Listen to our psychics
first, then decide if they know your future and fate.
Try it free on 1-800-677-8061. Adults over 18 only.

Dial now 1-800-677-8061

1772. ! FREE PSYCHIC ADVICE/SPECIAL SAMPLES LINE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5occ0t$rtn@news.intercall.com>
Source record: 18632

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-682-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-682-8057

1773. Ham Page

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33AA0370.74B@mailhost.cyberramp.net>
Source record: 18633

http://www.cyberramp.net/~johnf

1774. ARLS018 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls018.1997@arrl.org>
Source record: 18634
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS018
ARLS018 Phase 3D delayed

ZCZC AS18
QST de W1AW
Space Bulletin 018 ARLS018
From ARRL Headquarters
Newington, CT June 19, 1997
To all radio amateurs

SB SPACE ARL ARLS018
ARLS018 Phase 3D delayed

AMSAT Phase 3D officials remain optimistic despite another delay in the launch of the Ariane 502 that is scheduled to carry Phase 3D aloft in mid-September. The European Space Agency, ESA, announced this week that the Ariane 502 launch will be delayed a couple of weeks until September 30 at the earliest while the rocket gets another engine. It's the second delay announced this year for the Phase 3D vehicle. In March, the launch date was moved from early July to mid-September. AMSAT-NA President Bill Tynan, W3XO, remains philosophical about the schedule changes. ''It's more of the same,'' he said. ''We're trying to use all the time they give us productively.''

Orbital Report On-Line said this week that a faulty component was detected in the liquid oxygen turbopump of the Vulcain engine due to fly on Ariane 504. Since the origin of the flaw was identified as a possible production defect and a similar element is known to be in the pump of the engine already mounted on the Ariane 502 rocket that recently arrived in Kourou, French Guyana, the European Space Agency and the launch consortium (CNES) have decided to remove the engine and replace it with the one originally scheduled for Ariane 503, which features a component from an older production batch.

Any delay increases the overall cost of the project, but Tynan characterized the additional cost factor of the most recent delay as ''noise level.'' He did not have a precise cost estimate. Tynan, who was at the Phase 3D Integration Lab in Orlando, Florida, said everything is going along well in the process. ''The RF equipment integrated fine,'' he noted.

For more information on Phase 3D, including pictures of the assembly and integration process, see http://www.amsat.org/amsat/sats/phase3d.html.

NNNN
/EX

1775. ARLS019 Mir frequency test

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls019.1997@arrl.org>
Source record: 18635
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS019
ARLS019 Mir frequency test

ZCZC AS19
QST de W1AW
Space Bulletin 019 ARLS019
From ARRL Headquarters
Newington, CT June 19, 1997
To all radio amateurs

SB SPACE ARL ARLS019
ARLS019 Mir frequency test

For the third time in less than a year, the Mir FM voice and packet frequency changed again June 15. But even as it was made, the switch to 145.985 MHz simplex was being called ''tentative'' and ''experimental.'' It also was controversial. As a result, Mir officially will end the worldwide ''experiment'' on 145.985 MHz as of June 23, but leave the frequency available as an option to the Mir crew only while Mir is over the US. Mir packet sysop Miles Mann, WF1F, said US astronaut Mike Foale, KB5UAC, now aboard Mir, can use ''any channel he wants'' when he's over the US, including 145.985, but he has to switch to 145.200/800 when Mir is elsewhere. Also, the radio will remain on the split pair when the crew is sleeping. The new frequency may be used for both voice and packet operation.

The Mir International Amateur Radio Experiment--MIREX--cited ''numerous complaints from around the world'' that the 145.200/800 split-frequency combination did not work very well as the main reason for trying 145.985. Last November, Mir changed from 145.550 MHz simplex to the split-frequency pair. ''The radio has been almost impossible to use since November 1,'' said Mann, who called 145.985 MHz ''an excellent compromise.''

In a posting to the AMSAT bulletin board, John O'Hara, KB8TJX, in Wellsville, Ohio, reports he worked KB5UAC aboard Mir on 145.985 MHz for several minutes right after the changeover. ''Mike said that it was working out a lot better for him also. He said he had trouble sorting out the voice contacts from the packet and that the duplex was also confusing to him,'' said O'Hara, who's AMSAT coordinator for Eastern Ohio, Western Pennsylvania and the northern panhandle of West Virginia.

When the ''experiment'' was announced, Mann had expressed the hope that if the 145.985 MHz channel worked much better, the Mir crew

might be more inclined to get on the air than previously. Mann said the 145.800/200 MHz split-frequency operation suffered from interference from terrestrial users and drew widespread complaints from hams in the US, Japan and Australia (145.200 MHz is a repeater output or input frequency in many countries). He said the new frequency complies with the IARU band plan for satellite operation and will reduce desensing of Mir's 2-meter station by commercial VHF activities taking place aboard spacecraft in the 143-MHz range. Mann said MIREX is working on a fix for the desensing problem, and hopes to have it in operation by this fall.

A return to the 145.55 MHz frequency used previously by Mir was rejected because it's too close to a popular simplex frequency in Europe. Switching to 145.79 MHz also was out because it's in use by many semi-permanent packet operations.

Equipment aboard Mir includes a Kenwood TM-733, a PacComm Handi-Packet modem, a dual-band antenna, and a new, huskier power supply capable of powering the TM-733 to its full 50 W output. Mann said the output power typically is 10 W, however.

MIREX requests reports on the 145.985 MHz channel. Signal and interference reports go to Dave Larsen, N6CO, Box 1501, Pine Grove, CA 95665; e-mail doc@volcano.net.
NNNN
/EX

1776. ! PSYCHIC PREDICTIONS/ TRY IT FREE 1-800-676-3733

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: jln@tnp.com
Message-ID: <5obnpu$9d3@news-in.tnp.com>
Source record: 18636

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1777. ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: jln@tnp.com
Message-ID: <5obu9h$fbc@news-in.tnp.com>
Source record: 18637

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

1778. Re: unknown freq

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: Rainer.Redweik@t-online.de
Message-ID: <5obsvtrie1@news02.btx.dtag.de>
Source record: 18638

16-Jun-97 21:28:34: MANOLIS MANOLI has written to the theme
"unknown freq":

>>A digital signal heard on 150.00 mhz FM i belive is a weather
> sattelite anyone any ideas ?

> thanks Manos
> mano@spidernet.com.cy

Right, this may be signals from the russian COSMOS-satellites.

Ha det bra !

Rainer

--
Einer der beliebtesten Fehler von Leuten, die etwas absolut Idioten-
sicheres zu konstruieren versuchen, ist der, den Erfindungsreichtum
eines absoluten Idioten zu untersch�tzen.
Douglas Adams

1779. Audio of Mars Landing

Newsgroup: rec.radio.amateur.space
Date: 1997-06-19 00:00:00 UTC
From: Brian Webb <102670.1206@CompuServe.COM>
Message-ID: <5oab3s$o0a$2@mhadf.production.compuserve.com>
Source record: 18639

Does anyone know of any 2-meter, 220 MHz, or 440 MHz repeaters in
southern California that will be rebroadcasting NASA Select audio
during the July 4th Mars landing?

I'm a columnist for a large circulation newspaper in the region;
right now I'm trying to put together an article on the Mars landing
and where to find information the mission.

73

Brian Webb, KD6NRP

1780. ! SPECIAL OFFER! FREE PSYCHIC READINGS!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5ocp32$47b@news.intercall.com>
Source record: 18640

Get a personal psychic reading from one of our hand-picked
professionals and see if we aren't everything we claim to
be and more! Try it Free on 1-800-682-4736 - there are
no credit cards, checks or appointments
required. Adults over 18 only.
Call now 1-800-682-4736

1781. ! SAMPLE OUR PSYCHICS TOLL FREE!! 1-800-683-3733

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5octc6$8ip@news.intercall.com>
Source record: 18641

Dial 1-800-683-3733 and sample amazing psychic advice -
it's free. You will be startled and amazed!
Adults over 18 only

Dial now 1-800-683-3733

1782. ICOM IC-271 PS 15 FOR SALE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: geoff <geoff@rpi.net.au>
Message-ID: <5od2trfsq1@envy.rpi.net.au>
Source record: 18642
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
271a all mode 2m base $ 600
ps15 suit 751 hf or 471 or 271 $geoff@rpi.net.au 300
```

1783. ! FREE PSYCHIC READINGS!! FREE!! 1-800-677-8048

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5od3s0$dbl@news.intercall.com>
Source record: 18643

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

1784. Re: @@@ Mir @@@

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: maury <i862@rocketmail.com>
Message-ID: <5od44p$a8d$1@menelao.polito.it>
Source record: 18644
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

Mir is workin' on 145.985 !

M@s@ wrote in article <33a83a86.1712487@news.bctel.ca>...
> have you heard from MIR (voice) lately ? I hear packet, but
>no voice.
>

1785. Re: @@@ Mir @@@

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5odh3l$n6k$1@news.mhv.net>
Source record: 18645
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

In article <5od44p$a8d$1@menelao.polito.it>, "maury" <i862@rocketmail.com> wrote:
>Mir is workin' on 145.985 !
>
> M@s@ wrote in article <33a83a86.1712487@news.bctel.ca>...
>> have you heard from MIR (voice) lately ? I hear packet, but
>>no voice.

Since June 15th she's been on the new freq. I heard Mike on the other day
working folks. Packet's been on too but they seemed to have changed some
things...lots of <DM>'s now.....

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1786. AO-27 / MIR / Sarex & Other Antenna's

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: Scott <stengen@tengen.com>
Message-ID: <01bc7cb7$f3a3f800$51f94ecf@one>
Source record: 18646

I would like to know what antenna configuration would a) work and b) be ideal to work these birds and others including 3d when it gets up.

A few basic questions to start.
1) Do I need a circular polarized antenna?
2) Can I use a small 70cm & 2m Yagi?
3) How about a dual bander vertical with low horizontal gain?
4) What about preamps - is one at the antenna I can't tx from better then one built into an external peramp/amplifier combo? - Or do I need them at all...

Thanks in advance!

Scott, KC8GXR@Tengen.com

1787. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: kc7rcy@amsat.org
Message-ID: <33a9e5d7.0@208.212.139.3>
Source record: 18647

"Scott" <stengen@tengen.com> wrote:>How about Nova for Windows 32 - got it from Amsat...
>
>CrACKeD <cracked@primenet.com> wrote in article
><5nv7nk$3av@nntp02.primenet.com>...
>> orion@xyzcapital.net wrote:
>> : On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:
>>
>> : >I've been searching high and low for decent satellite tracking
>software,
>> : >and all I've been able to find is half-assed crippled shareware and
>demos.

Try Logsat. Don't know how "crippled" the current demo is but an
older version might be better. Its worth paying for.

Jim
Kc7RCY

1788. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: Roberto Franceschetti <roberto@logsat.com>
Message-ID: <01bc7d3e$b8712b40$068bd4d0@miseno.netwide.net>
Source record: 18648

A new version of LogSat (v5.2) has been released a couple of weeks ago.
It's distributed on CDROM and features new maps. We are certain you have
never seen such great looking graphic displays on other programs. To
preview some screenshots, please visit our home page at
http://www.logsat.com.

--
Roberto Franceschetti
roberto@logsat.com

kc7rcy@amsat.org wrote in article <33a9e5d7.0@208.212.139.3>...
> "Scott" <stengen@tengen.com> wrote:>How about Nova for Windows 32 - got
it from Amsat...
> >
> >CrACKeD <cracked@primenet.com> wrote in article
> ><5nv7nk$3av@nntp02.primenet.com>...
> >> orion@xyzcapital.net wrote:
> >> : On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:
> >>
> >> : >I've been searching high and low for decent satellite tracking
> >software,
> >> : >and all I've been able to find is half-assed crippled shareware and
> >demos.
> >
> >
> > Try Logsat. Don't know how "crippled" the current demo is but an
> > older version might be better. Its worth paying for.
> >
> > Jim
> > Kc7RCY
> >
> >

1789. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <33AAB8A7.58F4@ibag.com>
Source record: 18649

kc7rcy@amsat.org wrote:
>
> "Scott" <stengen@tengen.com> wrote:>How about Nova for Windows 32 - got it from Amsat...
> >
> >CrACKeD <cracked@primenet.com> wrote in article
> ><5nv7nk$3av@nntp02.primenet.com>...
> >> orion@xyzcapital.net wrote:
> >> : On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:
> >>
> >> : >I've been searching high and low for decent satellite tracking
> >software,
> >> : >and all I've been able to find is half-assed crippled shareware and
> >demos.
>
> Try Logsat. Don't know how "crippled" the current demo is but an
> older version might be better. Its worth paying for.
>
> Jim
> Kc7RCY
Tried both Logsat and Nova...I prefer Nova..
Rick Tannehill - W7RT

1790. Ham Site

Newsgroup: rec.radio.amateur.space
Date: 1997-06-20 00:00:00 UTC
From: Jerry <jnewland@rapidramp.com>
Message-ID: <33AB3FC9.44063D11@rapidramp.com>
Source record: 18650

http://www.geocities.com/Colosseum/7859/

1791. ! FREE PSYCHIC ADVICE!! SPECIAL SAMPLES LINE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: boo@cybernex.net
Message-ID: <5of7ft$3re$5446@news.cybernex.net>
Source record: 18651

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-682-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-682-8057

1792. ! SPECIAL OFFER! PERSONAL PSYCHICS FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: boo@cybernex.net
Message-ID: <5ofebn$g4l$5446@news.cybernex.net>
Source record: 18652

Get a personal psychic reading from one of our hand-picked
professionals and see if we aren't everything we claim to
be and more! Try it Free on 1-800-682-4736 - there are
no credit cards, checks or appointments
required. Adults over 18 only.
Call now 1-800-682-4736

1793. ! PSYCHIC PREDICTIONS/ TRY IT FREE 1-800-676-3733

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: jln@tnp.com
Message-ID: <5ogufk$29k@news-in.tnp.com>
Source record: 18653

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1794. TROUBLE WITH LOVE? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ohh1c$c52@newsfeed.ingress.net>
Source record: 18654

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

1795. ARLK048 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk048.1997@arrl.org>
Source record: 18655
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK048
ARLK048 Keplerian data

ZCZC SK48
QST de W1AW
Keplerian Bulletin 48 ARLK048
From ARRL Headquarters
Newington, CT June 21, 1997
To all radio amateurs

SB KEP ARL ARLK048
ARLK048 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97171.05998363 .00000050 00000-0 10000-3 0 05006
2 14129 25.9709 141.4821 6065344 127.3975 304.7915 2.05880617077442
RS-10/11
1 18129U 87054A 97171.16050904 -.00000003 00000-0 -19981-4 0 03806
2 18129 82.9257 236.5321 0010457 208.3413 151.7180 13.72378941500649
UO-11
1 14781U 84021B 97171.02935878 .00000057 00000-0 17462-4 0 09821
2 14781 97.8361 152.1508 0012299 359.7400 0.3779 14.69560284711673
RS-12/13
1 21089U 91007A 97170.76720167 .00000052 00000-0 39063-4 0 09900
2 21089 82.9206 276.7252 0028239 292.4670 67.3504 13.74082640319513
UO-14
1 20437U 90005B 97171.17723801 -.00000008 00000-0 13651-4 0 03065
2 20437 98.5183 252.7821 0010444 196.3242 163.7609 14.29963107386640
RS-15
1 23439U 94085A 97171.00022747 -.00000039 00000-0 10000-3 0 02398
2 23439 64.8139 148.2898 0148896 132.0709 229.2988 11.27527848102257
AO-16
1 20439U 90005D 97170.77204813 -.00000011 00000-0 12452-4 0 00967
2 20439 98.5359 255.3195 0010733 199.7461 160.3309 14.30010617386608
RS-16
1 24744U 97010A 97170.77696415 .00001516 00000-0 52344-4 0 00780
2 24744 97.2759 75.7895 0009383 82.2211 278.0096 15.31449846016488
```

```
DO-17
1 20440U 90005E 97170.75771499 -.00000019 00000-0 94627-5 0 00835
2 20440 98.5382 256.1659 0011134 197.2459 162.8348 14.30153521386631
WO-18
1 20441U 90005F 97170.75565017 -.00000008 00000-0 13570-4 0 00951
2 20441 98.5403 256.0649 0011365 199.1705 160.9050 14.30120966386631
LO-19
1 20442U 90005G 97171.14249132 .00000024 00000-0 25999-4 0 00868
2 20442 98.5425 257.1125 0011611 197.3078 162.7710 14.30236240386719
FO-20
1 20480U 90013C 97170.91725476 .00000047 00000-0 17842-3 0 09864
2 20480 99.0457 131.9908 0541090 11.2873 349.9818 12.83239218345050
AO-21
1 21087U 91006A 97171.11182095 .00000093 00000-0 82657-4 0 08450
2 21087 82.9401 49.4157 0033744 262.8078 96.9240 13.74583369320552
UO-22
1 21575U 91050B 97171.17010084 .00000017 00000-0 20004-4 0 07931
2 21575 98.3012 231.6106 0006842 243.9892 116.0591 14.37073842310917
KO-23
1 22077U 92052B 97171.01007834 -.00000037 00000-0 10000-3 0 06839
2 22077 66.0772 139.3260 0009923 211.5857 148.4555 12.86302721228112
KO-25
1 22828U 93061F 97171.14923312 .00000020 00000-0 25399-4 0 05542
2 22828 98.5415 245.6363 0009458 215.4709 144.5844 14.28182315162632
IO-26
1 22826U 93061D 97171.11563637 .00000002 00000-0 18284-4 0 05722
2 22826 98.5451 245.5182 0008440 232.2771 127.7645 14.27838752194509
AO-27
1 22825U 93061C 97171.14741829 .00000002 00000-0 18254-4 0 05766
2 22825 98.5453 245.3062 0007614 232.7516 127.2972 14.27729151194497
PO-28
1 22829U 93061G 97171.17041624 .00000001 00000-0 17534-4 0 05678
2 22829 98.5402 245.7458 0009419 216.9607 143.0931 14.28166144194554
FO-29
1 24278U 96046B 97171.17359390 .00000027 00000-0 62907-4 0 00954
2 24278 98.5391 211.9976 0351516 178.3455 181.8926 13.52631930041529
MO-30
1 24305U 96052B 97170.99001812 .00000204 00000-0 20364-3 0 01266
2 24305 82.9326 352.5141 0029000 196.5935 163.4255 13.73094116039447
Mir
1 16609U 86017A 97171.12384520 .00001242 00000-0 21740-4 0 04008
2 16609 51.6547 71.1153 0005307 164.7525 195.3702 15.59497210647484

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
June 24, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1796. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33b1641b.25622704@news.capital.net>
Source record: 18656

On 20 Jun 97 02:07:19 GMT, kc7rcy@amsat.org wrote:

>"Scott" <stengen@tengen.com> wrote:>How about Nova for Windows 32 - got it from Amsat...
>>
>>CrACKeD <cracked@primenet.com> wrote in article
>><5nv7nk$3av@nntp02.primenet.com>...
>>> orion@xyzcapital.net wrote:
>>> : On 9 Jun 1997 22:30:02 -0700, CrACKeD <cracked@primenet.com> wrote:
>>>
>>> : >I've been searching high and low for decent satellite tracking
>>software,
>>> : >and all I've been able to find is half-assed crippled shareware and
>>demos.
>
>
>Try Logsat. Don't know how "crippled" the current demo is but an
>older version might be better. Its worth paying for.
>
>Jim
>Kc7RCY

Try STSPlus. It's free. It's not crippled in any way.

--
Butch N2YMJ

To send mail.
delete xyz
from my address.

1797. Test Do Not Read

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33b467ce.26569845@news.capital.net>
Source record: 18657

TEST TEST TEST.

--
Butch N2YMJ

To send mail.
delete xyz
from my address.

1798. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-21 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33ACA230.8F12EB6C@cyberramp.net>
Source record: 18658

http://www.cyberramp.net/~rnewland

1799. !!!PSYCHIC SAMPLES LINE/ TRY IT FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5oj2b3$9hm@newsfeed.ingress.net>
Source record: 18659

Curious about your future? Try a psychic and
see for yourself. Get free advice on life and
love on 1-800-688-1584. Adults over 18 only

Call now 1-800-688-1584

1800. !!!PSYCHIC PREDICTIONS/TRY IT FREE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5oj7nu$d0u@newsfeed.ingress.net>
Source record: 18660

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1801. !!!TROUBLE WITH LOVE??? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ojh62$jco@newsfeed.ingress.net>
Source record: 18661

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

1802. ANS-173 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc7f29$33285840$3d280ace@home.the-bridge.net>
Source record: 18662

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-173.01
ARIANE 502 FLIGHT UPDATE

HR AMSAT NEWS SERVICE BULLETIN 173.01 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.01

In a Joint ESA/CNES press release it has been announced that the Ariane 502 launch campaign has begun. The joint statement issued by ESA/CNES is quoted as follows, exactly as received:

"The Director General of the European Space Agency (ESA) and the Chairman of the Centre National d'Etudes Spatiales (CNES, the French space agency), acting on the recommendation made following the Flight Readiness Review held on 5 and 6 June, have given the go-ahead for the Ariane 502 flight launch campaign to start today, 16 June, at the Guiana Space Centre, Europe's spaceport at Kourou in French Guiana. This decision follows detailed reviews conducted over the past few months on the launch vehicle itself and the corresponding ground facilities (see ESA/CNES release of 24 March).

Over the next few weeks, mechanical, fluid and electrical integration of the cryogenic main stage, the solid booster stage, the vehicle equipment bay and the upper stage of the launcher will be proceeding in the Launcher Integration Building, while preparatory work will be under way in the Final Assembly Building on the upper composite: the Speltra, the fairing and the payload made up of two technological instrument platforms, Maqsat H and B and two satellites: Teamsat (a satellite flying five European technology experiments and Amsat P3D (an international radio amateur satellite). Meanwhile, various tests, flight program functional simulations in particular, will be continuing in Europe.

These various operations are planned to lead to integration of the upper composite and filling of the upper stage and the attitude control system with propellant, the target date for the

Ariane 502 flight now being set as from the end of September
this year."

[ANS thanks ESA and CNES for this information.]

/EX

SB SAT @ AMSAT $ANS-173.02
MIR FREQ. CHANGE

HR AMSAT NEWS SERVICE BULLETIN 173.02 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.02

For the third time in less than a year, the Mir FM voice and packet frequency changed again June 15. But even as it was made, the switch to 145.985 MHz simplex was being called tentative and experimental. It also was controversial. As a result, Mir officially will end the worldwide experiment on 145.985 MHz as of June 23, but leave the frequency available as an option to the Mir crew only while Mir is over the US. Mir packet sysop Miles Mann, WF1F, said US astronaut Mike Foale, KB5UAC, now aboard Mir, can use "any channel he wants" when he's over the US, including 145.985, but he has to switch to 145.200/800 when Mir is elsewhere. Also, the radio will remain on the split pair when the crew is sleeping. The new frequency may be used for both voice and packet operation.

The Mir International Amateur Radio Experiment--MIREX--cited "numerous complaints from around the world" that the 145.200/800 split-frequency combination did not work very well as the main reason for trying 145.985. Last November, Mir changed from 145.550 MHz simplex to the split-frequency pair. "The radio has been almost impossible to use since November 1," said Mann, who called 145.985 MHz "an excellent compromise."

In a posting to the AMSAT bulletin board, John O'Hara, KB8TJX, in Wellsville, Ohio, reports he worked KB5UAC aboard Mir on 145.985 MHz for several minutes right after the changeover. "Mike said that it was working out a lot better for him also. He said he had trouble sorting out the voice contacts from the packet and that the duplex was also confusing to him," said O'Hara, who's AMSAT coordinator for Eastern Ohio, Western Pennsylvania and the northern panhandle of West Virginia.

When the "experiment" was announced, Mann had expressed the hope that if the 145.985 MHz channel worked much better, the Mir crew might be more inclined to get on the air than previously. Mann said the 145.800/200 MHz split-frequency operation suffered from interference from terrestrial users and drew widespread complaints from hams in the US, Japan and Australia (145.200 MHz is a repeater output or input frequency in many countries). He said the new

frequency complies with the IARU band plan for satellite operation and will reduce desensing of Mir's 2-meter station by commercial VHF activities taking place aboard spacecraft in the 143-MHz range. Mann said MIREX is working on a fix for the desensing problem, and hopes to have it in operation by this fall.

A return to the 145.55 MHz frequency used previously by Mir was rejected because it's too close to a popular simplex frequency in Europe. Switching to 145.79 MHz also was out because it's in use by many semi-permanent packet operations.

Equipment aboard Mir includes a Kenwood TM-733, a PacComm Handi-Packet modem, a dual-band antenna, and a new, huskier power supply capable of powering the TM-733 to its full 50 W output. Mann said the output power typically is 10 W, however.

MIREX requests reports on the 145.985 MHz channel. Signal and interference reports go to Dave Larsen, N6CO, Box 1501, Pine Grove, CA 95665; e-mail doc@volcano.net.

[ANS thanks the ARRL for this news on MIR.]

/EX

SB SAT @ AMSAT $ANS-173.03
P3D DELAY

HR AMSAT NEWS SERVICE BULLETIN 173.03 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.03

AMSAT Phase 3D officials remain optimistic despite another delay in the launch of the Ariane 502 that is scheduled to carry Phase 3D aloft in mid-September. The European Space Agency, ESA, announced this week that the Ariane 502 launch will be delayed a couple of weeks until September 30 at the earliest while the rocket gets another engine. It's the second delay announced this year for the Phase 3D vehicle. In March, the launch date was moved from early July to mid-September. AMSAT-NA President Bill Tynan, W3XO, remains philosophical about the schedule changes. ''It's more of the same,'' he said. ''We're trying to use all the time they give us productively.''

Orbital Report On-Line said this week that a faulty component was detected in the liquid oxygen turbopump of the Vulcain engine due to fly on Ariane 504. Since the origin of the flaw was identified as a possible production defect and a similar element is known to be in the pump of the engine already mounted on the Ariane 502 rocket that recently arrived in Kourou, French Guyana, the European Space Agency and the launch consortium (CNES) have decided to remove the engine and replace it with the one originally scheduled for Ariane 503, which features a component from an older production batch.

Any delay increases the overall cost of the project, but Tynan characterized the additional cost factor of the most recent delay as ''noise level.'' He did not have a precise cost estimate. Tynan, who was at the Phase 3D Integration Lab in Orlando, Florida, said everything is going along well in the process. ''The RF equipment integrated fine,'' he noted.

For more information on Phase 3D, including pictures of the assembly and integration process, see http://www.amsat.org/amsat/sats/phase3d.html.

[ANS thanks the ARRL for this report.]

/EX

SB SAT @ AMSAT $ANS-173.04
A0-10 UPDATE

HR AMSAT NEWS SERVICE BULLETIN 173.04 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.04

AO-10 is returning to active life. On June 17th, Dan James, KE0DH, in Minnesota and James O' Neill, WA7OPE, In Montana enjoyed an almost solid 1 hour contact, starting at 0420 UTC. The satellite was nearing perigee, moving southeast from out over the pacific. Both stations had ,at times, S-9 downlink signals. A slow, predictable QSB fade was observed, getting worse as AO-10 neared its lowest point. KE0DH was still able to hear his downlink as AO-10 approached only 4 degrees above his horizon. The following night KE0DH worked WA3JYM in Pennsylvania and W8LKX In Ohio under the same conditions.

Both WA7OPE and KE0DH enjoy similar working conditions, gain antennas on AZ/El mounts, with both stations running about 80 watts output on the 435 MHz uplink. Very little FM'ing was observed during the hour long QSO. KE0DH was able to reduce his output to under 25 watts and still achieve a Q5 downlink! Both Dan and Jim used the updated AO-10 information that Stacy Mills, W4SM, has posted on his Internet web site to predict how AO-10 would respond before setting up the scheduled contact.

[ANS thanks James O' Neill ,WA7OPE, and Dan James, KE0DH, for this information]

/EX

SB SAT @ AMSAT $ANS-173.05
SCOPE NEWS

HR AMSAT NEWS SERVICE BULLETIN 173.05 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.05

A brief description of the SCOPE project is now available in Japanese and English. The SCOPE Home Page is located at:

http://www.jamsat.or.jp/scope/

SCOPE is an experiment flying on the Phase 3D satellite that will provide images of celestial objects through the use of a CCD imaging camera.

[ANS thanks SpaceNews, Tak Okamoto and the JAMSAT SCOPE Project Team for this information.]

/EX

SB SAT @ AMSAT $ANS-173.06
CONFERENCE UPDATE

HR AMSAT NEWS SERVICE BULLETIN 173.06 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.06

The 1997 Western States Weak Signal Society Technical Conference will be held on Friday through Sunday, October 3 to 5, at the Montecito-Sequoia Lodge. The lodge is located in the Sequoia National Forest between Kings Canyon and Sequoia National Parks, 65 miles east of Fresno at 7500 feet, just minutes from Grant Grove & the famous Giant Sequoia Trees! For rates and reservations, call Montecito-Sequoia at (800) 227-9900.

N1BWT A Single-board Transverter for 5760 MHz (and Phase 3D)
K6QXY 6m EME and large array engineering
NU8I VHF amplifier design using Svetlana tubes
K7XC VHF Contesting and What It Takes To Win
W6GGV Designing ON-Way1 power dividers
W6RXQ GPS and Ham Radio
WB6NOA ATV Record From Hawaii to California
K6WR Regulatory issues of interest to the weak signal enthusiast
K6MYC To Be Determined

A brief description of how GPS works and how to use GPS for some interesting Ham Radio applications, including beacon synchronization, Grid Square hopping, and Microwave mountaintoping. Some hands on demonstrations will be available during non-conference hours.

For more information on our 1997 Conference, contact Robert Brown N7STU, at wswss@contesting.com

/EX

SB SAT @ AMSAT $ANS-173.07
MORE SPUTNIK-1

HR AMSAT NEWS SERVICE BULLETIN 173.07 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.07

For the 40th anniversary of the launching of SPUTNIK-1 and the beginning of the space Conquest, l'Aeroclub of France and Russian Astronautical Federation are associated to commemorate this event. Last February 20th, during a conference, they were god fathers for the signature of the protocol of action between the radioclub, FR5KJ, of Jules Reydellet College in St Denis Reunion Island and the Polytechnic Laboratory of Nalchik Kabardine Balkar Republique (Russian Federation) The goal of the Project is to interest as many young people as possible in space matters, leading to an extraordinary realization and maybe to get a job in this field. The pupils from the two schools are working on a SPUTNIK 1 miniature satellite which will be able to work in space, when it will be hand thrown by a cosmonaut from the MIR orbital station.

The Russians will build the satellite body in which will be placed the transmitter made by the French pupils It will emit a "bip, bip" (sound track38 ko) on the 2 meters band starting October the 4th, 1997. During one month, every VHF equipped amateur radio station in the world will be able to receive the signal emitted from the miniature satellite .

[ANS thanks Philippe Mondon, FR5DN, for this news.]

/EX

SB SAT @ AMSAT $ANS-173.08
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 173.08 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-173.08

MIR:
(All operations, Voice and Packet will be on 145.985 MHz, Simplex FM until June 23rd, 1997.)
Mir officially will end the worldwide experiment on 145.985 MHz as of June 23, but leave the frequency available as an option to the Mir crew only while Mir is over the US. Mir packet sysop Miles Mann, WF1F, said US astronaut Mike Foale, KB5UAC, now aboard Mir, can use "any channel he wants" when he's over the US, including 145.985, but he has to switch to 145.200/800 when Mir is elsewhere.

SAFEX, MIR 70cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Mike Seguin, N1JEZ, finally had some time to work a pass of the MIR /SAFEX repeater on the evening 6/21/97 @ 2223 UTC over Vermont. Mike reports he couldn't key up the repeater, and he also heard nothing on the downlink. He quickly tuned down to the Digitalker freq. 437.925 +/- doppler. There N1JEZ heard a message from Mike Foale, KB5UAC, about the Space Festival and the Student Model Rocket contest. The message repeats every few minutes.

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)

RS-10 Still silent.
RS3A needs some SWL reports of RS-10.
What time you heard RS-10, and also the date.
Send info via packet to Andy, .RS3A.
Packet: RK3KPK@RA3KP.MSK.RUS.EU

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 Mhz CW/SSB)
Signals on RS-12 in North America during May and June (almost
exclusively daylight passes) are weakened by increased ionospheric
activity which is keeping 15m active during the daylight hours.
This makes it especially important for the 'old timers' to warn the
newcomers on RS-12 to set their uplink frequency and leave it alone to
prevent sweeping across the 15m band and QRM-ing the terrestrial QSOs
in progress
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
WT0N reports that downlink signals are still weak from RS-15,
but the bird is still workable.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active. Also,
the 29.408 MHz beacon is reported as being heard.
No transponder activity yet.
70cm beacon =RS16 ZEAA ZEJA ZEAA(AA is sent as one
characrer);P163,o0,n0,m0,l0,k7,j5,i7,h49,g0,f159,e8,d6,c8,b11,a7.

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
[ANS thanks Bernie Hall, WY4D, for this report..]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operating normally. Strong downlink signal. Very busy
during passes over North America. Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.
.
KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.
AO-27 (1-Jun-1997- 10:58 UTC Orbit-19182)
The satellite is working normally over North America.
and Europe.
Current AO-27 schedule information can be found at
www.umbra.com

Tepr 4 = 32 counts 16 Minutes
Tepr 5 = 66 counts 18 Minutes
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Please remember to adjust the higher frequency for doppler when the bird
is in analog, JA, mode. This means adjust the 70 cm frequency, the
downlink, for doppler shift. You do not have to adjust the 2 meter
frequency, the uplink, for doppler.

The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
June
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-173.09
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 173.09 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 22, 1997

TO ALL RADIO AMATEURS BT
BID: $ANS-173.09

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.
Many QSO's heard as when the bird was in view from
north America. WT0N reports some slight FM'ing on the downlink..

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
Telemetry nominal. The battery voltage has recently improved to
around 13.9 volts, and the internal temperatures have continued to
fall, due to solar eclipses. The battery temperature is now 4
degrees C, or 18 degree below the full sunlight condition.

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 Mhz.)
Operational.
Telemetry data received from AO-16
uptime is 1007/06:01:17. Time is Sat Jun 21 11:26:27 1997
RC PSK TX Out= 0.428 W
Total Array C= 0.256 Bat Ch Cur=-0.009 Ifb= 0.054 I+10V= 0.266
TX:010B BCR:83 PWRC:59E BT:3C WC:25 EDAC:93

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
No report available.

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
Telemetry data received from LO-19:
uptime is 731/21:48:59. Time is Sat Jun 21 11:54:09 1997
RC PSK TX Out= 0.534 W
Total Array C= 0.268 Bat Ch Cur= 0.137 Ifb= 0.035 I+10V= 0.079
TX:016 BCR:80 PWRC:36E BT:3C WC: 0
NOTE: Add 6.83 minutes to the clock of the satellite.
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
A problem with UO-22 seems to be related to the software changes that
were made last week prior to the last flight software reload. During
the last pass over Surrey on Saturday morning, June 7th, Chris Jackson
closed the spacecraft store and forward communications system for general
use to allow him to diagnose the problem..
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1803. !!! SAMPLEOUR PSYCHICS TOLL FREE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ok938$a4k@newsfeed.ingress.net>
Source record: 18663

```
Dial 1-800-683-3733 and sample amazing psychic advice -
it's free. You will be startled and amazed!
Adults over 18 only

Dial now 1-800-683-3733
```

1804. *** Subscription ***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <33adb1b2.2167604@news.bctel.ca>
Source record: 18664
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

I am currently taking the membership (free) for the web site:

http://www.geocities.com/Yosemite/1325/main.htm

It contains lots of information regarding to CB, Ham radio and etc.

If you subscribe, you will get update information, useful information
regarding to the contents of the web site.

One e-mail address is required to subscribe.
To subscribe, either go to the web site and register or simply e-mail
me.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1805. Help Paccomm NB-96 + PSK-1 And Icom IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: Ramon Serna <geko@redestb.es>
Message-ID: <geko-2206971834490001@ppp56.89.redestb.es>
Source record: 18665

Dears Friends:

I ham interested en the conections diagrams,for the connection
of the Icom IC-970/H and the Satellite modem Paccomm NB-96 & PSK-1
and the 9600 Modification for this rig.

Thank`s

Ramon Serna EA3CFC

1806. HELP !! Connections IC-970/H and The Paccomm NB-96+PSK-1

Newsgroup: rec.radio.amateur.space
Date: 1997-06-22 00:00:00 UTC
From: Ramon Serna <geko@redestb.es>
Message-ID: <geko-2206971840300001@ppp56.89.redestb.es>
Source record: 18666

Dears Friends:

I ham interested en the conections diagrams,for the connection
of the Icom IC-970/H and the Satellite modem Paccomm NB-96 & PSK-1
and the 9600 Modification for this rig.

Thank`s

Ramon Serna EA3CFC

E-mail: ea3cfc@amsat.org

1807. ! PSYCHIC PREDICTIONS TRY-IT-FREE! IT'S FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: may@ingress.com
Message-ID: <5oklo3$9sm@newsfeed.ingress.net>
Source record: 18667

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1808. ! FREE PSYCHIC READINGS! 1-800-677-8048 FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: may@smarttec.net
Message-ID: <5ol0ij$g0n@newsfeed.ingress.net>
Source record: 18668

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of others - see for yourself just how accurate they are.
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1809. ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-677-8063

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: may@smarttec.net
Message-ID: <5olf3l$n0e@newsfeed.ingress.net>
Source record: 18669

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Dial now 1-800-677-8063

1810. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5oltov$521$89@news.internetmci.com>
Source record: 18670

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

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shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.

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and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

1811. Re: ARLS018 Phase 3D delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5omj15$6b9$1@tilde.csc.ti.com>
Source record: 18671

In article <$arls018.1997@arrl.org>, w1aw@arrl.org says...
>
>>.........
>Orbital Report On-Line said this week that a faulty component was
>detected in the liquid oxygen turbopump of the Vulcain engine due to
>fly on Ariane 504. Since the origin of the flaw was identified as a
>possible production defect and a similar element is known to be in
>the pump of the engine already mounted on the Ariane 502 rocket that
>recently arrived in Kourou, French Guyana, the European Space Agency
>and the launch consortium (CNES) have decided to remove the engine
>and replace it with the one originally scheduled for Ariane 503,
>which features a component from an older production batch.
>~~~~~~
It seems that a clarification of "production defect" is in order
here. Can we get more details? "Similar element" needs some further
description too.

Ken Durham K5MBV

1812. SETI League Pres. on Radio Show

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: lenwink@goodnet.com
Message-ID: <5on0unaaq1@news.goodnet.com>
Source record: 18672
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.radio.shortwave,rec.radio.amateur.space,alt.ufo.reports

This sunday, June 29, 1997, Dr. H. Paul Shuch, N6TX, from the
Amateur SETI League, will be the special guest on the Ham Radio
& More Show. Don't miss this opportunity to find out what's going
on with SETI, special projects in the works, how you can join, info
on the upcoming movie-Contact, and we'll even get to hear Dr. Shuch
do some of his world famous singing about SETI.
The Ham Radio & More Show air live exclusively on WWCR, 5.070mhz,
every sunday at 6:00pm ET, 2200utc. More info is below or check out
the home page.

Len Winkler, KB7LPW lenwink@goodnet.com
P.O. Box 9219 kb7lpw@kc7y.az.usa.na
Phoenix, AZ. 85068-9219 ARIZONA ARRL PIC

Ham Radio & More Show info at:
http://www.goodnet.com/~lenwink/hrm.htm
http://www.tapr.org/hrm (RealAudio site to hear past shows) (Thanks TAPR)

The Ham Radio & More Show airs LIVE each Sunday at 6:00pm ET,
(2200utc) on WWCR Shortwave, 5.070mhz.
Also available tape delayed via WWCR Shortwave on Tuesdays, at 0800utc on 3.210mhz, and
Sundays at 0500utc on 5.070mhz.

Support "WOG", the Written Only General!
WOG info at http://www.goodnet.com/~lenwink/wog.htm
Also, check out http://www.nocode.org

1813. *Amateur CW/Voice Satellite Frequencies FAQ 06.23.97*

Newsgroup: rec.radio.amateur.space
Date: 1997-06-23 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2306971656300001@cqtlm-pm2-061.dowco.com>
Source record: 18673
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ06.23
Amateur CW/Voice Satellite Frequencies for June 23, 1997.

BID: $FREQ0623
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.985 FM *** NEW FREQUENCY ***
Downlink 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
```

chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-10's beacon, ROBOT and transponder remain silent while designer and builder Andy Papkov carries out experimental work with the satellite from the RS3A command station. Leonid Labutin UA3CR reports that it is hoped that RS-10 will be active again soon, long before it's tenth birthday.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Currently the 10M beacons are off but the 70cm beacons are on.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

Current AO-27 schedule information can be found at:

http://www.umbra.com

The Transmitter xtal is changing with time. From the first day AO-27 was in orbit the Transmit Frequency has been shifting lower. Many have not checked the zero doppler frequency closely enough to see that it is dropping. Every few months Michael Wyrick, N4USI, has to change a setting that moves the freq. a KHz or so up in freq. This setting only has a range of about 7 KHz total. This means that after a while Michael can't compensate for the change and has to reset the setting back to zero. This causes the frequency to drop about 7 KHz when he does this. There is no way around this and the Tx frequency will continue to drop as the xtal ages.

The satellite is coming up on the end of range for this setting and in several months the freq. will seem to drop again. If N4USI had not put the correction hardware on-board, you would see a continuous shift in tx frequency. AO-27 Will turn on Every pass 16 Minutes after entering the sun

and will stay on for 18 minutes. This corrects the early shut off that has been going on for the passed few weeks.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

The latest FO-29 Schedule can be found at:

http://www.kt.rim.or.jp/~jr1nvu/eindex.html

June 13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA

* Mir Simplex - A frequency change experiment is taking place with the 2-meter station on board the Mir Space Station. The duration of the experiment has not been finalized, we would like your inputs on the results. The MIREX team has received numerous complaints from around the world, stating the existing Mir 2-meter channels are not usable. In November 1996 Mir changed from the successful channel 145.550 simplex to a 145.200/800 split frequency. This combination of channels (145.200/800) does not work very well for most parts of the world. In many countries the 145.200 is used for repeater Outputs or
Inputs. The 145.790 channel is in use by many semi-permanent packet operations. The new temporary frequency which MIREX has requested is 145.985 Simplex. All operations, Voice and Packet will be on 145.985 Simplex. This frequency was chosen for three primary reasons. First it complies with the ITU International Band plan for Satellite operations. Second, It gets Mir away from most of the terrestrial based interference. Third, The Mir 2-meter station is desensed by commercial VHF activities on board Mir (in the 143 MHz range).

Stations are encouraged to listen to the Mir activities on the new channel and send your Signal and Interference reports to the CEO of MIREX, Dave Larsen. It is very important to participate and send reports. This is

an opportunity to provide useful input.
Address:
E-mail doc @ volcano.net
Packet n6co @ N0ARY.#NOCAL.CA.USA.NOAM
Postal N6CO POB1501 PINE GROVE CA 95665

Please do not send Signals reports via the Mir PMS mail box. And do not bother the Mir crew members about the frequency change. This frequency experiment is solely the responsibility of the MIREX Working Group. The MIREX Working Group would like the thank all of the people involved with

assisting in this information gathering experiment, including the Mir 23 Crew members and the Chief of Cosmonaut Amateur Radio Department RSC.

Suggested Report format: (pre-amps turned off, state antenna style, then describe interference if any)
Elevation Degrees / S-Unit
5 5
10 9
30 +10
50 +20
30 8
10 6
5 2

* SAREX Mission STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

CREW MEMBERS with Amateur Radio call signs:
James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

During most SAREX missions, many of the crew members will make random contacts with earth-bound hams. This crew will use KC5RNI, KC5BTK and KC5FVF on FM voice and W5RRR-1 on packet. They make these contacts during their breaks, before and after meal time, and during their pre-sleep time. In fact, over the past years the astronauts have contacted thousands of amateurs around the world. On many missions, they have even carried a 2-meter packet radio station. Innovative computer software allows the crew to operate the packet gear in an ''unattended'' mode, allowing amateurs to make contacts with the ROBOT station when the astronauts are working or sleeping.

The SAREX Working Group has designated the following frequencies during this mission. FM voice downlink (worldwide): 145.55 MHz; FM voice uplink (except Europe): 144.91, 144.93, 144.95, 144.97, and 144.99 MHz; FM voice uplink (Europe only): 144.70, 144.75, and 144.80 MHz; FM packet downlink: 145.55 MHz; FM packet uplink: 144.49 MHz.

Hams should avoid transmitting on the shuttle's downlink frequencies. The uplink is your transmitting frequency. The crew will not favor any uplink frequency, so your ability to communicate with SAREX will be the ''luck of the draw.'' Transmit only when the shuttle is within range of your station, and when the shuttle's station is on-the-air.

QSLs go to ARRL EAD, STS-94 QSL, 225 Main St, Newington, CT 06111-1494. Include the following information in your QSL or report: STS-94, date, time in UTC, frequency and mode (FM, voice or packet). You must also include a business-sized SASE.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

Special Event Station

From 21st June until 29th June a group of keen RS enthusiasts consisting
of G4CUO, G4ZHG, G0MKA, G7MUB, G8DYK and G0MKA will be celebrating the ten
years of faultless operation provided by the Russian RS-10 satellite.
They will be active with the callsign GB0RAS on all modes on each and every
pass of RS-10, RS-12, RS-15 and the Japanese FUJI satellites also. A serial
number will be given for all QSO's on each satellite, and a very special
QSL card will be sent to each station contacted or SWL report received.

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

Scott Leaf VE7VDX - VHF DX Grid Square CN89
ve7vdx@dowco.com
Coquitlam, British Columbia, Canada.

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

1814. MCW for OSCAR?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-24 00:00:00 UTC
From: timw@juno.COM
Message-ID: <19970624.115130.11263.0.TimW@juno.com>
Source record: 18575

Hello, all: is it possible to use a modulated continuous wave signal (MCW as described in this month's QST) with a handheld to work the OSCAR satellites as long as a proper receiver is used?

Thanks,
Tim, AB7LP
ab7lp@qsl.net

1815. ARLK049 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-24 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk049.1997@arrl.org>
Source record: 18576
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK049
ARLK049 Keplerian data

ZCZC SK49
QST de W1AW
Keplerian Bulletin 49 ARLK049
From ARRL Headquarters
Newington, CT June 24, 1997
To all radio amateurs

SB KEP ARL ARLK049
ARLK049 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97171.05998363 .00000050 00000-0 10000-3 0 05006
2 14129 25.9709 141.4821 6065344 127.3975 304.7915 2.05880617077442
RS-10/11
1 18129U 87054A 97175.17040455 .00000048 00000-0 35949-4 0 03686
2 18129 82.9261 233.5696 0010738 195.5965 164.4864 13.72379454501198
UO-11
1 14781U 84021B 97174.97849575 .00000101 00000-0 24975-4 0 09823
2 14781 97.8359 155.9406 0012006 347.6013 12.4895 14.69561683712252
RS-12/13
1 21089U 91007A 97175.20902379 .00000036 00000-0 22941-4 0 09911
2 21089 82.9206 273.4305 0027895 279.2470 80.5534 13.74082572320127
UO-14
1 20437U 90005B 97175.23561087 .00000037 00000-0 31119-4 0 03073
2 20437 98.5181 256.7530 0010872 183.3910 176.7199 14.29963846387225
RS-15
1 23439U 94085A 97174.99144228 -.00000039 00000-0 10000-3 0 02310
2 23439 64.8158 141.8379 0148882 131.3278 230.0560 11.27527850102708
AO-16
1 20439U 90005D 97175.18013404 -.00000011 00000-0 12652-4 0 00941
2 20439 98.5338 259.6419 0011000 185.7243 174.3817 14.30010964387236
RS-16
1 24744U 97010A 97175.22004811 .00002113 00000-0 71945-4 0 00577
2 24744 97.2763 80.1534 0009012 71.9904 288.2341 15.31468145017161
```

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DO-17
1 20440U 90005E 97175.23532375 -.00000012 00000-0 12115-4 0 00824
2 20440 98.5381 260.5591 0011224 184.1861 175.9234 14.30153826387274
WO-18
1 20441U 90005F 97175.23336187 -.00000014 00000-0 11325-4 0 00989
2 20441 98.5405 260.4592 0011872 184.4426 175.6660 14.30120996387273
LO-19
1 20442U 90005G 97175.20008991 .00000022 00000-0 25034-4 0 00885
2 20442 98.5427 261.0965 0011799 184.7676 175.3391 14.30236599387294
FO-20
1 20480U 90013C 97174.89332385 -.00000061 00000-0 -63756-4 0 09907
2 20480 99.0469 135.2205 0541122 2.2650 358.0723 12.83238210345562
AO-21
1 21087U 91006A 97175.18808582 .00000093 00000-0 82657-4 0 08536
2 21087 82.9402 46.3983 0033414 250.4960 109.2585 13.74583506321119
UO-22
1 21575U 91050B 97175.13879374 .00000035 00000-0 26060-4 0 07901
2 21575 98.3006 235.4386 0006867 229.8932 130.1663 14.37074489311485
KO-23
1 22077U 92052B 97175.05307874 -.00000037 00000-0 10000-3 0 06801
2 22077 66.0771 130.8595 0009690 210.0683 149.9776 12.86302849228639
KO-25
1 22828U 93061F 97175.21266312 -.00000020 00000-0 92828-5 0 05570
2 22828 98.5411 249.6102 0009788 200.9821 159.0963 14.28182150163218
IO-26
1 22826U 93061D 97175.18004007 .00000009 00000-0 21028-4 0 05743
2 22826 98.5455 249.4954 0008510 219.7128 140.3436 14.27839083195088
AO-27
1 22825U 93061C 97175.21213411 -.00000014 00000-0 11629-4 0 05773
2 22825 98.5451 249.2806 0007664 219.2446 140.8175 14.27729230195070
FO-29
1 24278U 96046B 97175.09411565 .00000026 00000-0 61479-4 0 00932
2 24278 98.5391 215.3842 0351581 168.1974 192.7681 13.52632323042059
MO-30
1 24305U 96052B 97174.99784386 .00000204 00000-0 20364-3 0 01242
2 24305 82.9309 349.5478 0029135 185.1153 174.9702 13.73094845039995
Mir
1 16609U 86017A 97175.22498073 .00001034 00000-0 19160-4 0 03957
2 16609 51.6543 50.5167 0005321 178.0935 182.0132 15.59512552648124

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
June 28, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1816. ! SAMPLE A FREE PSYCHIC! TRY-IT-FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-24 00:00:00 UTC
From: user@metrocon.com
Message-ID: <5oof0t$p46$5436@news.metrocon.com>
Source record: 18577

How do you know if you've found a real psychic?
Now you can see for yourself. Listen to our psychics
first, then decide if they know your future and fate.
Try it free on 1-800-677-8061. Adults over 18 only.

Dial now 1-800-677-8061

1817. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-06-24 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33b09899.0@news.cyberannex.com>
Source record: 18578

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail:

sales@emodus.com

Thank you!

1818. Nude Teenage girls *ten.jpg

Newsgroup: rec.radio.amateur.space
Date: 1997-06-24 00:00:00 UTC
From: as
Message-ID: <5onve2$st1$2585@news.internetmci.com>
Source record: 18674

Looking for Dirty Schoolgirls Having Sex? Well, then look no further, Nasty-Schoolgirls is your
source for the Nastyiest girls that will Fuck and Suck your Cock.

Are you ready to have a Schoolgirl Suck you Cock?

Then Visit:

http://www.nasty-schoolgirls.com

All Models Represented on Nasty-Schoolgirls are 18 years of age or older.

1819. Attention-All-Writers

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Ron34@compuserve.com
Message-ID: <33b0e686.0@news1.ibm.net>
Source record: 18579

We are accepting new and previously published writers for publication.
We are a NEWYORK based international literary agency with three offices:
2 in NEW YORK and one in FLORIDA. Please follow guidelines for
submission: For all fiction, including screenplays for TV & Movies:
Send us a brief synopsis, the first chapter, and include a self-addressed,
stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include
a S.A.S.E.
Do not send complete manuscript unless invited.
WOODSIDE INTERNATIONAL LITERARY AGENCY
33-29 58 Street
Woodside, New York
zip: 11377
Tel: 718-651-8145

1820. MIR accident

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8169$ad8bc9e0$39280ace@home.the-bridge.net>
Source record: 18580

CAPE CANAVERAL, Florida (CNN) -- A Russian supply ship crashed into the space station Mir Wednesday during a test, causing one module to lose pressure, NASA said. The three men on board, including a U.S. astronaut, were reported to be safe.

The crew watched as the Progress ship, filled with garbage, moved toward the Mir and collided into a module during a test of the automated docking system, said NASA spokesman Rob Navias.

A solar panel on the module was damaged, and pressure began to drop inside. "It's heading toward zero," Navias said this morning.

The crew hurriedly sealed off the module to prevent a further drop in pressure in the rest of the sprawling station.

Correspondent John Holliman and The Associated Press contributed to this report.
--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1821. Post Collision MIR passes

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc818b$27a39340$39280ace@home.the-bridge.net>
Source record: 18581

On the June 25th, 1997 at 1700 UTC pass of MIR over north America, no activity heard on SAFEX, downlink 437.925 MHz. I did try to uplink also with, no luck. No activity heard on 145.800 MHz, 145.985 MHz or 145.95 MHz. I did hear MIR using the 143.625 MHz frequency. I would like other reports about MIR since the collision. 73 and Thanks for your time de Bj
BJ Arts

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1822. ARLS020 Mir crew safe after collision

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls020.1997@arrl.org>
Source record: 18582
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS020
ARLS020 Mir crew safe after collision

ZCZC AS20
QST de W1AW
Space Bulletin 020 ARLS020
From ARRL Headquarters
Newington, CT June 25, 1997
To all radio amateurs

SB SPACE ARL ARLS020
ARLS020 Mir crew safe after collision

The crew aboard the Mir space station--including US astronaut Mike Foale, KB5UAC and two Russian cosmonauts--was reported safe and in good shape today after an unmanned Progress M-34 cargo rocket struck Mir as the crew was trying to re-dock the rocket during a practice run. NASA spokesman Rob Navias says there are no plans to abandon Mir. A Soyuz spacecraft is docked at the station to provide an escape route.

Damage was confined to the Spektr module, which has been sealed off from the rest of Mir. That module reportedly contains the SAFEX 70 cm Amateur Radio repeater and most of the US experiments aboard Mir. NASA reports the crew is closely monitoring the damaged module.

According to VideoCosmos Co of Moscow and Novosti Kosmonavtiki magazine, the mishap occurred at approximately 0918 UTC. The cargo spacecraft sheared off half of a Spektr solar panel and damaged the module itself. The resulting leak caused the space station to begin to lose pressure, but the crew was able to rapidly close the hatch to the Spektr module and repressurize the unaffected compartments. The crash also damaged thermal control radiators on the Spektr module.

Vera Medvedkova, a spokeswoman for the Russian Mission Control Center near Moscow, said that at the time of the crash, the crew was using manual control to practice docking the Progress rocket. The crew had released the trash-filled rocket Tuesday and was attempting to re-dock it. Russian space officials now are figuring out how to fix the damaged Spektr module and what to do with the cargo ship, which continues to orbit Earth near the space station. NASA says it's working closely with the Russian flight team to determine the appropriate action.

In addition to Foale, the Mir is staffed by Russian cosmonauts Vasily Tsibliyev and Alexander Lazutkin. Foale has been aboard Mir since mid-May, when he replaced Jerry Linenger, KC5HBR. Linenger had his share of problems during his four-month stay on Mir, including a fire and coolant-system leaks.

For news updates, see
http://www.hq.nasa.gov/office/pao/NewsRoom/today.html.
NNNN
/EX

1823. ARLS021 Mir update

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls021.1997@arrl.org>
Source record: 18583
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS021
ARLS021 Mir update

ZCZC AS21
QST de W1AW
Space Bulletin 021 ARLS021
From ARRL Headquarters
Newington, CT June 25, 1997
To all radio amateurs

SB SPACE ARL ARLS021
ARLS021 Mir update

Ham-astronaut and former Mir crew member Jerry Linenger, KC5HBR, told reporters today (June 25) that the crew aboard the Russian space station has had to ''power everything down that's possible,'' including some life-support systems, in the wake of a collision with an unmanned cargo rocket this morning. The crash, which damaged a solar array and punctured one module, resulted in a loss of as much as 50 per cent of the Mir's electrical power. Speaking at a NASA press briefing, Linenger characterized the Mir as ''a darkened ship'' and said the crew would operate ''in a slowdown mode'' until the effects of the mishap are corrected. The accident caused the space station to depressurize. The situation prompted quick action by the crew to seal off the affected Spektr module.

The accident has cut off US ham-astronaut Mike Foale, KB5UAC, from his sleeping quarters and personal items in the Spektr module. NASA Shuttle-Mir Program Manager Frank Culbertson said there was ''no indication of health and safety problems'' among the crew members, but that some of the experiments in the Spektr module may have been ruined. Culbertson said the collision with the Progress supply rocket happened as the crew was ''testing a new rendezvous technique'' to be used if automatic docking systems failed. In addition to Foale, the Mir is staffed by Russian cosmonauts Vasily Tsibliyev and Alexander Lazutkin. Foale has been aboard Mir since mid-May, when he replaced Linenger.

Linenger told the press conference today that it was too early to comment on what the latest problem aboard Mir might mean for the future of the 11-year-old space station, which already has outlasted its anticipated life span by six years. Linenger said fire and decompression are the two most dangerous things aboard a spacecraft ''and we've had both of those.'' During Linenger's four months aboard Mir early this year, the crew experienced a fire, a near

collision with another cargo rocket, and coolant system leaks.

Culbertson said repairs likely would require a space walk by the Mir crew. He also did not rule out the possible termination of the mission. As part of its response to the emergency, the crew prepared the Soyuz escape vehicle for possible evacuation. Culbertson said the crew would have to orient the station for optimal exposure to the sun to make the best possible use of the solar panels that remain on-line.

For news updates, see
http://www.hq.nasa.gov/office/pao/NewsRoom/today.html.
NNNN
/EX

1824. Analysis/Synthesis Capability for Hams

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <33B18C4A.79D@webblabs.com>
Source record: 18584
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radioamateur..misc,rec.radio.amateur.space

Many amateur radio operators have contaced us in recent months regarding availability of affordable electronic analysis and synthesis tools. We have now released Version 2 of the Professional Partnership (PP) Program. While there is a one-time $975 charge, the PP program may be distributed throughout a club, organization or company. Of special significance is the profound level of Wireless/RF/Microwave capability included.

The PP Program includes:

Nodal Circuit Analysis with True Two-Node Port Definition
Unconstrained Noise Analysis
Transmission Structure Synthesis & Analysis
Over 40 Single & Coupled Topologies
Strip (Planar) Structures
Wire Lines
Coaxial Arrangements
Waveguide (Non-TEM) Topologies
Passive Filter Synthesis
Lowpass
Highpass
Bandpass
Prototypes
Practical Reactively-Coupled Realizations
System & Receiver Design Support
Link, Terminal & Radar Analysis
System Architecture Characterization
Spurious Analysis
Transmit & Receive
Coincident & Tuned
Preselector & Output Filtering
Phase Noise Analysis
Time Domain Effects
Frequency Domain Effects

500+ Page User's Manual with Examples & References

Acquire a single PP Program package for your club, company or organization, and you will be furnishing all of this needed capability to every designer, not just one! Our competitors are furious with us for having created the uniquely progressive opportunity. It seems they're still using dongles to hinder access to their own products.

Please contact me for additional information.

Kathy Goerg
Professional Partnership Program Coordinator

Webb Laboratories

1825. Re: Post Collision MIR passes

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Kenneth G Barbour <kbarbour@mb.sympatico.ca>
Message-ID: <33B1892A.367C@mb.sympatico.ca>
Source record: 18585

BJ.....What collision are you refering to?? Any info would be appreciated. thanks VE4KGB

1826. Re: MIR accident

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Dan O'Connell <oconneld@OIT.EDU>
Message-ID: <Pine.OSF.3.96.970625105431.14704A-100000@internet.oit.edu>
Source record: 18586

On 25 Jun 1997, BJ Arts wrote:

> CAPE CANAVERAL, Florida (CNN) -- A Russian supply ship crashed into the
> space station Mir Wednesday during a test, causing one module to lose
> pressure, NASA said. The three men on board, including a U.S. astronaut,
> were reported to be safe.

I saw some video of it this morning on the news; a couple of the panels are really mangled. Dan WA7TDZ

1827. *** Mir Crashes with Progress ***

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: masa@writeme.NOSPAMcom
Message-ID: <33b194a2.5749506@news.bctel.ca>
Source record: 18587
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur,rec.radio.amateur.misc

It seems the Progress crushed into the Mir space station.

For updated information, subscribe Masa's Radio Membership. It's
free.
http://www.geocities.com/Yosemite/1325/main.htm is the main
address.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1828. Re: PC Rotor Controller?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970625153752.3906I-100000@oso.slonet.org>
Source record: 18588

It seems difficult to get information on the controller described here.
Has anyone had any luck getting further information on this?? Any
standalone PC controller other than the TAPR "trackbox" would be most
useful. 73 Cliff Buttschardt K7RR
On Sat, 21 Jun 1997, Oevna wrote:

> On Sat, 14 Jun 1997 22:53:10 -0500, Mike Blanchard <phoenix@flash.net>
> wrote:
>
> >Is anyone designing a low-cost (~$100) az/elv rotor and radio controller
> >that is pc based for satellite communications?
> >I know of only two sources for such a device:
> > KC Tracker
> > TAPR
> If you want to build a homebrew, look for a program called "Fodtrack"
> (net search, it's on some of the ham pages). It gives schematics
> for the radio & az/el controller & no-frills software to run it.
> It works for me! The program is freeware & parts are ~$25.00 Cdn.
> Good luck!
> Oevna VE7IJQ
> (name in ROT13 to stifle e-mail spam)
>
>

1829. Foale's Mir interview mentions ham radio (possible dupe)

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33B1962B.679A@ix.netcom.com>
Source record: 18589

Excerpt from an interview with Mike Foale aboard the Mir space station:
"What are you missing most?

=93I don=92t really know. I=92m having a good time here. It=92s hard to say=
,
really. Not
much at the moment. I have very good contact with my wife, Rhonda, and I
talk
to her once a week. I send e-mail to her. That=92s a lot of fun. And I talk=

to radio
hams around the world. And the view is fantastic and the work is
interesting, so
I=92m having a good time.=94

For the full interview, see the Mir status reports link on:
http://www.hq.nasa.gov/office/pao/NewsRoom/today.html

-- =

73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html

1830. Foale's interview mentions ham radio

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33B19523.3E12@ix.netcom.com>
Source record: 18590

Excerpt from an interview with Mike Foale aboard the Mir space station:
"What are you missing most? =

=93I don=92t really know. I=92m having a good time here. It=92s hard to say=
, =

really. Not
much at the moment. I have very good contact with my wife, Rhonda, and I =

talk
to her once a week. I send e-mail to her. That=92s a lot of fun. And I talk=
=

to radio
hams around the world. And the view is fantastic and the work is =

interesting, so
I=92m having a good time.=94 =

For the full interview, see the Mir status reports link on:
http://www.hq.nasa.gov/office/pao/NewsRoom/today.html

-- =

73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html

1831. <Attention-All-Writers>

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: Poe@idt.net
Message-ID: <33b1d08c.0@news1.ibm.net>
Source record: 18591

We are accepting new and previously published writers for publication. We are a NEW YORK based international literary agency with three offices: 2 in NEW YORK and one in FLORIDA. Please follow guidelines for submission:
For all fiction, including screenplays for TV & Movies: Send us a brief synopsis, the first chapter, and include a self-addressed, stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include a S.A.S.E.
Do not send complete manuscript unless invited.
<WOODSIDE INTERNATIONAL LITERARY AGENCY>
<33-29 58 Street>
Woodside, New York
zip: 11377
Tel: <718-651-8145>

1832. !!!PROVEN PSYCHICS / FREE PREDICTIONS!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5oqm4d$1qu@kensie.dorsai.org>
Source record: 18592

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

1833. !!!TROUBLE WITH LOVE??? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5or02i$54f@kensie.dorsai.org>
Source record: 18593

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

1834. !!!FREE PSYCHIC ADVICE/SPECIAL SAMPLES LINE!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5or71l$73k@kensie.dorsai.org>
Source record: 18594

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-677-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-677-8057

1835. ! PROVEN PSYCHICS! FREE PREDICTIONS!! FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: sue@quicklink.com
Message-ID: <5osqt9$j9c$5406@news.quicklink.com>
Source record: 18595

Curious about psychics? Now you can try a psychic reading free, just dial 1-800-677-8039 - our free samples line where master psychics will amaze you with their knowledge and forsight. Try it now - see for yourself. adults over 18 only

Dial 1-800-677-8039

1836. ! PROVEN PSYCHICS! TRY-IT-FREE! 1-800-677-8063

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: sue@quicklink.com
Message-ID: <5ot9rb$3hm$5406@news.quicklink.com>
Source record: 18596

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

1837. Re: MIR accident

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33b27258.2169197@news.bctel.ca>
Source record: 18597
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

you should watch out for the copyright law.

you can't just copy everything.

On 25 Jun 1997 13:16:34 GMT, "BJ Arts" <bjarts@the-bridge.net> wrote:

>CAPE CANAVERAL, Florida (CNN) -- A Russian supply ship crashed into the
>space station Mir Wednesday during a test, causing one module to lose
>pressure, NASA said. The three men on board, including a U.S. astronaut,
>were reported to be safe.
>
>The crew watched as the Progress ship, filled with garbage, moved toward
>the Mir and collided into a module during a test of the automated docking
>system, said NASA spokesman Rob Navias.
>
>A solar panel on the module was damaged, and pressure began to drop inside.
>"It's heading toward zero," Navias said this morning.
>
>The crew hurriedly sealed off the module to prevent a further drop in
>pressure in the rest of the sprawling station.
>
>Correspondent John Holliman and The Associated Press contributed to this
>report.
>--
>BJ Arts
>Amateur callsign: WT0N
>ARMY MARS callsign: AAR5EL
>Grid Sqaure EN-37mk
>Hibbing, Minnesota. U.S.A.
>e-mail bjarts@the-bridge.net or wt0n@amsat.org
>Amsat News Service Bulletin Editor

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1838. FODTRACK and INSTANTTRACK are they compatable?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: Allen Fugelseth <Allen.Fugelseth@lmco.com>
Message-ID: <33B29E11.29D1@lmco.com>
Source record: 18598

I see from a previous post that there is software available to operate FODTRACK. Will InstantTrack tracking software drive the FODTrack interface? I am currently building FODTrack and was hoping to use my InstantTrack to run it.

73, Allen WB6RWU
Capitola, Ca.

1839. Re: MCW for OSCAR?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b2a3ea.18252078@news.atl.bellsouth.net>
Source record: 18599

On 24 Jun 97 19:51:28 GMT, timw@juno.COM wrote:
>Hello, all: is it possible to use a modulated continuous wave signal (MCW
>as described in this month's QST) with a handheld to work the OSCAR
>satellites as long as a proper receiver is used?

If is possible to do that, but you shouldn't do that. The reason is that the MCW signal is a constant power signal. Those are discouraged on the amateur satellites because they use satellite transponder power even when not transmitting any information, and transponder power is limited and precious. Use CW or SSB on the analog transponders so that more of the limited power resource will be available to others attempting to use the satellite at the same time.

Note that this only applies to satellites which have linear transponders. Obviously satellites which don't have linear transponders have different requirements, IE AO27 wants an FM uplink, and the microsats want FSK uplinks. Those are constant power signals, but it doesn't matter since they're being received and decoded by the satellite before retransmission. They don't control the amount of downlink power consumed.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1840. !!!FREE PSYCHIC READINGS / FIND OUT HOW!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: sue@quicklink.com
Message-ID: <5otn9b$b7n$5406@news.quicklink.com>
Source record: 18600

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

1841. 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: timw@juno.COM
Message-ID: <19970626.104232.7127.0.TimW@juno.com>
Source record: 18601

This morning (6/26), Art Bell referred to this frequency on his night-time talk radio show Coast to Coast A.M. He mentioned that this was a frequency Mir was using. I tuned to that during the latest pass here in Vancouver, WA, and heard a flow of Russian. Two questions:
1. What is this frequency being used for? Is it similar to the types of communications that the shuttle uses Ku-band and S-band?
2. Although this may sound like a no-brainer, is SAFEX and the packet robot still operational? I heard someone say that the amateur equipment was in the depressurized module that was sealed off. Is this true? If it is, and the equipment survives, it will make one great ad for Kenwood...

73 and tnx,

Tim, AB7LP:
ab7lp@qsl.net

---}}}}~~"Evoles ut ira breve nefas sit; regna!"~~{{{{---

1842. MIR Downlink 143.625 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: ghiscox@netcom.com
Message-ID: <33b2acc5.33298944@10.0.2.1>
Source record: 18602

This morning, between 1027 and 1037 PDT, I could clearly hear the MIR spacecraft on 143.625 MHz as it passed over the Southern California area. The signal was strong, even with an omnidirectional antenna, although there was fading that is indicative of some spin on the spacecraft. It sounds like they are using a full duplex circuit so you can hear BOTH sides of the conversation on that frequency. Of course it would help if you can speak Russian.

Next pass over SoCal is 1203-1212 PDT.

1843. MIR Keplerian Elements

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: ghiscox@netcom.com
Message-ID: <33b2b43b.35209600@10.0.2.1>
Source record: 18603

For those of you with your own satellite tracking software, here are the
Keplerian elements for the MIR spacecraft:

Mir
1 16609U 86017A 97176.18616814 .00008992 00000-0 11721-3 0 3974
2 16609 51.6538 45.6897 0005424 186.3953 173.7196 15.59540102648274

George, WA6RIK

1844. Re: mir and shuttle freq ?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-26 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5ouikl$9km$1@news.mhv.net>
Source record: 18604

In article <19970617154000.LAA26344@ladder02.news.aol.com>, n2ogb@aol.com (N2OGB) wrote:
> Mir is now on 145.985 simplex, both packet and voice.
>
> Ron N2OGB

Mir will be on voice ONLY on the new freq. when over the U.S., They will be
on the old freqs. when in packet mode.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1845. Homemade 137MHz- APT- receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: Alex <abom@iaehv.nl>
Message-ID: <01bc82ec$8b9cc0d0$de219082@cig483>
Source record: 18605

Here you can find my homemade 137 MHz- APT receiver design.

http://qsl.net/pa0axb/

********** Alex **********
* e-mail: abom@iaehv.nl *
* pa0axb@qsl.net *
****

1846. Work on a Smith chart : SmithDraw

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: pautex@lpmi.u-nancy.fr
Message-ID: <pautex-2706971628350001@lien5.lien.u-nancy.fr>
Source record: 18606

Hello
for some amateur who have to work on a Smith chart for some HF design
I can send you, via mail, a Macintosh application : SmithDraw.
If anybody interested in order to send me some report my e-meil is :
pautex@lpmi.u-nancy.fr

Thanks F1BDZ Jean-Francois

--
Pautex Jean-Francois F1BDZ
UHP NANCY France pautex@lpmi.u-nancy.fr
ftp -> ftp.lpmi.u-nancy.fr
www -> www.lpmi.u-nancy.fr

1847. Re: 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: dj0my@aol.com
Message-ID: <19970627190200.PAA14056@ladder01.news.aol.com>
Source record: 18607

Hi there !

It seems that there are still people out there which don't
know anything about the MIR onboard radio systems.

Here some informations:

143.625 MHz is the primary MIR downlink channel to communicate
with the control station TsUP in Kaliningrad (Star City) near Moscow.

It is either received direct by different groundstations spread all over
the CIS. When US "cosmonauts" are involved in the missions they
can also relay through groundstations in the US to their control center.
Therefore they are able to extend their communication time "slot" with
their control station in Russia.

In some occasions it is also possible to relay the signal via a
geostationary
satellite (either ALTAIR on 16° West or LUCH-1 on 77° East). Latter are
used
also for relaying their TV transmissions from space to the ground station.
The geostationary system is rather old fashioned compared with the US
TDRS-Satellites used by NASA to communicate with the Shuttle. The Russian
geosats downlink the signals on the KU-Band arround 10.8 GHz....

There is also a secondary channel (somewhere in the AIR-Band arround 130
MHz)
which is used in very special cases (e.g. coupling manouvers,
spacewalks...)

You can hear the 143.625 MHz transmission on almost every orbit the whole
year long (but only in the "working" times of the crew) here in Europe.
So we
have a little advantage compared with the US receiving amateurs. The only
disadvantage is, that most of the traffic is in russian language.....
But I have a Russian colleague at work..... ;-)))

Many years ago (at times of the USSR) they were using several ships on
different oceans to relay the MIR communications through HF links to the
control center in the former USSR.

Except of the voice channels there are also some telemetry channels in
the VHF and the UHF frequency range.....

So far my short description about the MIR radio systems.....

Best regards,

Oscar, DJ0MY
Neu-Ulm
Germany

1848. Re: unknown freq

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <33B49BE4.88D@erols.com>
Source record: 18608

MANOLIS MANOLI wrote:
>
> >A digital signal heard on 150.00 mhz FM i belive is a weather
> sattelite anyone any ideas ?
>
> thanks Manos
> mano@spidernet.com.cy

This is a downlink frequency used by some Russian navigation satellites.
There are four of them that use that frequency.

--
Keith Stein
Woodbridge, VA

Launchspace magazine
www.launchspace.com

Community, Air & Space Report
www.newspace.com/casr

Satellite Times magazine
www.grove.net/hmpgst.html

1849. How to use Amsat P3D frequency chart

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: steves@MCS.COM
Message-ID: <5p200f$kq2$1@Mars.mcs.net>
Source record: 18609

I am trying to figure out what the bands are going to be
for the Amsat P3D bird. I see a list of transmit and
receive frequencies but I am unsure what the combinations
will be. Could some kind soul please enlighten me?

Also, with the power levels of P3D could a dish work well
on 430 Mhz. ?

Thanks in advance,

Steve Stringfellow steves@mcs.com

1850. Re: MCW for OSCAR?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: <>
Message-ID: <970526204640.tvr@spinner>
Source record: 18610
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew

>Hello, all: is it possible to use a modulated continuous wave signal (MCW
>as described in this month's QST) with a handheld to work the OSCAR

>satellites as long as a proper receiver is used?

This is a quibble, Gary, mostly to clarify my understanding. It doesn't seem like MCW is inherently evil, as that represents a variety of emission types. Given a sufficiently pure sine wave as modulation, isn't emission type J2A (SSB) almost indistinguishable from CW? Even A2A (AM) ought not take more bandwidth than twice the frequency of that sine wave.

The problem comes with what is probably being suggested ['haven't seen the relevant QST yet], that is, MCW using emission types F2A or G2A (frequency or phase modulation) which uses completely unacceptable bandwidth for satellite transponders [as opposed to repeaters, such as on MIR, AO-27 or AO-21 (currently SK)]. The best you *might* be able to do is to make a fake microphone out of a suitable value of resistor and a telegraphic key. If you've a remembered to turn off PL (*important*), i think you'll be sending an FM carrier with very little modulation which might be something like CW that sounds bad and drifts horribly, and probably should only be tried at a time when almost no one else is on, to find out that one *could* use a given satellite if one obtained the proper equipment.

In short, don't use FM with a non-FM satellite!!!

Now, can anyone suggest a homebrew 2M transmitter (CW or SSB) so those of us who don't have $300-$500 (or more) and/or an HF rig lying around can experiment with such things without potentially causing serious interference?

-- KD6PAG (networking old-timer, RF newbie)

P.S. You can often find me trying AO-27 on most daylight passes that give at least 20 degrees elevation in the S.F. Bay Area. If you can hear it, then you can probably work it.

1851. Re: 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-27 00:00:00 UTC
From: <>
Message-ID: <970526205922.tvr@spinner>
Source record: 18611

2. Although this may sound like a no-brainer, is SAFEX and the packet robot still operational? I heard someone say that the amateur equipment was in the depressurized module that was sealed off. Is this true? If it is, and the equipment survives, it will make one great ad for Kenwood...

Both SAFEX and the VHF equipment were shut down until the coolant leak was fixed, so if they're short on power, it's probably one of the first things to get powered off.

--KD6PAG (who will be waiting patiently...)

1852. Re: MIR Downlink 143.625 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: rbtarn@ix.netcom.com
Message-ID: <5p2c93$h1p@dfw-ixnews4.ix.netcom.com>
Source record: 18612

George,

Is there a web site with information on passes of MIR over Southern
California?
Bob Tarn
Agoura Hills, CA

1853. !!!Talk to Other Hams via The Web!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: "Jamie R. Dean" <ke4htm@wp.cc.nc.us>
Message-ID: <5p29bi$ckl@snews1.zippo.com>
Source record: 18613
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Talk with other Amateur Radio Operators just like yourself via the World Wide Web.

There are no fees and no extra programs to install. You can chat with Hams from around the world.

Come By The Western NC APRS & Amateur Radio Home Page to join the fun at http://www.bluenet.net/ke4htm

Note: The Chat Service Works Best With Internet Explorer 3.0 +

1854. Re: MIR PMS docs?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: aa1cj@aol.com
Message-ID: <19970628092101.FAA25079@ladder02.news.aol.com>
Source record: 18614

MIR PMS info at:

http://www.cyberportal.net/dhend/miles.txt

73 de Gene AA1CJ

1855. Writers-Seeking-Publication

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: agent654@aol.com
Message-ID: <33b4db55.0@news1.ibm.net>
Source record: 18615

/We are accepting new and previously published writers for publication.
We are a NEWYORK based international literary agency with three offices:
2 in NEW YORK and one in FLORIDA. Please follow guidelines for
submission: For all fiction, including screenplays for TV & Movies:
Send us a brief synopsis, the first chapter, and include a self-addressed,
stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include
a S.A.S.E.
Do not send complete manuscript unless invited.
(WOODSIDE INTERNATIONAL LITERARY AGENCY)----------
33-29 58 Street>>>>>----------
Woodside, New York
zip: 11377
Tel: 718-651-8145>>>>>>>>_________

1856. !!! PROVEN PSYCHICS / FREE PREDICTIONS !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: susan11@ultinet.net
Message-ID: <33b517b3.1@nntp1.nac.net>
Source record: 18616

Curious about psychics? Now you can try a psychic reading free, just dial 1-800-677-8039 - our free samples line where master psychics will amaze you with their knowledge and forsight. Try it now - see for yourself. adults over 18 only

Dial 1-800-677-8039

1857. Re: How to use Amsat P3D frequency chart

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: martin morris <martin@marteagle.demon.co.uk>
Message-ID: <Uh47AAAZWVtzEwNh@marteagle.demon.co.uk>
Source record: 18617

In article <5p200f$kq2$1@Mars.mcs.net>, Steve Stringfellow
<steves@MCS.COM> writes
>I am trying to figure out what the bands are going to be
>for the Amsat P3D bird. I see a list of transmit and
>receive frequencies but I am unsure what the combinations
>will be. Could some kind soul please enlighten me?
>
>Also, with the power levels of P3D could a dish work well
>on 430 Mhz. ?
>
>Thanks in advance,
>
>Steve Stringfellow steves@mcs.com
>
>

Have a look the following. They may give you some more info

http://www.amsat.org/amsat/
http://www.amsat.org/amsat/features/ka0snl/p3d1.html
http://www.amsat.org/amsat/features.html

73's
@@@

1858. Detection of forward scatter from satellites?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: thomsona@netcom.com
Message-ID: <thomsonaECI6Ao.HFH@netcom.com>
Source record: 18618

Are there any reports of detections of forward scatter effects when
aircraft or low-orbiting satellites passed between ground-based receivers
and geosynchronous comsats? Or of attempts to do this that failed?

1859. ARLK050 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk050.1997@arrl.org>
Source record: 18619
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK050
ARLK050 Keplerian data

ZCZC SK50
QST de W1AW
Keplerian Bulletin 50 ARLK050
From ARRL Headquarters
Newington, CT June 28, 1997
To all radio amateurs

SB KEP ARL ARLK050
ARLK050 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97171.05998363 .00000050 00000-0 10000-3 0 05006
2 14129 25.9709 141.4821 6065344 127.3975 304.7915 2.05880617077442
RS-10/11
1 18129U 87054A 97178.23250486 .00000089 00000-0 80804-4 0 3688
2 18129 82.9257 231.3053 0010898 187.5325 172.5667 13.72380218501612
UO-11
1 14781U 84021B 97178.92763114 .00000078 00000-0 20992-4 0 9824
2 14781 97.8362 159.7319 0011733 335.0807 24.9837 14.69562418712834
RS-12/13
1 21089U 91007A 97178.34014559 .00000052 00000-0 39515-4 0 9882
2 21089 82.9209 271.1094 0027780 270.0331 89.7640 13.74082776320550
UO-14
1 20437U 90005B 97178.17443254 .00000023 00000-0 25659-4 0 02913
2 20437 98.5180 259.6281 0010933 174.5667 185.5638 14.29964132387649
RS-15
1 23439U 94085A 97178.00702699 -.00000039 00000-0 10000-3 0 2284
2 23439 64.8150 136.9613 0148866 130.7636 230.6313 11.27527834103041
AO-16
1 20439U 90005D 97178.18882703 .00000024 00000-0 26038-4 0 00845
2 20439 98.5309 262.5866 0010980 177.2149 182.9099 14.30011612387665
RS-16
1 24744U 97010A 97178.74833781 .00001980 00000-0 67542-4 0 538
2 24744 97.2760 83.6145 0009020 60.9177 299.2965 15.31483757 17703
```

```
DO-17
1 20440U 90005E 97178.24371726 -.00000015 00000-0 10746-4 0 774
2 20440 98.5389 263.5111 0011545 174.1814 185.9514 14.30153886387702
WO-18
1 20441U 90005F 97178.17185781 .00000050 00000-0 35920-4 0 00860
2 20441 98.5403 263.3420 0011939 175.7152 184.4136 14.30121974387695
LO-19
1 20442U 90005G 97177.71860149 -.00000036 00000-0 29577-5 0 00786
2 20442 98.5424 263.5679 0012489 176.0950 184.0345 14.30236008387657
FO-20
1 20480U 90013C 97177.93384434 -.00000015 00000-0 40825-4 0 09840
2 20480 99.0472 137.6898 0541069 355.4060 4.2186 12.83238641345952
AO-21
1 21087U 91006A 97178.75481847 .00000093 00000-0 82657-4 0 8285
2 21087 82.9403 43.7582 0033559 239.9438 119.8411 13.74583754321602
UO-22
1 21575U 91050B 97178.20234514 .00000030 00000-0 24154-4 0 7810
2 21575 98.3007 238.3943 0006931 220.1448 139.9226 14.37074891311923
KO-23
1 22077U 92052B 97178.08533076 -.00000037 00000-0 10000-3 0 06767
2 22077 66.0767 124.5106 0009261 209.6969 150.3522 12.86302790229021
KO-25
1 22828U 93061F 97178.15514551 .00000022 00000-0 26036-4 0 05474
2 22828 98.5404 252.4862 0009798 192.6410 167.4530 14.28182799163635
IO-26
1 22826U 93061D 97178.19330484 -.00000001 00000-0 16820-4 0 5644
2 22826 98.5425 252.4401 0008541 209.6217 150.4489 14.27839375195519
AO-27
1 22825U 93061C 97178.22563018 -.00000012 00000-0 12482-4 0 5673
2 22825 98.5450 252.2270 0007682 210.3340 149.7394 14.27729427195500
FO-29
1 24278U 96046B 97178.20093969 .00000003 00000-0 37679-4 0 886
2 24278 98.5387 218.0666 0351697 160.1400 201.3828 13.52632490 42473
Mir
1 16609U 86017A 97178.74942250 .00005597 00000-0 75567-4 0 4129
2 16609 51.6536 32.8112 0004809 184.3618 175.7255 15.59480403648671

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
July 1, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1860. MIR prediction site

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: Kees Leune <s722413@kub.nl>
Message-ID: <5p40ff$623$3@mailnews.kub.nl>
Source record: 18620

For those of you who are interested in listening to MIR communication, you can visit my MIR prediction page to estimate when the station will be in your range. Used frequencies are on the page as well.... for those of you who speak Russian, you might also want to monitor 143.625, that frequency is used to communicate with Moscow I think

The URL is

http://stuwww.kub.nl/~pe1rhp or
http://stuwww.kub.nl/people/kees/mir

Kees, PE1RHP

Kees Leune Tilburg University
Student of Information Management and Technology The Netherlands

EMail: C.J.Leune@KUB.NL HAM Callsign: PE1RHP
WWW: http://stuwww.kub.nl/people/kees/

1861. QUICK CASH

Newsgroup: rec.radio.amateur.space
Date: 1997-06-28 00:00:00 UTC
From: acidtest0@aol.com
Message-ID: <19970628223000.SAA01795@ladder01.news.aol.com>
Source record: 18621

Subject: ~~~~$$$ $$$ MAKE MONEY FAST !!!! $$$
From: ACIS TEST0
Date: Sat, 28 Jun 97 21:50:20 GMT

Subject:
~~~ $$ FAST CASH NOW!! $$ ~~~
Date:
Fri, 23 May 1997 19:00:00 -0700
From:
Gustavo <gaviota@homemail.com

Organization:
Cycor Communications Inc., Coast to Coast Internet Services

$$$ Mailbox Cash $$$

A little while back, I was browsing these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $5.00! So I thought, "Yeah, right, this must be a scam," but like most of us, but I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 5 names and address stated in the article. You then place your own name and address in the bottom of the list at #5, and post the article in at least 200 newsgroups. (There are thousands.) No catch, that was it.

You can make up to or over $50,000.00 in 4-6 weeks, maybe sooner! I SWEAR, I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're interested in making some big bucks, keep reading; if you're not, I apologize for wasting your time.

So after thinking it over, talking to a few people first, I figured what have I got to lose except for 5 stamps and $5, right? One person who very recently had tried it said it worked like a charm. He started getting money in the mail! He was shocked! He figured it would end soon, and didn't give it another thought. But then the money kept coming IN - tripling in size and multiplying by 10 - 20 times the amount that he got the first week! In his first week he had made a total of over $1,000!!! In the third week he had over $10,000 dollars, and it's still growing! This is his fourth week and he's made about $42,000 Total, and believe it or not the money is still coming in...

I know this has been checked out several times with the legal community and is deemed perfectly Legal, but being a very cautious person, I also wanted to check it out with the US Post Office. I called them (1-800-725-2161) and explained this process and asked if there were any
~~~

regulations that would be violated doing this. Without hesitation, the postal official also said it is legal. At that point, I felt comfortable going ahead and joining the process.

Let me tell you how this works and most importantly, WHY IT WORKS!...Also, make sure you print a copy of this article NOW, so you get the information from it, and begin making money. The process is very simple, and it consists of 3 ease steps:

STEP 1: Get 5 separates pieces of paper and write the following on each sheet of paper: "PLEASE PUT ME ON YOUR MAILING LIST. YOU ARE NUMBER #."

Get five $1 bills, and place ONE inside each piece of paper that you have just written on, and fold each piece of paper so the bill will not be seen in the envelope (otherwise, nosy people who like to steal envelopes with money in it will not get yours). Put one paper inside the envelope and seal it. Do the same for all 5. You should now have 5 envelopes sealed, each having a piece of paper AND the $1 bill inside. NOTE: Make sure those words that were stated above are written on each piece of paper. What you are doing is creating a service by this. This is PERFECTLY LEGAL. Now, mail the 5 envelopes with the paper and $1 in each to the following 5 addresses:

#1 T. Love
109 Wildwood Dr.
Sanford, Fl. 32773

#2 A. Lillian
449 Bch 68th St.
Arverne, NY. 11692

#3 D. Dixon
36 Ambrose St.
Charlottetown, PE C1A 3PC1
Canada

#4 G. Cisnero
VLN1151
P.O. Box 025685
Miami, Fl. 33102

#5. E. Perkin
2838 Tilghman St,
Allentown Pa. 18104

STEP 2: Now take the #1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you need is 200, but remember, the more you post, the more money you make!

Don't know HOW to post in the newsgroups? Well, do exactly the
following:

FOR NETSCAPE USERS,

1) Click on any newsgroup, like normal. Then click on "To News,
which
is in the top left corner of the newsgroup page. This will bring up a
message box.

2) Fill in the SUBJECT with a flashy title, like the one I used,
something to catch the eye!!!

3) Now go to the message part of the box and retype this letter
exactly
as it is here, with exception of your few changes. (Remember to add your
name to number 5 and move the rest up)

4) When you're done typing in the WHOLE letter, click on FILE
above
the
send button. Then, SAVE AS.. DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE
IT. (So you don't have to type this 200 times :-)

5) Now that you have saved the letter, go ahead and send your
first
copy! (Click the SEND button in the top left corner)

6) This is where you post all 200! OK, go to ANY newsgroup article
and
click the TO NEWS button again. Type in your flashy subject in the
SUBJECT BOX, then go to the message and place your cursor here. Now
click on ATTACHMENT, which is right below the SUBJECT BOX. Click on
attach file then find your letter wherever you saved it. Click once on
your file then click OPEN then click OK. If you did this right, you
should see your filename in the ATTACHMENT BOX and it will be
shaded.

NOW POST AWAY!!

IF YOU ARE USING INTERNET EXPLORER:

It's just as easy, holding down the left mouse button,
highlight this entire article, then press the CTRL key and C key at the
same time to copy this article. Then print the article for your records
to have the names of those you will be sending $1.00 to.

NEXT, Go to the newsgroups and press POST AN ARTICLE type in your
flashy subject and click the large window below. Press CTRL and V and
the article will appear in the message window. ** BE SURE TO MAKE YOUR
ADDRESS CHANGES TO THE 5 NAMES. ** Now re-highlight the article and
re-copy it re-copy it so you have the changes.... Then all you have to
do for each newsgroup is CTRL and V and press POST. It's that easy!!

THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!

** REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200 **

This is WHY this works!

Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #5 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #4 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #3 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #2 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #1 and they each only receive 5 replies that just made me $3,125.00!!! With an original investment of only $5.00!

AMAZING! And, as I said 5 responses is actually VERY LOW! Average is probable 20 to 30! So let's put those figures at just 15 responses per person. Here is what you will make:

at #5 $15.00

at #4 $225.00

at #3 $3,375.00

at #2 $50,625.00

at #1 $759,375.00

When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $5.00 to names on the list, putting your name at number 5 again. Then start posting again. The thing to remember is, do you realize that thousands of people all over the world are joining the Internet and reading these articles every day, JUST LIKE YOU are now!! So can you afford $5.00 and see if it really works?? I think so - People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and knew honest people who are joining the Internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual Internet. Remember, play FAIRLY and HONESTLY and this will work. You just have to be honest. Make sure you print this article out RIGHT NOW, also. Try to keep a list of everyone that sends you money and always keep an eye on the newsgroups to make sure everyone are playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to

Makes the money!!

GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. ** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 5 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future dollars.

Please remember to declare your extra income. Thanks once again
:

1862. Re: !!!Talk to Other Hams via The Web!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: "Albert Alvareztorres, Jr." <aa1do@qsl.net>
Message-ID: <01bc8438$f9a7f3e0$67e0accf@laptop>
Source record: 18475
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

This sounds great! My only questions are; what did I go through all the
trouble of getting a Ham license for, and what should I do with all my
radios and antennas?

Al/AA1DO

Jamie R. Dean <ke4htm@wp.cc.nc.us> wrote in article
<5p29bi$ckl@snews1.zippo.com>...
> Talk with other Amateur Radio Operators just like yourself via the World
> Wide Web.
>
> There are no fees and no extra programs to install. You can chat with
Hams
> from around the world.
>
>
> Come By The Western NC APRS & Amateur Radio Home Page to join the fun at
> http://www.bluenet.net/ke4htm
>
> Note: The Chat Service Works Best With Internet Explorer 3.0 +
>
>
>
>

1863. Tracking the Birds

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: John Trolinger <jdt@nospam.comcat.com>
Message-ID: <33B60454.5F156C02@nospam.comcat.com>
Source record: 18476

Found this site recently and if you can run Java it
will make life easier for tracking.

http://liftoff.msfc.nasa.gov/RealTime/JTrack/Amateur.html

--
John Trolinger N3ZKK

remove 'spam' from my e-mail for direct replies

Spanmers may send replies to jdt@dont.spame.me.com
nospm@spm.dvla.com
--

1864. Re: !!!Talk to Other Hams via The Web!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: William Lee <willee@inwave.com>
Message-ID: <01bc8483$0b3d9a20$770abece@william>
Source record: 18477
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Albert Alvareztorres, Jr. <aa1do@qsl.net> wrote in article
<01bc8438$f9a7f3e0$67e0accf@laptop>...

> This sounds great! My only questions are; what did I go through all the
> trouble of getting a Ham license for, and what should I do with all my
> radios and antennas?
>
> Al/AA1DO
>
>
You dont need them anymore so send them to me.....
William Lee

1865. !!! SAMPLE A REAL PSYCHIC / TRY IT FREE !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: susan11@ultinet.net
Message-ID: <33b673be.0@nntp1.nac.net>
Source record: 18478

How do you know if you've found a real psychic?
Now you can see for yourself. Listen to our psychics
first, then decide if they know your future and fate.
Try it free on 1-800-677-8061. Adults over 18 only.

Dial now 1-800-677-8061

1866. Re: MCW for OSCAR?

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b6b6d1.148848942@news.atl.bellsouth.net>
Source record: 18479
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew

On 27 Jun 1997 03:53:20 GMT, tvr@alive.com@alive.com> (Tovar) wrote:
>This is a quibble, Gary, mostly to clarify my understanding. It
>doesn't seem like MCW is inherently evil, as that represents a
>variety of emission types. Given a sufficiently pure sine wave as
>modulation, isn't emission type J2A (SSB) almost indistinguishable
>from CW? Even A2A (AM) ought not take more bandwidth than twice the
>frequency of that sine wave.

Sure, a keyed audio signal into a SSB rig should be indistinguishable
from ordinary CW. We do FSK that way by putting an AFSK signal
into the microphone jack. We couldn't call the emission MCW then,
though. It would just be ordinary CW generated a different way.

But if you did that with an AM or FM transmitter, not only would you
use a lot of bandwidth (not serious in itself) but the continous carrier
would be using excessive transponder downlink power. That's the
real issue.

>The problem comes with what is probably being suggested ['haven't
>seen the relevant QST yet], that is, MCW using emission types F2A
>or G2A (frequency or phase modulation) which uses completely
>unacceptable bandwidth for satellite transponders [as opposed to
>repeaters, such as on MIR, AO-27 or AO-21 (currently SK)]. The
>best you *might* be able to do is to make a fake microphone out of
>a suitable value of resistor and a telegraphic key. If you've a
>remembered to turn off PL (*important*), i think you'll be sending
>an FM carrier with very little modulation which might be something
>like CW that sounds bad and drifts horribly, and probably should
>only be tried at a time when almost no one else is on, to find out
>that one *could* use a given satellite if one obtained the proper
>equipment.
>
>In short, don't use FM with a non-FM satellite!!!
>
>Now, can anyone suggest a homebrew 2M transmitter (CW or SSB) so
>those of us who don't have $300-$500 (or more) and/or an HF rig
>lying around can experiment with such things without potentially
>causing serious interference?

Your suggestion of *keying* an FM transmitter is a quick, easy, and
cheap way to get going. Any old UHF FM transmitter will do for mode
B birds, or a VHF-Hi version will do for mode A. I like the GE Exec II,
but a Motorola or even an old ham rig will work. Don't use PTT for keying.
That's usually ugly and slow. Key a low level stage after the oscillator.

This works dandy, and is easy to do. Surplus commercial FM rigs
can be bought for $50 or less and run 80 to 110 watts. Makes a nice
signal on the bird. (Disable the modulator.)

You can convert an Exec II to VXO control by simply inserting a 0 to 10 volt
tuning voltage via a pot into the temperature compensation pin of the channel
element. this can give you about +/- 20 kHz tuning on 70 cm, somewhat less
on 2m. This also works on receive for doppler tracking if you're using the radio
as a FM rig for a digital microsat. These commerical rigs are pretty easy to
get to work properly at 9600 baud too.

The cheapest route to SSB that I know is to use an old SSB CB with a
transverter. Almost all of them can be easily modified to allow the clarifier
to swing transmit as well as receive, so you won't have holes between
the channels where you can't work. You can convert the CB to 10m if
you like, but it's usually easier to just change the crystal in the transverter
so it'll expect a 27 MHz IF. Fleamarket SSB CBs go for between $20 and
$50. A good transverter is going to cost $150 or so at a hamfest. So you're
looking at about $200 if you go that route. You might find a used IC-211 for
that much, so that's another alternative.

There's also Rick Campbell's T2. That's a very simple SSB phasing exciter
(kit available from Kanga). It can be built to work on 2m or 70 cm (actually
anywhere between 500 kHz and 500 MHz). Output is only 10 mW though,
so you'll need some serious amplifiers behind it. You can get to 3 watts with
a Mitsubishi brick (RF Parts) and follow that with an amplifer designed to be
driven by a HT (Mirage, etc). That'll probably drive the cost above the options
listed above. There's a companion R2 receiver you might want to check out,
though. It works pretty good, but you'll want a preamp in front of it. You have
to supply the LO for either of these rigs. That can be just a VXO, or if you
want to get fancy, a DDS such as the one featured recently in QST.

Antennas can be cheap too. A length of wooden 2x2 and some aluminum
clothesline wire for elements will give you a dandy CP yagi for under $10.

There's lots of ways to put a signal to the birds. You don't have to spend
thousands to get setup to do it.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1867. -Teenage School Girls * young1.jpg

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: as
Message-ID: <5p6r3h$qa3$484@news.internetmci.com>
Source record: 18480

Are you ready to look at pictures of Teens fucking and sucking?

Then cum visit:

http://www.sexy-girls.com

All models represented on Sexy-Girls are 18 years of Age or Older.

1868. Re: How to use Amsat P3D frequency chart

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b5f41f.98998757@news.atl.bellsouth.net>
Source record: 18481

On 27 Jun 1997 22:21:51 -0500, steves@MCS.COM (Steve Stringfellow) wrote:
>I am trying to figure out what the bands are going to be
>for the Amsat P3D bird. I see a list of transmit and
>receive frequencies but I am unsure what the combinations
>will be. Could some kind soul please enlighten me?

The matrix can be configured on the fly. Any uplink can be
cross connected to any downlink. And more than one pair
can be active at a given time. It seems certain that mode
U/V will be heavily used at first, but other modes will likely
gain more usage as time goes on. Mode L/S is likely to see
a large usage because it should require very modest antennas
and has lots of available bandwidth. That means apartment
dwellers and portable users can play.

>Also, with the power levels of P3D could a dish work well
>on 430 Mhz. ?

Dishes always work well, provided they are big enough.
You're going to need about 100 watts ERP on 70 cm.
Run the numbers for your transmit power and your
dish gain and see how they fall out.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1869. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc846a$974ae900$f5915cc1@dummy.forthnet.gr>
Source record: 18482

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS. OPEN FROM 14/April/97
TO 31/October/97. FOR INFORMATIONS
CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

1870. ! TROUBLE WITH LOVE? TRY-A-PSYCHIC-FOR-FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: susan11@ultinet.net
Message-ID: <33b5b707.0@nntp1.nac.net>
Source record: 18622

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

1871. Re: 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b5b51a.82864262@news.atl.bellsouth.net>
Source record: 18623

On 26 Jun 97 17:41:43 GMT, timw@juno.COM wrote:
>This morning (6/26), Art Bell referred to this frequency on his
>night-time talk radio show Coast to Coast A.M. He mentioned that this
>was a frequency Mir was using. I tuned to that during the latest pass
>here in Vancouver, WA, and heard a flow of Russian. Two questions:
>1. What is this frequency being used for? Is it similar to the types of
>communications that the shuttle uses Ku-band and S-band?

This is the Russian air to ground frequency. They've used it since the
beginning of their manned program. They use ships at sea as relays
since they don't have anything equivalent to our TDRSS system for
relaying signals when their craft are over the horizon from their
territory.

>2. Although this may sound like a no-brainer, is SAFEX and the packet
>robot still operational? I heard someone say that the amateur equipment
>was in the depressurized module that was sealed off. Is this true? If
>it is, and the equipment survives, it will make one great ad for
>Kenwood...

Nope, the amateur equipment was not in Spectr. It is in the core module.
The power shortfall caused by the accident will limit amateur activities
on MIR though.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1872. n3tuk web page updaated

Newsgroup: rec.radio.amateur.space
Date: 1997-06-29 00:00:00 UTC
From: n3tuk@tidalwave.net
Message-ID: <33b5c15e.4474994@newsdesk.tidalwave.net>
Source record: 18624

visit http://www.geocities.com/SiliconValley/Heights/5575/softw.html

1873. Send Thousands of Posts to Newsgroups

Newsgroup: rec.radio.amateur.space
Date: 1997-06-30 00:00:00 UTC
From: ajfa
Message-ID: <5p7fng$qk4$2727@news.internetmci.com>
Source record: 18483

Mailloop is an Industrial Bulk Email and Newsgroup Broadcasting Program.

Visit http://205.199.4.219 for More info.

Here is just some of the many hunreds of Mailloops Features:

Send Bulk Email to Thousands of People an hour-

Send Bulk Broadcasts to the Newsgroups with an Anti-Cancel Bot Feature-

Send Binaries to the Newsgroups in Bulk-

Process your incoming Mailbox -

Build E-Mail and Newsgroup Lists From:

Extracting from the Newsgroups-

Extracting from a Whois-

By processing your incoming Mailbox-

By using the finger Client (You can finger a domain and extract all of the email addresses)-

Extracting From a Import File-

Extract from a Web Page-

Extract from an FTP Site-

And Many Many More.

If you interested in these and many other features that Mailloop has to offer, or to obtain a copy,

Visit Our Web Site:

http://205.199.4.219

1874. Re: 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-06-30 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <33B885D5.7411@erols.com>
Source record: 18484

Gary Coffman wrote:
>
> On 26 Jun 97 17:41:43 GMT, timw@juno.COM wrote:
> >This morning (6/26), Art Bell referred to this frequency on his
> >night-time talk radio show Coast to Coast A.M. He mentioned that this
> >was a frequency Mir was using. I tuned to that during the latest pass
> >here in Vancouver, WA, and heard a flow of Russian. Two questions:
> >1. What is this frequency being used for? Is it similar to the types of
> >communications that the shuttle uses Ku-band and S-band?
>
> This is the Russian air to ground frequency. They've used it since the
> beginning of their manned program. They use ships at sea as relays
> since they don't have anything equivalent to our TDRSS system for
> relaying signals when their craft are over the horizon from their
> territory.
>
> >2. Although this may sound like a no-brainer, is SAFEX and the packet
> >robot still operational? I heard someone say that the amateur equipment
> >was in the depressurized module that was sealed off. Is this true? If
> >it is, and the equipment survives, it will make one great ad for
> >Kenwood...
>
> Nope, the amateur equipment was not in Spectr. It is in the core module.
> The power shortfall caused by the accident will limit amateur activities
> on MIR though.
>
> Gary
> Gary Coffman KE4ZV | You Make It | Email:
> Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> 534 Shannon Way | Guaranteed | or
> Lawrenceville, GA 30244 | | ke4zv@radio.org

Gary,

Mir does not use ships to relay communications anymore, they haven't since about 1990 I think. They do have a TDRS type satellite constellation in orbit called Altair, but currently the transmitter on board Mir is not working. They hope to put a new transmitter in when the next Progress supply ship reaches Mir on July 7th.

Also, currently NASA's Wallops, Dryden, and White Sands facilities are also providing VHF voice relay from Mir to Moscow.

--
Keith Stein

Woodbridge, VA

Associate Technical Editor/Launchspace magazine
http://www.launchspace.com

Freelance Writer/Community, Air & Space Report (CASR)
http://www.newspace.com/casr

Editoral Staff/Satellite Times magazine
http://www.grove.net/hmpgst.html

1875. Chair-Pak !! a backpack with a built in Chair !!

Newsgroup: rec.radio.amateur.space
Date: 1997-06-30 00:00:00 UTC
From: chairpak@chairpak.com
Message-ID: <33b77be2.0@news.net999.com>
Source record: 18485

Welcome,

Chair-Pak is a great idea!!!

It's a Backpack AND a built-in Chair!!!

See it at http://www.chairpak.com

3 Sizes Full Pak, Day Pak, and a Child Pak!

How many times have you gone somewhere and needed a chair ?
beach waiting in line with friends
hiking around the campfire conventions
air shows at the park in line at the DMV
outdoor concerts hiking trails car shows
camping on campus reading at the poo l /beach
fishing trekking rest areas
poetry readings jams outdoor games
outdoor sport events story telling to children picnics
theme parks national parks hunting
backyard outdoor weddings and anywhere you want to SIT!!!

Carry your stuff and your chair where ever you go!!!

Where do you want to sit today?

Chair-Pak is made of the strong durable Dupont Cordura and the frame is of strong and light T6 aluminum.

If you would like to order, or get more information about Chair-Pak, please visit our web site

http://www.chairpak.com

1876. Help with NASA feed? (Minumum Invest.)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5p9je3$1vf6$1@sol.caps.maine.edu>
Source record: 18486

Greetings all..
Just wondering waht the minimum investment would be to get the
NASA feeds from the satellites?

Dish size / C/KU band ? receiver?

Any information would be great..
Not looking for the best, just adequate.

Jason N1RWY
baack@maine.edu

1877. ! PROVEN PSYCHICS!! TRY-IT-FREE!! 1-800-677-8063

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: michele@precipice.com
Message-ID: <5pabne$ard@news1-alterdial.uu.net>
Source record: 18487

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

1878. !!!PSYCHIC PREDICTIONS / TRY IT FOR FREE !!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: ps002@puresource.com
Message-ID: <5paq1i$l76@news1-alterdial.uu.net>
Source record: 18488

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1879. !!!PROVEN PSYCHICS / FREE PREDICTIONS!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: ps002@puresource.com
Message-ID: <5pb12j$p56@news1-alterdial.uu.net>
Source record: 18489

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

1880. Re: 143.625 Frequency for Mir??

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: "Robert B. Zimmerman" <bobz@umich.edu>
Message-ID: <33B915F6.43E0@umich.edu>
Source record: 18490

The packet system was working on Monday 6/30/97. I saw WF1F and
other calls connect.
--

Bob Zimmerman - KC8CLB Diversity: The longer you verk here,
E-Mail: bobz@umich.edu deverse it gets.

1881. ANS-180 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8649$5bc36d40$65280ace@home.the-bridge.net>
Source record: 18491

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-180.01
PROGRESS COLLIDES WITH MIR

HR AMSAT NEWS SERVICE BULLETIN 180.01 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.01

On Wednesday June 25 at 9:18 UTC a Russian Progress cargo ship collided with the Spektr module of the MIR space station causing substantial damage to the module. All personnel on board, including US astronaut Mike Foale, KB5UAC, and two cosmonauts were unhurt in the incident.

The Progress cargo ship, filled with garbage and undocked the day before, was performing a manual docking test with the Kvant module, when it veered out of control and struck the solar array and thermal control assembly on the Spektr module. During the collision, the aluminum hull of the Spektr module was punctured, resulting in an air leak. In a manner similar to damaged ships at sea, the Spektr module was quickly sealed off from the rest of MIR to maintain a livable atmosphere for the astronaut and cosmonauts. The Spektr module is now close to a space vacuum environment. It is unclear where the leak occurred or the size or shape of the gash in the module.

Nearly all astronaut Mike Foale's personal effects as well as his sleeping quarters were located in Spektr. As a result, he has moved into a new sleeping area and additional personal effects will be included on the next resupply ship. Many of the US experiments were also housed in the Spektr and are now lost. However, two major US experiments were located in the Piroda module and are in fine shape.

The Solar Array damage initially resulted in a 50% reduction in electrical power. Over the past few days, the crew has worked the power issue and have now regained about 70% of the pre-collision power capability. Flight controllers are developing procedures to recover full use of the solar arrays on Spektr. The options include a possible procedure to hook cables from the Spektr to the MIR's base block to route power from the disabled module to operational batteries. The two Russian cosmonauts, Commander Vasily Tsibliev, and Flight Engineer Alexander Lazutkin would perform a space walk to accomplish this. It is expected that this space walk, or

EVA, would not occur earlier than mid-July, following the arrival of hardware and new cables on the next Progress ship. The launch of the next Progress resupply ship is planned for early July.

Despite the recent problem on MIR, the crew is in good spirits. They will be working hard in the weeks ahead to bring MIR back to it's pre-accident state. Despite the problem, Mike Foale has been active on amateur radio during the past few days. The radio has served as a valuable link between Mike and his family and friends during this crisis.

[ANS thanks Frank H. Bauer, KA3HDO, AMSAT-NA, VP,
Manned Space Programs for this information.]

/EX

SB SAT @ AMSAT $ANS-180.02
HAM RADIO DURING MIR CRISIS

HR AMSAT NEWS SERVICE BULLETIN 180.02 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.02

For US ham-astronaut Mike Foale, KB5UAC, aboard the crippled MIR space station, ham radio is providing a valuable supplement to conventional Russian and NASA communication systems. Foale has already used the ham gear aboard MIR to talk to NASA managers and fellow astronauts and exchange health and welfare news as the crew struggles to stabilize the ship after Wednesday's collision with an unmanned cargo rocket.

Astronaut friends of Foale's gathered late Wednesday morning--just hours after the mishap--at W5RRR at Johnson Space Center in Houston for the scheduled MIR pass and QSO. "When we got there, it was a packed room. Ninety percent of the room was licensed astronauts," said Matt Bordelon, KC5BTL, the SAREX principal investigator.

As Bordelon related: "A hush fell over the room as MIR started its trek above the horizon. We didn't know if they would be on--power was down to 50% available and all nonessential equipment was turned off. Before we even had a chance to call up, Mike called down for us!"

Following a collective sigh of relief, Bordelon said astronaut Dave Leestma, N5WQC, took the mike and started talking. "Mike was in Good spirits. "Several others in the room also chatted with Foale during the 10-minute contact.

Foale asked for some personal items to be sent up when the next Progress supply ship flies. And he had good news. Two of his major experiments are okay. They are in the Priroda module where he and the cosmonauts are living until repairs can be made to the damaged Spektr compartment. At that time the MIR station should be able to resume normal ham radio contacts. "Amateur Radio has a very low priority when survival is the key, and power is critical on MIR," Neal said in assessing the

situation. A supply ship is being readied and could carry a replacement solar panel and other supplies to MIR within two or three weeks. NASA Shuttle-MIR Project Manager Frank Culbertson said repairs likely would require a space walk or two by the MIR crew.

"It was a very successful pass," Bordelon said of Wednesday's contact with Foale. "All were very thankful for the ham radio and the excellent link it provided." Bordelon said he does not expect Foale to have the ham radio on at all times during the current crisis, "but I think he'll do more passes with us," he added.

Bordelon said that astronaut Ken Bowersox was so impressed, "he wants to get his license next week." As SAREX Working Group Chairman Roy Neal, K6DUE, put it: "It's proving that ham radio, as always, is an invaluable aid to health and welfare during critical times." As repairs progress, Neal said, "it's safe to say that disaster has been avoided. Repairs probably can and will be made, and ham radio will continue providing a personal link to help Mike Foale stay in touch with his home base."

Ham-astronaut and former MIR crew member Jerry Linenger, KC5HBR, told reporters Wednesday that the MIR crew had to power down everything everything possible, including some life-support systems, in the wake of the collision. The crash initially resulted in a loss of as much as 50% of the MIR's electrical power. By Thursday, the MIR had 70% of its power back. The cargo spacecraft sheared off half of a Spektr solar panel and damaged the module itself. When the crew sealed off the compartment, they had to cut cables from three other panels.

Speaking at a NASA press briefing, Linenger characterized the MIR as "a darkened ship" and said the crew would operate "in a slowdown mode" until the effects of the mishap could be corrected. The accident cut off Foale from his sleeping quarters and personal items in the Spektr module, which also contains most of the US experiments aboard MIR. Foale has been aboard MIR since mid-May, when he replaced Linenger.

Linenger told the press conference Wednesday that it was "too early to comment" on what the latest problem aboard MIR might mean for the future of the 11-year-old space station, which already has outlasted its anticipated life span by six years. Linenger said fire and decompression are the two most dangerous things aboard a spacecraft "and we've had both of those." During Linenger's four months aboard MIR early this year, the crew experienced a fire, a near collision with another cargo rocket, and coolant system leaks.

For news updates, see
http://www.hq.nasa.gov/office/pao/NewsRoom/today.html

[ANS thanks Roy Neal, K6DUE, SAREX Working Group Chairman , for this news report.]

/EX

SB SAT @ AMSAT $ANS-180.03
OSCAR-11 REPORT 24 June 1997

HR AMSAT NEWS SERVICE BULLETIN 180.03 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.03

During the period 15-May to 24-June good signals have once again been received from the 145.826 MHz. beacon.

Telemetry nominal. The battery voltage generally around 13.9 volts, but 14.4 has been recorded on one occasion, and several over 14.0 have been noted. The internal temperatures have continued to fall, due to solar eclipses. The battery temperature is now 0.2 degrees C, i.e. about 22 degrees below the full sunlight condition.

Three WOD surveys have been transmitted during the period. Channels 0, 10 20, 30 (-Y, +Y, -X, +X, solar array currents) dated 01-May continued. This was followed by channels 17, 18, 19, 20 (+X, +Y, +Z facit temperatures, & -X array current) dated 25 May. Currently channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage) dated 07-June is being transmitted.

Three AMSAT bulletins by Richard G3RWL have been uploaded. Topics have included the AMSAT-UK colloquium, OSCAR-11 status, LUSAT and FO-20 information. Bulletins always include current Keplerian elements for OSCAR-11, and often for satellites featured in the bulletin.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

The mode-S beacon is ON, but telemetry indicates that it has partially failed, and delivering half power. It has been heard, but it is a weak signal, and a good receiving setup is needed. Any reports of reception on 2401 MHz. would be most welcome. Please e-mail g3cwv@amsat.org.

The 435.035 MHz. beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, i.e. within range of Guildford, UK. Likely times are between 13:00 and 18:00 UTC, Fridays or at weekends. However it has been heard at other times, and recently was heard unexpectedly during an early morning pass on Wednesday 21 May at 05:30 UTC. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit my web site. It contains some
software for capturing data, and decoding ASCII telemetry and WOD.
There is an archive of raw data (mainly WOD) for analysis, which is
continually being expanded, as new data is captured.

http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this report.]

/EX

SB SAT @ AMSAT $ANS-180.04
COSMONAUT GETS U.S. LICENSE

HR AMSAT NEWS SERVICE BULLETIN 180.04 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.04

AMSAT-NA would like to welcome cosmonaut Vladimir Titov, KD5AOS to the ranks
of U.S. hams. Bruce Paige, KK5DO , reports that Vladimir took his test at
the Clear Lake amateur radio club test session the second Saturday of may.
Vladimir is scheduled to go on the shuttle mission in September that docks
with the MIR. KD5AOS told Bruce Paige he was taking his ham test because he
would not be able to use the Russian callsign from the shuttle. This way,
Vladimir can use either callsign depending on which heavenly body he is
aboard.

Vladimir Titov, KD5AOS, has also spent a lot of time on the MIR in the past
having been one of it's residents. Bruce Paige, KK5DO was one of the VE's
that signed his CSCE and 610 and had a chance to talk with Vladimir for a
few minutes at the session.

[ANS thanks Bruce Paige, KK5DO, AMSAT Area Coordinator, for this story.]

/EX

SB SAT @ AMSAT $ANS-180.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 180.05 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.05

MIR:
Mike Foale, KB5UAC, has been active on amateur radio during the past few
days. The radio has served as a valuable link between Mike and his family
and friends during this crisis . Also activity from the MIR packet station
has been reported. Frequencies with activity have been 145.985 MHz and
the 145.200/800 MHz split.
.

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,

Subaudible tone 141.3 Hz)
Not operational at this time..

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.
RS3A needs some SWL reports of RS-10.
What time you heard RS-10, and also the date.
Send info via packet to Andy, .RS3A.
Packet: RK3KPK@RA3KP.MSK.RUS.EU

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 MHz CW/SSB)
Signals on RS-12 in North America during May and June (almost
exclusively daylight passes) are weakened by increased ionospheric
activity which is keeping 15m active during the daylight hours.
This makes it especially important for the 'old timers' to warn the
newcomers on RS-12 to set their uplink frequency and leave it alone to
prevent sweeping across the 15m band and QRM'ing the terrestrial QSOs
in progress
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
WT0N reports that downlink signals are still weak from RS-15,
but the bird is still workable.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active. Also,
the 29.408 MHz beacon is reported as being heard.
No transponder activity yet.
70cm beacon =RS16 ZEAA ZEJA ZEAA(AA is sent as one
characrer);P163,o0,n0,m0,l0,k7,j5,i7,h49,g0,f159,e8,d6,c8,b11,a7.

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
[ANS thanks Bernie Hall, WY4D, for this report..]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operating normally. Strong downlink signal. Very busy

during passes over North America. Please remember to adjust the
higher frequency for doppler when the bird is in analog, JA, mode.
This means adjust the 70 cm frequency, the downlink, for doppler
shift. You do not have to adjust the 2 meter frequency, the uplink,
for doppler.

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.
AO-27 (1-Jun-1997- 10:58 UTC Orbit-19182)
The satellite is working normally over North America.
and Europe.
Current AO-27 schedule information can be found at
www.umbra.com

Tepr 4 = 32 counts 16 Minutes
Tepr 5 = 66 counts 18 Minutes
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Please remember to adjust the higher frequency for doppler when the bird
is in analog, JA, mode. This means adjust the 70 cm frequency, the
downlink, for doppler shift. You do not have to adjust the 2 meter
frequency, the uplink, for doppler.

The latest FO-29 Schedule can be found at.
http://www.kt.rim.or.jp/~jr1nvu/eindex.html
June
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-180.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 180.06 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 29, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-180.06

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.
Many QSO's heard as when the bird was in view from
north America.

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
The beacon on 2401.500 heard over Spain on 23rd of June and also on
24th, but with weak signals.
[ANS thanks Saludos de Antonio, EA1IW/EA4, for this report.]

During the period 15-May to 24-June good signals have once again been
received from the 145.826 MHz. beacon. Telemetry nominal. The battery
voltage generally around 13.9 volts, but 14.4 has been recorded on one
occasion, and several over 14.0 have been noted. The internal temperatures
have continued to fall, due to solar eclipses. The battery temperature
is now 0.2 degrees C, i.e. about 22 degrees below the full sunlight
condition. The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operational.
Telemetry data received from AO-16
uptime is 1007/06:01:17. Time is Sat Jun 21 11:26:27 1997
uptime is 1013/17:44:51. Time is Fri Jun 27 23:10:01 1997
RC PSK TX Out 0.263 W (Nocturnal orbit)
RC PSK TX Out 0.472 W (Light orbit)
Total Array C= 0.000 Bat Ch Cur=-0.343 Ifb= 0.168 I+10V= 0.198
TX:0109 BCR:1E PWRC:59E BT:3C WC:25 EDAC:1C

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
The beacon on 2401.220 could not be heard over Spain.
[ANS thanks Saludos de Antonio, EA1IW/EA4, for this report.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
Telemetry data received from LO-19:
uptime is 738/09:21:49. Time is Fri Jun 27 23:26:59 1997
RC PSK TX Out= 0.520 W
Total Array C= 0.008 Bat Ch Cur=-0.245 Ifb= 0.119 I+10V= 0.133
TX:016 BCR:1E PWRC:36E BT:3C WC: 0
NOTE: Add 6.83 minutes to the clock of the satellite.
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
A problem with UO-22 seems to be related to the software changes that
were made last week prior to the last flight software reload. During
the last pass over Surrey on Saturday morning, June 7th, Chris Jackson
closed the spacecraft store and forward communications system for general
use to allow him to diagnose the problem..
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
IO-26 controllers report that the spacecraft is now in IHT mode. The new
ROBOT software is under currently undergoing tests. The beacon reports
that the digipeater is OFF and that the ROBOT is undergoing tests.
Controllers ask that groundstations please do not transmit on any of
the satellite's uplink frequencies for the time being.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

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BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1882. * Amateur CW/Voice Satellite Frequencies for July 1, 1997 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0107971305310001@cqtlm-pm3-093.dowco.com>
Source record: 18492
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

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SB freqs @ amsat $FREQ07.01
Amateur CW/Voice Satellite Frequencies for July 1, 1997.

BID: $FREQ0701
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
use the satellite if the beacon frequency wavers, or if downlink signals
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chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-10's beacon, ROBOT and transponder remain silent while designer and builder Andy Papkov carries out experimental work with the satellite from the RS3A command station. Leonid Labutin UA3CR reports that it is hoped that RS-10 will be active again soon, long before it's tenth birthday.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Reports out of Russia speculate that the transponder may be turned on for amateur use sometime in June. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

1997 June 6(Fri) 08:25z JA
13(Fri) 00:39z JD 1200bps PSK MailBox
20(Fri) 09:41z JD 9600bps FSK MailBox
27(Fri) 00:11z JA
July 4(Fri) 09:13z JD Digi-talker
8(Fri) 09:06z JA

* Mir Simplex has been suspened indefinitely due to the well publicized accident which has caused a major power loss onboard the space station.

* SAREX Mission STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

CREW MEMBERS with Amateur Radio call signs:
James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

The following STS-94 SAREX summary information was obtained from several sources at NASA, the ARRL, and AMSAT including portions of AMSAT News Service bulletin numbers $ANS-166.02 and $ANS-159.02.

During SAREX missions, the astronauts will typically make scheduled radio contacts with schools, random radio contacts with the Amateur Radio community and personal contacts with their families.

Seventeen schools, including one in the People's Republic of China, are scheduled to talk with the astronauts. During the earlier mission, Columbia's premature return to Earth on April 8 posponed all scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for the July mission, which will again carry the microgravity science lab. Three hams are among the STS-94 crew members.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in science, math, technology and the U.S. space program.

STS-94 is a long duration shuttle flight where crew members will work in shifts around the clock. Shift team members are as follows:

RED TEAM
Commander (CDR): Jim Halsell, KC5RNI
Pilot (PLT): Susan Still
Mission Specialist (MS3): Donald Thomas, KC5FVF
Payload Specialist (PS2): Greg Linteris

BLUE TEAM
Mission Specialist (MS1): Janice Voss, KC5BTK
Mission Specialist (MS2): Michael Gernhardt
Payload Specialist (PS1): Roger Crouch

The SAREX Working Group has designated the following frequencies
during the STS-94 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz FM
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz***
FM Packet Uplink: 144.49 MHz***

***If packet is on the air.

CONFIGURATION: Officially, the SAREX hardware is flying in
Configuration B. SAREX Configuration B is voice only, battery
operation. The SAREX equipment on-board STS-94 includes the Motorola
2-meter FM hand-held transceiver, 15 spare batteries, the window
antenna, SAREX headset assembly, personal recorder and the required
interconnecting cables. Since STS-94 is an extended duration flight with
power hungry primary experiments, the power allocated for SAREX is zero
watts. The SAREX team is also flying the Heathkit Packet Radio TNC for
potential use later in the flight. In the event that power conservation
measures are successful, the mission control team will advise SAREX and
the astronauts to initiate use of the Packet Radio system which also
includes one of the shuttle laptop computers or PGSCs.

Please stay tuned to these SAREX Working Group bulletins and
sarex@amsat.org during the mission for late breaking news regarding
packet operation.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1 (If turned on during the flight)

Hams should avoid transmitting on the shuttle's downlink frequencies.
The crew will not favor any uplink frequency, so your ability to
communicate with SAREX will be the "luck of the draw." Transmit only
when the shuttle is within range of your station, and when the shuttle
station is on-the-air.

The crew will use separate receive and transmit frequencies. PLEASE do
not transmit on the shuttle's DOWNLINK frequency. The DOWNLINK is your
receiving frequency. The UPLINK is your transmitting frequency.

QSL VIA: Send reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-94, date and time in UTC, frequency and mode (FM; voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

STS-94 will be the 23rd flight of Columbia and the 85th mission flown since the start of the Space Shuttle program in April 1981.

[Radio amateurs are encouraged to relay these SAREX bulletins to their local packet BBS as long as the Bulletin IDentification (BID) is preserved. The BID is the character string beginning with the dollar sign ($), for example as in "SB SAREX @ AMSAT $STS-94.001" without the quotation marks.]

This FAQ is being updated and re-released on a weekly basis on or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

Scott Leaf VE7VDX - VHF DX Grid Square CN89
ve7vdx@dowco.com
Coquitlam, British Columbia, Canada.

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

1883. Kepler/Prop

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: Mario Melendez <hitman@expreso.co.cr>
Message-ID: <01bc868d$c3c1cce0$LocalHost@default>
Source record: 18493
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

For a couple of months I've been receiving the w1aw bulletins: propagation,
dx and keplerian elements. I have a couple of questions:

1. What are all those planetary indexes/sunspot numbers the propagation
report talks about? What do they mean and how are they obtained?

2. What exactly is the keplerian elements bulletin used for? How do you
interpret it? What is a keplerian element?

--
//\/\ario //\/\elendez- TI2DLL
viper@expreso.co.cr
www.expreso.co.cr/gate/

1884. Updated Web Page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33B99B25.8C9@primenet.com>
Source record: 18494

```
Updated Web Page
http://www.qsl.net/k7on
```

1885. ARLK051 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-01 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk051.1997@arrl.org>
Source record: 18495
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK051
ARLK051 Keplerian data

ZCZC SK51
QST de W1AW
Keplerian Bulletin 51 ARLK051
From ARRL Headquarters
Newington, CT July 1, 1997
To all radio amateurs

SB KEP ARL ARLK051
ARLK051 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97181.25487531 -.00000140 00000-0 10000-3 0 4896
2 14129 25.9968 139.7397 6063167 130.2416 300.9914 2.05880360 77656
RS-10/11
1 18129U 87054A 97182.16948258 .00000009 00000-0 -69660-5 0 03733
2 18129 82.9251 228.3942 0011199 175.8484 184.2753 13.72379594502151
UO-11
1 14781U 84021B 97181.99161564 .00000041 00000-0 14810-4 0 00076
2 14781 97.8364 162.6737 0011450 325.4194 34.6265 14.69562531713280
RS-12/13
1 21089U 91007A 97181.76253610 .00000029 00000-0 14950-4 0 00112
2 21089 82.9215 268.5725 0027736 260.1650 99.6374 13.74082823321023
UO-14
1 20437U 90005B 97182.16282112 -.00000001 00000-0 16166-4 0 02911
2 20437 98.5179 263.5299 0011063 162.6754 197.4812 14.29964311388219
RS-15
1 23439U 94085A 97182.35300573 -.00000039 00000-0 10000-3 0 2293
2 23439 64.8137 129.9326 0148716 129.9073 231.5032 11.27527785103535
AO-16
1 20439U 90005D 97182.17708075 .00000032 00000-0 29064-4 0 00861
2 20439 98.5325 266.4984 0011309 164.6086 195.5442 14.30012220388235
RS-16
1 24744U 97010A 97182.14591147 .00001804 00000-0 61738-4 0 00844
2 24744 97.2753 86.9466 0008982 48.1832 312.0176 15.31495924018224
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DO-17
1 20440U 90005E 97182.30153422 .00000024 00000-0 26044-4 0 785
2 20440 98.5375 267.4923 0011663 163.2343 196.9225 14.30154988388287
WO-18
1 20441U 90005F 97182.15980500 .00000020 00000-0 24429-4 0 00831
2 20441 98.5396 267.2528 0012005 163.9144 196.2427 14.30122432388261
LO-19
1 20442U 90005G 97182.19593729 .00000089 00000-0 51125-4 0 00792
2 20442 98.5425 267.9644 0012638 162.4504 197.7122 14.30237662388290
FO-20
1 20480U 90013C 97181.90991370 -.00000003 00000-0 68907-4 0 09832
2 20480 99.0473 140.9181 0540958 346.4115 12.2902 12.83238560346464
AO-21
1 21087U 91006A 97182.10317164 .00000094 00000-0 82657-4 0 8291
2 21087 82.9395 41.2775 0033564 230.5884 129.2299 13.74583787322063
UO-22
1 21575U 91050B 97182.24065068 .00000020 00000-0 20999-4 0 7828
2 21575 98.3004 242.2894 0007162 205.0539 155.0275 14.37075311312505
KO-23
1 22077U 92052B 97182.05057202 -.00000037 00000-0 10000-3 0 06761
2 22077 66.0760 116.2077 0009091 207.5722 152.4812 12.86302591229534
KO-25
1 22828U 93061F 97182.14850147 .00000038 00000-0 32425-4 0 05456
2 22828 98.5401 256.3912 0009672 180.8990 179.2171 14.28183551164207
IO-26
1 22826U 93061D 97182.18762013 -.00000006 00000-0 14804-4 0 05853
2 22826 98.5415 256.3439 0008578 197.7711 162.3177 14.27839756196080
AO-27
1 22825U 93061C 97182.15017051 .00000002 00000-0 18319-4 0 05887
2 22825 98.5441 256.0618 0007686 197.8333 162.2580 14.27730046196061
FO-29
1 24278U 96046B 97182.56526754 -.00000037 00000-0 -35978-5 0 894
2 24278 98.5390 221.8367 0351748 148.8459 213.4062 13.52631856 43066
MO-30
1 24305U 96052B 97181.92045513 .00000204 00000-0 20364-3 0 01234
2 24305 82.9351 344.4356 0029707 165.1224 195.0785 13.73094053040946
Mir
1 16609U 86017A 97182.46606938 .00003008 00000-0 43525-4 0 4273
2 16609 51.6549 14.1414 0004851 200.9108 159.1622 15.59515416649251

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
July 5, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1886. useful frqs

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: Contarini <glennie@mail.schools.usq.edu.au>
Message-ID: <33B99E08.561B@mail.schools.usq.edu.au>
Source record: 18496

Could someone help me! I am secondary high school teacher wanting to get students more involved with radio and science.

We own a scanner and were wondering if there is a satellite that transmits a strong tone that we could pick up and use its doppler shift to measure its velocity.

Next question; what interesting satellite freqs are there we could listen to? our scanner ranges from 27MHz-1.2GHz. Is there any interesting information we can obtain from satellites eg telemetry etc.

Any help would be great.

Regards

Jason
(Queensland Australia)

1887. American Space Shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: yorkshire@sympaticon.ca
Message-ID: <33b9ca2a.43600634@news1.on.sympatico.ca>
Source record: 18497

At what frequency does the space shuttle communicate with Houston (or whomever it communicates with)?

Thanks,

Dave B.

****

To reply, remove the n from my email address.

1888. ! PROVEN PSYCHICS! FREE PREDICTIONS! FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: bibi12@concentric.com
Message-ID: <5pcevq$9ss@chronicle.concentric.net>
Source record: 18498

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

1889. Re: Help with NASA feed? (Minumum Invest.)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: eagle@sns-access.com
Message-ID: <5pcs9c$ke3$1@nntp.structured.net>
Source record: 18499

In article <5p9je3$1vf6$1@sol.caps.maine.edu>, baack@maine.edu it was said...
>
>Greetings all..
>Just wondering waht the minimum investment would be to get the
>NASA feeds from the satellites?
>
>Dish size / C/KU band ? receiver?
>
>Any information would be great..
>Not looking for the best, just adequate.

Maine is on the outer edges of most satellite footprints, though not too far out. You could probably do well with a 7-1/2' dish. I've done it here in Oregon, with very similar signal levels, with a 6', but that really isn't quite enough.

These days, C-Band (you don't need Ku) equipment is pretty cheap. If you don't need a descrambler, an old receiver can be had for $100.00 or less. Do make sure that the controller for pointing the dish is included, and that the remote control works properly. They can be VERY hard to find.

Search around the satellite dealers, and you will probably find an older dish for about $100.00 also. Just make sure that the dish has a bushing where it rotates, not just a bolt through a hole. The bolts get mighty thin with age, and the holes get really wide, though you could put a larger size bolt in by drilling and get a few more years out of it.

You will probably also want to get a positioner, which you should get new. Used ones tend to be on their last legs. One for a 7-1/2 ' dish used to be about $150.00. Don't go too cheap here. Cheapies tend to wear out really fast!

That leaves the installation. Many dealers will have the equipment pretty cheap, and then ding you hard for installing. Make sure you get the cost of installation before you buy!!!

TTYL
Bill

1890. Re: Updated Web Page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33bacbc3.7201907@news.bctel.ca>
Source record: 18500
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On 1 Jul 1997 17:05:01 -0700, "k7on@qsl.net" <ShortCkt@primenet.com>
wrote:

>Updated Web Page
>http://www.qsl.net/k7on

http://www.geocities.com/Yosemite/1325/ also updated.
500 visitors daily.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1891. ARLS022 Mir back on the air

Newsgroup: rec.radio.amateur.space
Date: 1997-07-02 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls022.1997@arrl.org>
Source record: 18501
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS022
ARLS022 Mir back on the air

ZCZC AS22
QST de W1AW
Space Bulletin 022 ARLS022
From ARRL Headquarters
Newington, CT July 2, 1997
To all radio amateurs

SB SPACE ARL ARLS022
ARLS022 Mir back on the air

Ham radio aboard the Mir has been getting some casual use again as the three-man crew continues efforts to get life back to normal aboard the Russian space station. General ham radio operation was suspended in the immediate wake of the mishap last week that damaged one of the Mir's compartments. But this week, US ham-astronaut Mike Foale, KB5UAC, expressed ''thanks for all your good wishes'' to hams around the world. The British-born Foale is using both 2 meters and 70 cm ''sparingly,'' according to SAREX Principal Investigator Matt Bordelon, KC5BTL. Werner Staubitzer, VO1CAT, in Pouch Cove, Newfoundland, reports he had ''a lengthy QSO'' with Foale over the weekend. Foale told VO1CAT that the crew was ''feeling fine and is making repairs to the damages as best they can while waiting for the required parts to arrive.'' Ray Webber, ZS6RSW, in Pretoria, South Africa, reports that he connected to Mir on packet (using the 145.800/200 split-frequency pair) on June 28.

Foale and his Russian cosmonaut crew mates again found themselves in crisis mode Wednesday, July 2, when the spacecraft lost attitude control. In a packet message to MIREX CEO Dave Larsen, N6CO, Foale related how, after the alarm sounded, ''we go rushing from one dark module to another, trying to look out windows, and point the solar arrays. The station dies very quickly if we don't do this.'' Foale compared the situation to ''being on a yacht at sea, with the wind changing all the time, and having to rush around pulling sails down, or putting them up, before a storm comes.''

Foale said the attitude failure has made the crew very wary of the next Progress rocket docking, set for Monday, July 7. ''Life on Mir is characterized by long periods of monotonous, serene calm, and short interludes of extreme frenzy, I am learning,'' Foale said.

The Progress rocket will supply cables and a special plate to fit over the hatch of the damaged Spektr science module. The crew will try to make cable connections to get the station back up to full power. Another Russian crew is scheduled to fly up in August to seal the leak and put the Spektr module back on line. Meanwhile, Foale and the cosmonauts are working on their new--but faulty--oxygen generator to get it back on line. They are using incendiary candles to supply oxygen temporarily.

Although the cosmonauts have begun practicing the repair routines, they and Foale still have a lot of time on their hands, and much of that is spent in darkness to conserve electricity. This means Foale has time for hamming, and, so far, no one's objected to his using a few watts of power for the radio. While Mir remains a space station in trouble, Foale is providing Amateur Radio with an intimate view of the danger and drama.

KB5UAC plans to operate frequently, whenever NASA and Moscow are not using their main communication channels. Look for him on 145.800 MHz, operating split. Occasionally, while Mir is over the US, you also may find him on 145.985 MHz (simplex).

To track the Mir spacecraft, check out http://liftoff.msfc.nasa.gov/temp/Mir_loc.html. The page presents a graphical representation of Mir's location and updates every minute.

(thanks to Roy Neal, K6DUE, for his contribution to this report)
NNNN
/EX

1892. KenwoodTr751e Mods

Newsgroup: rec.radio.amateur.space
Date: 1997-07-03 00:00:00 UTC
From: Dave@omen.softnet.co.uk
Message-ID: <N.070397.182423.70@swhjz003>
Source record: 18502
Cross-posted to:
alt.radio.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Hi,
I have just cut the diode that lets you tune the radio over a wider range
it will read out 140.000 to 149.990 but will not lock below 144.000
i only want to be able to tune down to 143.625, any help or further mods
will be of great use ....
Kenwood Tr751e is the beast in question

1893. Re: mode S antenna design

Newsgroup: rec.radio.amateur.space
Date: 1997-07-03 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33BBFB11.6BD4@larc.nasa.gov>
Source record: 18503

The AMSAT journal carried an article on constructing a mode S helix.
If you can provide a land mail address or FAX number, I will try to
locate the article and send it to you.
John WA4WDL
j.m.franke@larc.nasa.gov

1894. !!!! GET SOME MONEY IN A EASY WAY !!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: blackacaro@hotmail.com
Message-ID: <349e4c07.10911297@news.telepac.pt>
Source record: 18504

$$$ Big Time Mailbox Cash $$$

A little while back, I was browsing these newsgroups, just like you are
now, and came across an article similar to this that said you could make
thousands of dollars within weeks with only an initial investment of
$5.00! So I thought, "Yeah, right, this must be a scam," but like most
of us, but I was curious, so I kept reading. Anyway, it said that you
send $1.00 to each of the 5 names and address stated in the article. You
then place your own name and address in the bottom of the list at #5,
and post the article in at least 200 newsgroups. (There are
thousands.) No catch, that was it.

You can make up to or over $50,000.00 in 4-6 weeks, maybe sooner! I
SWEAR, I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're
interested in making some big bucks, keep reading; if you're not, I
apologize for wasting your time.

So after thinking it over, talking to a few people first, I figured what
have I got to lose except for 5 stamps and $5, right? One person who
very recently had tried it said it worked like a charm. He started
getting money in the mail! He was shocked! He figured it would end
soon, and didn't give it another thought. But then the money kept
coming IN - tripling in size and multiplying by 10 - 20 times the
amount that he got the first week! In his first week he had made a
total of over $1,000!!! In the third week he had over $10,000 dollars,
and it's still growing! This is his fourth week and he's made about
$42,000 Total, and believe it or not the money is still coming in...

I know this has been checked out several times with the legal community
and is deemed perfectly Legal, but being a very cautious person, I also
wanted to check it out with the US Post Office. I called them
(1-800-725-2161) and explained this process and asked if there were any
regulations that would be violated by doing this. Without hesitation,
the postal official also said it is legal. At that point, I felt
comfortable going ahead and joining the process.

Let me tell you how this works and most importantly, WHY IT
WORKS!...Also, make sure you print a copy of this article NOW, so you

get the information from it, and begin making money. The process is very simple, and it consists of 3 ease steps:

STEP 1: Get 5 separate pieces of paper and write the following on each
sheet of paper: "PLEASE PUT ME ON YOUR MAILING LIST. YOU ARE NUMBER #."

Get five $1 bills, and place ONE inside each piece of paper that you have just written on, and fold each piece of paper so the bill will not
be seen in the envelope (otherwise, nosy people who like to steal envelopes with money in it will not get yours). Put one paper inside the envelope and seal it. Do the same for all 5. You should now have 5
envelopes sealed, each having a piece of paper AND the $1 bill inside. NOTE: Make sure those words that were stated above are written on each piece of paper. What you are doing is creating a service by this. This
is PERFECTLY LEGAL. Now, mail the 5 envelopes with the paper and $1 in each to the following 5 addresses:

#1 P Gratrix
12165 Monaco Dr.
Brighton CO 80601

#2 T. Livingston
2361 Antietam Circle
Lemoore, CA 93245

#3 K. Burks
HC 01 Box 103
Keene Valley, NY 12943

#4 Paulo Aboim Pinto
Praceta 1º de Dezembro 5 c/v esquerda
2675 Odivelas / Portugal

#5 Miguel Kennedy
Avenida Nossa Senhora do Rosario Nº1042
2750-Cascais / Portugal

STEP 2: Now take the #1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you
need is 200, but remember, the more you post, the more money you make!

Don't know HOW to post in the newsgroups? Well, do exactly the
following:

FOR NETSCAPE USERS,

1) Click on any newsgroup, like normal. Then click on "To
News,
which
is in the top left corner of the newsgroup page. This will bring up a
message box.

2) Fill in the SUBJECT with a flashy title, like the one I
used,
something to catch the eye!!!

3) Now go to the message part of the box and retype this
letter
exactly
as it is here, with exception of your few changes. (Remember to add
your
name to number 5 and move the rest up)

4) When you're done typing in the WHOLE letter, click on FILE
above
the
send button. Then, SAVE AS.. DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE
IT. (So you don't have to type this 200 times :-)

5) Now that you have saved the letter, go ahead and send your
first
copy! (Click the SEND button in the top left corner)

6) This is where you post all 200! OK, go to ANY newsgroup
article
and
click the TO NEWS button again. Type in your flashy subject in the
SUBJECT BOX, then go to the message and place your cursor here. Now
click on ATTACHMENT which is right below the SUBJECT BOX. Click on
attach file then find your letter wherever you saved it. Click once
on
your file then click OPEN then click OK. If you did this right, you
should see your filename in the ATTACHMENT BOX and it will be
shaded.

NOW POST AWAY!!

IF YOU ARE USING INTERNET EXPLORER:

It's just as easy, holding down the left mouse button,
highlight this entire article, then press the CTRL key and C key at
the
same time to copy this article. Then print the article for your
records
to have the names of those you will be sending $1.00 to.

NEXT, Go to the newsgroups and press POST AN ARTICLE type in
your
flashy subject and click the large window below. Press CTRL and V and
the article will appear in the message window. ** BE SURE TO MAKE YOUR
ADDRESS CHANGES TO THE 5 NAMES. ** Now re-highlight the article and
re-copy it re-copy it so you have the changes.... Then all you have to
do for each newsgroup is CTRL and V and press POST. It's that easy!!

THAT'S IT! All you have to do is jump to different newsgroupes
and
post away, after you get the hang of it, it will take about 30 seconds
for each newsgroup!

** REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE
MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF
200 **

This is WHY this works!

Out of 200 postings, say I receive only 5 replies (a very low
example).
So then I made $5.00 with my name at #5 on the letter. Now, each of
the
5 persons who just sent me $1.00 make the MINIMUM 200 postings, each
with my name at #4 and only 5 persons respond to each of the original
5, that is another $25.00 for me, now those 25 each make 200 MINIMUM
posts with my name at #3 and only 5 replies each, I will bring in an
additional $125.00! Now, those 125 persons turn around and post the
MINIMUM 200 with my name at #2 and only receive 5 replies each, I will
make an additional $626.00! OK, now here is the fun part, each of
those
625 persons post a MINIMUM 200 letters with my name at #1 and they
each
only receive 5 replies, that just made me $3,125.00!!! With an
original
investment of only $5.00!

AMAZING! And, as I said 5 responses is actually VERY LOW! Average is
probable 20 to 30! So lets put those figures at just 15 responses per
person. Here is what you will make:

at #5 $15.00

at #4 $225.00

at #3 $3,375.00

at #2 $50,625.00

at #1 $759,375.00

When your name is no longer on the list, you just take the latest
posting in the newsgroups, and send out another $5.00 to names on the
list, putting your name at number 5 again. Then start posting again.
The

thing to remember is, do you realize that thousands of people all over the world are joining the Internet and reading these articles every day, JUST LIKE YOU are now!! So can you afford $5.00 and see if it

really works?? I think so - People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the Internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual Internet. Remember, play FAIRLY and HONESTLY and this will work. You just have to be honest. Make sure you print this article out RIGHT NOW, also. Try to keep a list of everyone that sends you money and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make the money!!

GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. ** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 5 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future dollars.

Please remember to declare your extra income. Thanks once again
:)

1895. Re: Kepler/Prop

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: Brian Gibbs <Brian@brimar.demon.co.uk>
Message-ID: <7XA8TKAFBJvzEw6x@brimar.demon.co.uk>
Source record: 18505
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

In article <01bc868d$c3c1cce0$LocalHost@default>, Mario Melendez
<hitman@expreso.co.cr> writes
>For a couple of months I've been receiving the w1aw bulletins: propagation,
>dx and keplerian elements. I have a couple of questions:
>
>1. What are all those planetary indexes/sunspot numbers the propagation
>report talks about? What do they mean and how are they obtained?
>
>2. What exactly is the keplerian elements bulletin used for? How do you
>interpret it? What is a keplerian element?
>

Keplerian sets are used to up-date satellite tracking programmes.

Satellite orbits tend to change with time (the lower they fly, the more
they change), so tracking programmes need to have current information if
they are to remain accurate.

Can not help with question #1....sorry.

Good luck.

Brian Gibbs Email: brian@brimar.demon.co.uk
WWW: http://www.brimar.demon.co.uk
Nr Corsham, Wiltshire Packet: G3MBN @ GB7SDN #49.GBR.EU

1896. HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: Jerry <jnewland@rapidramp.net>
Message-ID: <33BC946D.6D0B8C6D@rapidramp.net>
Source record: 18506

http://www.geocities.com/Colosseum/7859/

1897. Re: HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33bd37b0.17117311@news.bctel.ca>
Source record: 18507
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On Fri, 04 Jul 1997 01:13:02 -0500, Jerry <jnewland@rapidramp.net>
wrote:

>http://www.geocities.com/Colosseum/7859/

Umm. Colosseum is not a good place for the ham site I think.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1898. *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33bd4e29.22871638@news.bctel.ca>
Source record: 18508
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

Please continue crossposting to "rec.radio.amateur" newsgroup.

Before I crossposted mass articles, I saw nothing on
"rec.radio.amateur"

Now, there are around 100 articles.

Don't make this newsgroup [rec.radio.amateur] die !!
"rec.radio.amateur" can be used for anything that relates to the ham
radio.

Thank you.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1899. Ham Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-07-04 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33BDA775.B71601C5@cyberramp.net>
Source record: 18509

http://www.cyberramp.net/~rnewland

1900. Re: HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33bfd012.9255120@news.capital.net>
Source record: 18510
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On Fri, 04 Jul 1997 17:51:33 GMT, masa@writemeNOSPAM.com (m@s@) wrote:

>On Fri, 04 Jul 1997 01:13:02 -0500, Jerry <jnewland@rapidramp.net>
>wrote:
>
>>http://www.geocities.com/Colosseum/7859/
>
>Umm. Colosseum is not a good place for the ham site I think.

What qualifications do you posess that allows you to make this
judgement?

--
Butch N2YMJ

To send mail,
delete the xyz
from my address.

1901. VHF & UHF Satellite Equip. Sale

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: "Preston H. LeSage" <lesageph@earthlink.net>
Message-ID: <01bc88fc$3dd16340$cd9a2399@ELN/lesageph>
Source record: 18511
Body handling: Inline uuencoded payload not displayed: List.txt

I'm switching to HF operation... Please see attached text file for equip.
listing.

[Inline uuencoded payload not displayed: List.txt]

1902. NASA time-delay exposed - marsx.jpg (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: gf@worldnet.att.net
Message-ID: <33bddfe7.17831590@netnews.worldnet.att.net>
Source record: 18512

The well-known NASA time-delay mechanism has again been implicated in
a cover-up. The following image was recieved by an amateur radio
operator monitoring the GE2-9c satellite transponder. Officially,
transponder 9b carries the Pathfinder mission imagery, in the vertical
polarization mode. By accident, transponder 9C was found to be active
as well, though modulated with Horizontal polarization. The attached
snapshot demonstrates the reason for the time-delay. As in the 1994
Shuttle coverup the public has been robbed of free information
concerning our closest neighbors.
Demand the Truth!

gf - San Antonio

1903. NASA time-delay exposed - marsx.jpg (1/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: gf@worldnet.att.net
Message-ID: <33bddff5.17846537@domain.com>
Source record: 18513
Body handling: Inline uuencoded payload not displayed: marsx.jpg

```
[Inline uuencoded payload not displayed: marsx.jpg]
```

1904. Re: HAM SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33bded8a.848754@news.bctel.ca>
Source record: 18514
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On Sat, 05 Jul 1997 04:41:22 GMT, orion@xyzcapital.net wrote:

>On Fri, 04 Jul 1997 17:51:33 GMT, masa@writemeNOSPAM.com (m@s@) wrote:
>
>>On Fri, 04 Jul 1997 01:13:02 -0500, Jerry <jnewland@rapidramp.net>
>>wrote:
>>
>>>>http://www.geocities.com/Colosseum/7859/
>>
>>Umm. Colosseum is not a good place for the ham site I think.

>What qualifications do you posess that allows you to make this
>judgement?

I work for GeoCities volunteerly. It's called CL. We have around
1000 CLs who help 800,000 GeoCities users.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1905. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: James O'Brien <kd4cdb@bellsouth.net>
Message-ID: <33BE01ED.5339@bellsouth.net>
Source record: 18515

CrACKeD wrote:
>
> Roberto Franceschetti <pamela@netwide.net> wrote:
> : A new version of LogSat Professional has just been released this weekend.
> : It features astounding maps that you will not find on any other software.
> : Check out http://www.logsat.com for more information and an online order
> : form. You can also see it on the latest AES catalog.
>
> I tried the demo, and wasn't impressed. LogSat couldn't even install
> itself properly, let alone run. Nova for Windows looks good, and its maps
> are also impressive once you get into the "large" sizes. The only thing I
> don't like about this software is that it doesn't seem to be able to
> predict passes. Someone correct me if I'm wrong. I think being able to
> predict passes is a pretty vital feature in software like this.
>
> CrACKeD <cracked@primenet.com>

No reason to take this guy seriously. He's Burt Fisher's little flame
trolling suckboy.

1906. ARLK052 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk052.1997@arrl.org>
Source record: 18516
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK052
ARLK052 Keplerian data

ZCZC SK52
QST de W1AW
Keplerian Bulletin 52 ARLK052
From ARRL Headquarters
Newington, CT July 5, 1997
To all radio amateurs

SB KEP ARL ARLK052
ARLK052 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-94
1 24849U 97032A 97184.91666667 .00001740 00000-0 38527-5 0 76
2 24849 28.4690 4.6756 0003092 357.6606 255.1503 15.90242703 344
AO-10
1 14129U 83058B 97182.22580320 -.00000081 00000-0 10000-3 0 04900
2 14129 25.9993 139.5756 6062874 130.5084 300.6228 2.05879905077679
RS-10/11
1 18129U 87054A 97184.21088464 .00000002 00000-0 -14848-4 0 3735
2 18129 82.9253 226.8858 0011282 169.8963 190.2420 13.72379473502435
UO-11
1 14781U 84021B 97183.96617154 .00000029 00000-0 12748-4 0 09923
2 14781 97.8365 164.5693 0011336 319.0197 41.0155 14.69562703713571
RS-12/13
1 21089U 91007A 97184.16548037 .00000037 00000-0 23098-4 0 09963
2 21089 82.9216 266.7906 0027705 253.1322 106.6799 13.74082979321357
UO-14
1 20437U 90005B 97184.75178186 -.00000008 00000-0 13579-4 0 2803
2 20437 98.5179 266.0630 0011117 154.8178 205.3547 14.29964462388580
RS-15
1 23439U 94085A 97184.03818576 -.00000039 00000-0 10000-3 0 02387
2 23439 64.8117 127.2079 0148760 129.5613 231.8550 11.27527620103721
AO-16
1 20439U 90005D 97184.76595480 .00000011 00000-0 20984-4 0 760
2 20439 98.5336 269.0381 0011389 157.1098 203.0593 14.30012213388600
```

```
RS-16
1 24744U 97010A 97184.17137910 .00001969 00000-0 67153-4 0 00617
2 24744 97.2749 88.9337 0008953 41.2794 318.9123 15.31504691018530
DO-17
1 20440U 90005E 97184.19052328 .00000034 00000-0 29862-4 0 00891
2 20440 98.5377 269.3459 0011734 157.3920 202.7782 14.30155374388552
WO-18
1 20441U 90005F 97184.18876595 .00000012 00000-0 21408-4 0 00974
2 20441 98.5397 269.2440 0011994 157.8270 202.3431 14.30122550388552
LO-19
1 20442U 90005G 97184.15477778 .00000004 00000-0 18339-4 0 00893
2 20442 98.5428 269.8881 0012686 157.2211 202.9541 14.30237207388577
FO-20
1 20480U 90013C 97184.95042902 -.00000021 00000-0 30364-4 0 9777
2 20480 99.0475 143.3865 0540960 339.5292 18.4848 12.83238616346856
AO-21
1 21087U 91006A 97184.14130548 .00000094 00000-0 82657-4 0 08421
2 21087 82.9397 39.7686 0033535 224.9931 134.8506 13.74584072322348
UO-22
1 21575U 91050B 97184.19018353 .00000031 00000-0 24567-4 0 07961
2 21575 98.3006 244.1712 0007106 199.6469 160.4456 14.37075621312780
KO-23
1 22077U 92052B 97184.14982306 -.00000037 00000-0 10000-3 0 06888
2 22077 66.0763 111.8127 0008917 206.5117 153.5438 12.86302628229804
KO-25
1 22828U 93061F 97184.18021550 -.00000001 00000-0 16807-4 0 05547
2 22828 98.5403 258.3788 0009679 174.8355 185.2926 14.28183352164492
IO-26
1 22826U 93061D 97184.14974519 -.00000005 00000-0 15386-4 0 05740
2 22826 98.5419 258.2629 0008676 191.2226 168.8765 14.27839924196367
AO-27
1 22825U 93061C 97184.18253014 -.00000045 00000-0 -64022-6 0 05752
2 22825 98.5439 258.0483 0008147 188.2111 171.8947 14.27729449196351
FO-29
1 24278U 96046B 97184.11867282 -.00000067 00000-0 -34479-4 0 00977
2 24278 98.5388 223.1779 0351787 144.8241 217.6679 13.52631543043279
Mir
1 16609U 86017A 97185.28562187 .00010467 00000-0 13564-3 0 4369
2 16609 51.6539 359.9783 0004512 212.4701 147.5872 15.59487690649698

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
July8, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1907. Re: *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: martin morris <martin@marteagle.demon.co.uk>
Message-ID: <18tjXFAH2ovzEwIs@marteagle.demon.co.uk>
Source record: 18517
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

In article <33bd4e29.22871638@news.bctel.ca>, "m@s@"
<masa@writemeNOSPAM.com> writes
>Please continue crossposting to "rec.radio.amateur" newsgroup.
>
>
>Before I crossposted mass articles, I saw nothing on
>"rec.radio.amateur"
>
>
>Now, there are around 100 articles.
>
>
>Don't make this newsgroup [rec.radio.amateur] die !!
>"rec.radio.amateur" can be used for anything that relates to the ham
>radio.
>
>
>Thank you.
>
>
>Masa
>Masa@WriteMe.NOSPAMcom
>
>http://www.geocities.com/Yosemite/1325/ (General Interest)
>
>http://www.geocities.com/Yosemite/1325/main.htm
>(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular
>Bands Info,
>AT-600 Dual Bander, Int'l Freqs Info, Modifications,
>CB General Info, Space Station MIR, Propagation Info)
>
>http://www.geocities.com/Athens/Delphi/6630/
>(Paragraphes, Essay, Shakespeares, Online Resources and more !!)
>
>Spam Security is ON:
>Remove "NOSPAM" from noted e-mail address to contact me.
>*** I will NOT buy any products or visit web sites from the SPAM. ***

There are 25008 newsgroups via DEMON & this one (rec.radio.amateur) is
NOT one of them.

That was the one & only good thing about my old ISP, subscribable
newsgroups were well over 32000 groups.................
@@

```
************************************* 1727 Cuneus & Musschenbroek (Dutch)
* From ; Martin Morris. * discovered the principle of the
* Shrewsbury England. * capacitor.
* Tel-Fax +44 (01743) 441017. * 20 August 1874 Guglielmo Marconi was
* Pager Tel 01426 294562. * born.
* mailto:marteagle@repairman.com * In 1901 Marconi succeeded in sending
* mailto:martin@marteagle.demon.co.uk * messages spanning the Atlantic Ocean;
* http://www.marteagle.demon.co.uk * the radio for communication was born.
*************************************
The Telegraph sytem was devised in 1832 by Samual Morse.
```

1908. Suttle re-broadcast in Toronto?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-05 00:00:00 UTC
From: jessem@globalserve.net
Message-ID: <jessem-0507972344420001@dialin446.globalserve.net>
Source record: 18518
Cross-posted to: rec.radio.amateur,rec.radio.amateur.space

Hi all.

Does anyone know if Shuttle comms are being re-broadcast locally on a ham frequency in the Greater Toornto Area?

Any help would be appreciated.

Thanks,

Jesse

--
Computing: Apple Computer, Inc (Macintosh).
Politics: Fiscal Conservatives with a social conscience.
Music: Spirit Of The West, Great Big Sea, Loreena McKennitt
Email: 1. jessem@globalserve.net 2. yu153887@yorku.ca
Other: Politiking, Radio Scanners, Microbreweries, Toronto.
Partisan Muse: Charest in 97!

1909. Re: NASA time-delay exposed - marsx.jpg (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5pmr91$uc9$4@news.mhv.net>
Source record: 18519

Just what drugs are you on? Of coarse you do have PROOF of this right? Want
to name the ham or his callsign?

Tom

In article <33bddfe7.17831590@netnews.worldnet.att.net>, gf@worldnet.att.net
(Graetel Fromm) wrote:
>The well-known NASA time-delay mechanism has again been implicated in
>a cover-up. The following image was recieved by an amateur radio
>operator monitoring the GE2-9c satellite transponder. Officially,
>transponder 9b carries the Pathfinder mission imagery, in the vertical
>polarization mode. By accident, transponder 9C was found to be active
>as well, though modulated with Horizontal polarization. The attached
>snapshot demonstrates the reason for the time-delay. As in the 1994
>Shuttle coverup the public has been robbed of free information
>concerning our closest neighbors.
> Demand the Truth!
>
> gf - San Antonio
>

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1910. /Sell/Your/Photos$$$$

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: ret643@aol.com
Message-ID: <5pnrvrhcs7085@roadrunner.miracle.net>
Source record: 18520

We are a New York based international photo agency representing professional and amateur photographers in search of having their work promoted in order to conduct their profession or hobby minus the time consuming inconvenience of presenting and selling their own work.
You do not have to be a professional photographer to sell your photographic work successfully, and as any pro will tell you, quite often throughout history an amateur stumbles on a scene that he or she photographs and ends up with a photo that becomes a classic. Those who publish magazines, books, newspapers, greeting cards, record albums, or just about anyone who works with images in their profession, are in desperate need of fresh material, and are more than willing to review photos submitted by professional photo representatives. Sometimes the photos of amateurs are sought after more so than professionals because of accidental originality and innovative themes.
At Photo Phoenix International, we delight in and value the work of people who view photography as a fine art and understand a photo representative's significance in terms of a photographer's career, reputation, and monetary gain.
The photos we are seeking are some of the following: ANIMALS, ARCHITECTURE, ART, AUTOMOBILES, BUSINESS, CELEBRITIES, DOCUMENTARY, ENTERTAINMENT, EROTICA/NUDITY, FASHION, FOOD, HEALTH, HISTORY, HOBBIES, OUTDOORS, PEOPLE, POLITICAL, PORTRAITS, STILL LIFES, RELIGIOUS, SCIENCE, SPORTS, TRAVEL . . .
Whether your work portrays conservative, experimental, stylish, or innovative themes, your project proposal should be well thought out before submitting to us.
For first contact, submit a query letter and "SAMPLES ONLY" of your photos.
You must include "2" self addressed, stamped envelopes--one for correspondence, the other for the return of your material should we not be interested.
If we think your work is sellable, we will respond as soon as possible. Do not send entire portfolio unless we ask for it.
SEND TO: Photo Phoenix International

<33-29 58 Street>
<Woodside, New York>
<11377>
<~Phone: 718-651-8145>

1911. writers-seeking-publication

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: vgi564@aol.com
Message-ID: <5po3rt$9r$872@roadrunner.miracle.net>
Source record: 18521

We are a New York based international literary agency with two branch offices, one of which is in Florida. We are seeking new and> previously published authors, so please adhere to the following-- guidelines.

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.
Short-Stories: brief synopsis, 3 pages, SASE.
Poetry: send 3 poems, SASE.
Please do not send complete manuscript unless we ask for it.

Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>
=Woodside, New York>>>>>>>>
=11377>>>>>>>
=Phone (main office):
=718--651-8145>>>>>>>

1912. Ham Page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33BFCD88.1CEB@mailhost.cyberramp.net>
Source record: 18522

http://www.cyberramp.net/~johnf

1913. QSO with MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8a1b$d66aba00$d9280ace@home.the-bridge.net>
Source record: 18523

I just worked Mike Foale, KB5UAC/R0MIR during the 1420 UTC pass over north America. I was using 145.985 simplex. I was monitoring Mike talking on 143.625 MHz. He signed off there was I heard the packet station start up on 145.985 MHz. I decided to give a call, since I figured he must have just turned on the packet station after finishing his chat with controllers on 143.625. Well, its like hunting DX, when ya have a their operating pattern figured out, you have a better chance at making a contact. Mike Foale, KB5UAC, turned off the packet station and after he make a few adjustments, he and I QSO'ed until the end of the pass. I hope this helps some of you nab a contact with MIR. I monitor the 143.635 MHz with a scanner and monitor 145.985 and 145.200/800 split with a Ayes FT-736. 73 de Bj

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1914. Re: *** Mir Crashes with Progress ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: James O'Brien <kd4cdb@bellsouth.net>
Message-ID: <33BFE8EC.93E@bellsouth.net>
Source record: 18524
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur,rec.radio.amateur.misc

CrACKeD wrote:
>
> M@s@ <masa@writeme.NOSPAMcom> wrote:
> : It seems the Progress crushed into the Mir space station.
>
> Could you elaborate a bit?
>
> CrACKeD@primenet.com

Get the bulletin from amsat you spock-eared geek.

1915. Re: Suttle re-broadcast in Toronto?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5popg6tb1@news.mhv.net>
Source record: 18525
Cross-posted to: rec.radio.amateur,rec.radio.amateur.space

In article <jessem-0507972344420001@dialin446.globalserve.net>, jessem@globalserve.net (Jesse Michaels) wrote:
>Hi all.
>
>
>Does anyone know if Shuttle comms are being re-broadcast locally on a ham
>frequency in the Greater Toornto Area?
>
>Any help would be appreciated.
>
>Thanks,
>
>Jesse

Try scanning the 2 meter band. If you have shortwave ability WA3NAN
transmits on side band on:

3.860
7.185
14.285
14.295
21.390
21.395
28.650

You'll find them more on the first 2 freqs., from NY that's where they are
mostly found anyway, depends on the propagation...

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1916. writers=seeking=publication

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: ftr45r@aol.com
Message-ID: <5pp06t$67e$7432@roadrunner.miracle.net>
Source record: 18526

We are a New York based international literary agency with two branch offices, one of which is in* Florida. We are seeking new and> previously published authors, so please adhere to the >following-- guidelines.>>>>>>>>>>>>>>>

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.>>>>>>>>>>>>>
Short-Stories: brief synopsis, 3 pages, SASE.>>>>>>>>>>>>>>>
Poetry: send 3 poems, SASE.>>>>>>>>>>>>>>>
Please do not send complete manuscript unless we ask for it.

<<Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>//
=Woodside, New York>>>>>>>>//
=11377>>>>>>>
=Phone (main office):
=718--651-8145>>>>>>>//

1917. ANS-187 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8a56$83e3dba0$d9280ace@home.the-bridge.net>
Source record: 18527

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-187.01
SAREX QUITE ACTIVE ON STS-94

HR AMSAT NEWS SERVICE BULLETIN 187.01 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.01

The space shuttle astronauts have been quite active on SAREX since the launch of Columbia just a few short days ago. The launch of space shuttle Columbia occurred on time, in fact, 35 minutes prior to the initially planned July 1 launch time. Lift off (MET = 0) occurred at 18:02:00 UTC.

Seventeen schools, including one in the People's Republic of China, are scheduled to talk with the astronauts via Amateur Radio. During the earlier STS-83 mission, Columbia's premature return to Earth postponed all scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for this mission, which again carries the microgravity science lab. Three hams are among the STS-94 crew members.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in science, math, technology and the U.S. space program. The Shuttle astronauts also perform voice and packet QSOs with hams on the ground.

STS-94 is a long duration shuttle flight where crew members are working in shifts around the clock. Shift team members are as follows:

RED TEAM
Commander (CDR): Jim Halsell, KC5RNI
Pilot (PLT): Susan Still
Mission Specialist (MS3): Donald Thomas, KC5FVF
Payload Specialist (PS2): Greg Linteris

BLUE TEAM
Mission Specialist (MS1): Janice Voss, KC5BTK
Mission Specialist (MS2): Michael Gernhardt
Payload Specialist (PS1): Roger Crouch

The SAREX Working Group has designated the following frequencies during the STS-94 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz FM
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz
FM Packet Uplink: 144.49 MHz

Officially, the SAREX hardware was to fly in Configuration B, which is voice only, battery operation. However, power conservation measures have been successful to date and mission control advised the SAREX team and the astronauts to initiate use of the Packet Radio system. At the time this bulletin is being released, the packet system has not been confirmed to be active.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1

The crew has great enthusiasm for the Shuttle Amateur Radio Experiment (SAREX) on STS-94. Case in point, MS3 Don Thomas, KC5FVF, set up the orbiting ham shack and completed nineteen random contacts BEFORE the "official" scheduled test pass.

"Columbia was calling CQ as they passed over the tip of Baja California. Don said I was the first contact with Columbia. Elevation here was only two degrees, but the signals were Q5 at 1629z" reported Dave Guimont, WB6LLO, via the SAREX e-mail list on Wednesday, July 2.

On Friday morning, July 4, the students of Crittenden Middle School of Mountain View, California quizzed CDR Jim Halsell, KC5RNI, via the AMSAT Telebridge Network through Gordon Williams, VK6IU, in Western Australia. Five questions were asked and answered. The students chanted in closing, "Happy Independence Day, Columbia!"

Just the day before, the Mountain View youths spoke with NASA Administrator Dan Goldin. Mr. Goldin was in town for the dedication ceremony of the new teacher's resource center at the NASA Ames Research Center. He expressed excitement regarding the student's upcoming SAREX contact with the shuttle astronauts and wished the students good luck.

Edgewater High School of Orlando, Florida made a direct contact on Orbit 32 using station KF4DKF set up at the school. The students interviewed MS1 Janice Voss, KC5BTK. AMSAT Representative Will Marchant, KC6ROL, reported from Houston, "Edgewater HS had a very nice contact with twelve questions asked and answered."

The Lexington Traditional Magnet School (callsign AE4PD) in Lexington, Kentucky spoke with MS2 Dr. Michael Gernhardt on Rev 35 through telebridge ground station N6IZW in San Diego. Dave Sublette, K4TO, for the school commented, "Most folks don't realize how much work you [NASA, AMSAT and ARRL] put into SAREX. Thank you!"

Late acquisition of the SAREX signal has been observed by terrestrial hams when the orbiter attitude was roughly "tail down, main engines forward" and the SAREX antenna in Window 1 (far leftmost from the pilot/commander seat perspective). If you don't hear Columbia shortly after your predicted rise time then patiently continue monitoring throughout the pass. Remember too that the crew is quite busy with the primary experiments.

QSL VIA: Send reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-94, date and time in UTC, frequency and mode (FM; voice or packet). In addition, you must also include a SASE using a large, business-sized envelope if you wish to receive a card.

Watch for the SAREX Working Group bulletins and sarex@amsat.org during the mission for late breaking news regarding SAREX operations.

[ANS thanks Pat Kilroy, WD8LAQ, AMSAT Development and Operations Team; and Frank H. Bauer, KA3HDO, AMSAT V.P. for Manned Space Programs, for these reports.]

/EX

SB SAT @ AMSAT $ANS-187.02
MIREX/ SAREX QSO

HR AMSAT NEWS SERVICE BULLETIN 187.02 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.02

The shuttle also had two successful opportunities to talk to fellow astronaut Mike Foale, KB5UAC, on the Russian Space Station MIR. Shuttle Commander Jim Halsell, KC5RNI, talked to Mike on MIR during both contacts. The first ship-to-ship SAREX/MIREX contact occurred on Saturday July 5 at 12:02 UTC (MET 003/18:49.) This contact was conducted over the Indian Ocean and lasted 30-45 seconds. The second MIR/Columbia conjunction occurred over the Pacific Ocean at 13:36 UTC (MET 003/19:34). Will Marchant of the AMSAT reported that this contact also lasted about 30 to 45 seconds. He stated that the shuttle crew could hear MIR for a lot longer due to MIR's better antenna and higher power radio. Pilot Susan Still reported observing MIR through binoculars while the ham radio contact was underway. Mr. Marchant, who was in the Customer Support Room of Mission Control during the two contacts, said "The shuttle crew was pretty excited about their contact on the Air-To-Ground communications loop". The crew shared this excitement with fellow astronaut Bill McArthur, KC5ACR, who was CAPCOM during the contacts.

[ANS thanks Pat Kilroy, WD8LAQ, AMSAT Development and Operations Team; and Frank H. Bauer, KA3HDO, AMSAT V.P. for Manned Space Programs, for this report.]

/EX

SB SAT @ AMSAT $ANS-187.03
AMSAT-UK COLLOQUIUM 1997

HR AMSAT NEWS SERVICE BULLETIN 187.03 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.03

ANS has received this list of presentations and addresses to be given during the 1997 AMSAT-UK Colloquium.

Addresses by: Martin Sweeting OBE G3YJO, Professor of Satellite Engineering UoS, Chairman of AMSAT-UK; Ian Kyle, GI8AYZ, President of RSGB; Ray Soifer, W2RS.

Presentations:
P3D Ranging
- James Miller, G3RUH.
A new generation of UoSat Amateur Spacecraft - Chris Jackson, G7UPN (UoS).
A New Network Layer Protocol for a LEO Satellite Global Data Network
- Bao-zhong Cheng (UoS).
Optimising the LEO Satellite Communications Link Through Hybrid ARQ Techniques
- Valerie Chu (UoS).
On-Board Image Processing & Compression for Small Remote Sensing Satellites
- Peixin Hou (UoS).
38.4 Kbps Receiver Requirements - John Paffett (UoS).
Low Cost High Resolution Radar Altimetry Mapping by Micro/Mini Satellite
- Yuanxing Zheng (UoS).
The Station Program
- Paul Willmott, VP9MU.
Microwave Measurements
- (RSGB Microwave Committee).
The Kettering Group: From Hobby to Profession/Obsession
- Geoff Perry, MBE.
In Orbit Measurement of Long Term Interference Within the "Little LEO" and Amateur VHF Bands
- John Paffett (UoS).
Radio Astronomy, Practice & Problems
- Dr. John Ponsonby, University of Manchester (Jodrell Bank).
Latest State of P3D Integration & Launch Campaign
- Frank Sperber, DL6DBN, (AMSAT-DL).
Machinist Help Wanted !
- Fred Kennedy, ZL1BYP.
Phase-3D Construction (video); commentary by Ray Soifer W2RS
After Phase-3D, What ?
- Ray Soifer, W2RS.
Amateur Radio on the International Space Station
- R J C Broadbent (AMSAT-UK)
The Satgate Experience
- Andrew Sellers, G8TZJ.
Single Event Effects in Commercial Memory Devices Operating in the Space

Radiation Environment: A Decade of Research at Surrey
- Craig Underwood, G1WTW, (UoS).
Spacecraft Autonomy via Probabilistic RAM (pRAM) Artificial Neural Networks
- Mike Oldfield (UoS) [Paper read by Craig Underwood, G1WTW,. (UoS)].
Computer Security, a Briefing
- Richard Limebear, G3RWL, (AMSAT-UK).

Experts panel
AMSAT-UK Annual General Meeting
On Friday evening and Saturday there will be microwave test equipment (and people who know how to use it) available for people to test their projects

[ANS thanks Richard W L Limebear, G3RWL, for this information.]

/EX

SB SAT @ AMSAT $ANS-187.04
AMATEUR RADIO SATELLITE IMAGING

HR AMSAT NEWS SERVICE BULLETIN 187.04 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.04

At the AMSAT-NA Symposium to be held in Toronto, Canada in October 1997 Graham Ratcliff, VK5AGR, is planning a presentation entitled 'Amateur Radio Satellite Imaging - The Past, Present and Future'.

In this presentation Graham plans to give a brief overview of Amateur Satellite imaging hardware that has already flown in the past, is currently operational and those currently under construction and awaiting launch plus a step-by-step description of what hardware and software is required to decode and display these Amateur Satellite images, especially aimed at those who have never attempted it before. In particular, VK5AGR, plans to demonstrate how to use WiSP ,by Chris Jackson, G7UPN, to collect the raw images from the 9600 baud satellites and CCD Display by Colin Hurst, VK5HI, to display the images and some post-processing software such as PaintShop Pro.

Ratcliff has been active collecting the 9600 baud satellite images and has many examples from UO-22, KO-23, KO-25 and PO-28. He also has kept copies of any images from WEBERSAT-OSCAR-18.

[ANS thanks Graham Ratcliff, VK5AGR, for this information.]

/EX

SB SAT @ AMSAT $ANS-187.05
FIFTH ANNUAL JEWELRY CONTEST

HR AMSAT NEWS SERVICE BULLETIN 187.05 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT

BID: $ANS-187.05

Announcing The Fifth Annual Jewelry Contest to take place at the AMSAT convention in Toronto in October of 1997. This years prize is a device that your lady will use to assist her in fastening a bracelet on her wrist. Leanore, KA6UCD, will have it at the convention; she will be happy to demonstrate it at any time.

The accompanying brademo.gif shows the "third hand bracelet fastener" being used. Thrdhand.gif is a picture of the device. An alligator clip is the "third hand".

Your problem, should you decide to take the assignment, is to estimate the frequency of the open stub, from which the handle is made.

It is an open, half wave stub constructed from 50 ohm .141 teflon insulated hardline that has a velocity factor calculated at 70.8%. The inside diameter of the coil is .5 inches; the 3 3/4 turns is 5 3/4" overall. The formed coil has absolutely no effect on the frequency, and the frequency is in an amateur satellite band. The SMA connector on the end will enable you to check the frequency when you win. NO measuring equipment other than a ruler is permitted.

The frequency has been determined accurately to two decimal places, but for contest purposes the "correct" answer has been carried out to six places to provide a tie-breaker. Please submit your answer in MHz. Leanore will have a supply of entry slips.

ALL are eligible to enter. Take your significant other to Toronto, and get two chances to enter the contest. THIS IS A FUN THING. In the event you will not be attending the convention be sure to get your answers to Leanore or Dave by the 10th of October.

The winner will be announced at the banquet, but you need not be present to win.

Look for a depiction at toron5.zip at
http://users.aol.com/dguimont
or on the digital birds.

[ANS thanks Dave Guimont, WB6LLO, for this report.]

/EX

SB SAT @ AMSAT $ANS-187.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 187.06 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.06

MIR:
Mike Foale, KB5UAC, has been active on amateur radio.. The radio has

served as a valuable link between Mike and his family and friends during
this crisis . Also activity from the MIR packet station has been reported.
Frequencies with activity have been 145.985 MHz and the 145.200/800 MHz
split.

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Not operational at this time..

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.
RS3A needs some SWL reports of RS-10.
What time you heard RS-10, and also the date.
Send info via packet to Andy, .RS3A.
Packet: RK3KPK@RA3KP.MSK.RUS.EU

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 MHz CW/SSB)
Operational.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.
WT0N reports that downlink signals are still weak from RS-15,
but the bird is still workable.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active. Also,
the 29.408 MHz beacon is reported as being heard.
No transponder activity yet.
RS-16 CW Telemetry.
P PSU voltage Volts..... x0.1
O Solar panel voltage Volts..... x0.1
N Solar panel current mA
M TX 29 MHz Output Power mW..... x10
L TX 29 MHz current mA
K TX 29 MHz voltage 7V nominal
J TX 435 MHz Output Power mW..... x10
I TX 435 MHz current mA
H TX 435 MHz voltage V..... x0.1
G U of the transponder V..... x0.1
F U of stabilizer V..... x0.1
E Temperature of the charger in C deg.
D Temperature TX 29 MHz in C deg.
C Temperature TX 435 MHz in C deg.
B Temperature RX 145 MHz in C deg.
A Temperature of the stabilizer in C deg.

Parameters M, L, J, I are valid in FM mode only!

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operational. FO-20 in mode JA continuously
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.
AO-27 (1-Jun-1997- 10:58 UTC Orbit-19182)
The satellite is working normally over North America.
and Europe.
Current AO-27 schedule information can be found at
www.umbra.com
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Operational.
The latest FO-29 Schedule.
July 4 (Fri) 09:13z Digi-talker
July 8 (Tue) 09:05z JA
July 11 (Fri) 09:51z JD1200

July 18 (Fri) 00:20z JD9600
July 25 (Fri) 09:23z JA
Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-187.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 187.07 FROM AMSAT HQ
SILVER SPRING, MD, JULY 06, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-187.07

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
The beacon on 2401.500 heard over Spain on 23rd of June and also on
24th, but with weak signals.
[ANS thanks Saludos de Antonio, EA1IW/EA4, for this report.]

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operational.
Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
No report available.

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
Telemetry data received from LO-19:
uptime is 738/09:21:49. Time is Fri Jun 27 23:26:59 1997
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
No report available.

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
No report available.

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Sqaure EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1918. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03F52.52DF@novia.net>
Source record: 18528

http://www.novia.net/~pschleck/

1919. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03EAA.4B0C@novia.net>
Source record: 18529

http://www.novia.net/~pschleck/

1920. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03F64.122D@novia.net>
Source record: 18530

http://www.novia.net/~pschleck/

1921. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03F77.5AE1@novia.net>
Source record: 18531

http://www.novia.net/~pschleck/

1922. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03FB9.C1B@novia.net>
Source record: 18532

http://www.novia.net/~pschleck/

1923. writers/seeking/publication*

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: fre4e@msn.com
Message-ID: <5pp7hsgic872@roadrunner.miracle.net>
Source record: 18533

We are a New York based international literary agency with two branch offices, one of which is in* Florida. We are seeking new and> previously published authors, so please adhere to the following-- guidelines.>>>>>>>>>>>>>>>

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.>>>>>>>>>>>>>
Short-Stories: brief synopsis, 3 pages, SASE.>>>>>>>>>>>>>>>
Poetry: send 3 poems, SASE.>>>>>>>>>>>>>>>
Please do not send complete manuscript unless we ask for it.

<<Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>
=Woodside, New York>>>>>>>>
=11377>>>>>>>///
=Phone (main office):
=718--651-8145>>>>>>>

1924. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C04007.A03@novia.net>
Source record: 18534

http://www.novia.net/~pschleck/

1925. For my fellow QRP'ers!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: khzcop@aol.com
Message-ID: <19970706233101.TAA01145@ladder01.news.aol.com>
Source record: 18535

Here's a website that might be of interest to you:

http://www.glr.com/peanut

73, Willie

1926. Re: *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: mulveyr@ll.aa2ys.ampr.org
Message-ID: <5pp8ve$12o4$3@node17.cwnet.frontiernet.net>
Source record: 18536
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

On Fri, 04 Jul 1997 19:27:40 GMT, m@s@ <masa@writemeNOSPAM.com> wrote:
>Please continue crossposting to "rec.radio.amateur" newsgroup.
>
>

Well, that's because rec.radio.amateur was split into topical groups
several years ago. The reason that it has seen no traffic is that it's
no longer a valid newsgroup. If it's appearing on your server, that only
means that your news administrator isn't doing his job.

[Pointlessly long .sig deleted.]

--
Rich Mulvey
mulveyr@frontiernet.net Rochester, NY USA
http://www.frontiernet.net/~mulveyr
Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

1927. K3FU PAGE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C03FD0.38DA@novia.net>
Source record: 18537

http://www.novia.net/~pschleck/

1928. Any Info on RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: KROSNO <KROSNO@prodigy.net>
Message-ID: <01bc8a59$54504380$99382581@default>
Source record: 18538

Hello all. Im new to working satellites and im wondering when RS-10/11 is going to back up? Ive been tring to work RS-15 but no luck yet. If anyone has any info that may help me to work the RS satellites please help. Thanks, also is RS-12/13 only working in 15mtrs up 10mtrs down?

Thanks Devin(KD6GHZ)

1929. sell=Your=Photos$$$

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: dre4rw@msn.com
Message-ID: <5pph7pknj1148@roadrunner.miracle.net>
Source record: 18539

We are a New York based international photo agency representing professional and amateur photographers in search of having their work promoted in order to conduct their profession or hobby minus the time consuming inconvenience of presenting and selling their own work.
You do not have to be a professional photographer to sell your photographic work successfully, and as any pro will tell you, quite often throughout history an amateur stumbles on a scene that he or she photographs and ends up with a photo that becomes a classic. Those who publish magazines, books, newspapers, greeting cards, record albums, or just about anyone who works with images in their profession, are in desperate need of fresh material, and are more than willing to review photos submitted by professional photo representatives. Sometimes the photos of amateurs are sought after more so than professionals because of accidental originality and innovative >themes.
At Photo Phoenix International, we delight in and value the work of people who view photography as a fine art and understand a photo representative's significance in terms of a photographer's career, reputation, and monetary gain.
The photos we are seeking are some of the following: ANIMALS, ARCHITECTURE, ART, AUTOMOBILES, BUSINESS, CELEBRITIES, DOCUMENTARY, ENTERTAINMENT, EROTICA/NUDITY, FASHION, FOOD, HEALTH, HISTORY, HOBBIES, OUTDOORS, PEOPLE, POLITICAL, PORTRAITS, STILL LIFES, RELIGIOUS, SCIENCE, SPORTS, TRAVEL . . .
Whether your work portrays conservative, experimental, stylish, or innovative themes, your project proposal should be well thought out before submitting to us.
For first contact, submit a query letter and "SAMPLES ONLY" of your photos.
You must include "2" self addressed, stamped envelopes--one for correspondence, the other for the return of your material should we not be interested.
If we think your work is sellable, we will respond as soon as possible. Do not send entire portfolio unless we ask for it.
SEND TO: Photo Phoenix International

<33-29 58 Street>///
<Woodside, New York>
<11377>
<~Phone: 718-651-8145>....

1930. Communication with Mars Rover

Newsgroup: rec.radio.amateur.space
Date: 1997-07-06 00:00:00 UTC
From: camoore@nwu.edu
Message-ID: <5pp82s$aps@news.acns.nwu.edu>
Source record: 18540

What is the speed of radio waves? I am interested in knowing if NASA is using radio to communicate with the Mars Rover and if so how long it takes a signal leaving Mars to reach Earth.

Thanks.

1931. *** NASA's Pathfinder ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33c09f65.28038572@news.bctel.ca>
Source record: 18541

Dear Amateur Radio Operators,

I compiled the all kinds of information and pictures together on one
single page. It's at:

http://www.geocities.com/Yosemite/1325/nasa.htm

I suggest you to turn off the graphics. It's a graphic oriented site
(picture (Mars) oriented)

Enjoy !!

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/nasa.htm (NASA's PathFinder on Mars)
http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1932. Re: Communication with Mars Rover

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <33C0CFBC.7BE3@phoenix.net>
Source record: 18542

camoore@nwu.edu wrote:
>
> What is the speed of radio waves? I am interested in knowing if NASA is using
> radio to communicate with the Mars Rover and if so how long it takes a signal
> leaving Mars to reach Earth.
>
> Thanks.
almost the speed of light------almost 10 min

1933. *writers/seeking/publication

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: cdr43a@aol.com
Message-ID: <5pqki6$o9u$8576@roadrunner.miracle.net>
Source record: 18543

We are a New York based international literary agency with two branch offices, one of which is in Florida. We are seeking new and previously published authors, so please adhere to the following guidelines.

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11377>>>>>>>
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1934. Free Amatuer Radio trading board. Visit http://www.cameraweb.com/hr

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: bsw123@aol.com
Message-ID: <19970707150700.LAA06667@ladder02.news.aol.com>
Source record: 18544

```
Free Amatuer Radio trading board. Visit http://www.cameraweb.com/hr
```

1935. Re: Communication with Mars Rover

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5pr4hm$7ii$2@news.mhv.net>
Source record: 18545

In article <5pp82s$aps@news.acns.nwu.edu>, camoore@nwu.edu wrote:
>What is the speed of radio waves? I am interested in knowing if NASA is using
>radio to communicate with the Mars Rover and if so how long it takes a signal
>leaving Mars to reach Earth.
>
>Thanks.

Of coarse they are using radio waves. It takes approx. 10 1/2 minutes to get
a signal to and from the lander. The rover can't transmit to Earth, it goes
through the lander which uses a high gain antenna. A nightlight in your house
has more wattage than what they are using to send/recieve signals.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1936. Re: Any Info on RS-10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: w4mvb@aol.com
Message-ID: <19970707164201.MAA11628@ladder02.news.aol.com>
Source record: 18546

Hi Devin,

I guess you have asked the $64K question about RS-10. I am also looking for info but there doesn't seem to be any. RS-12 is operating on 15M up and both 10M and 2M down. Good luck on RS-16. It can be a tough bird to work but with a little effort on the receive end work it regularly. If you choose the right orbit (and the right part of the orbit) good contacts can be made. If you are using an omni antenna you will probably need 100 watts of power for reliable contacts but with steerable antennas many contacts are made with 25 watts or less. Occasionally you can have a real live QSO!

gud lk and 73 de Jess - w4mvb

1937. Re: Suttle re-broadcast in Toronto?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: "Roger E. Koss" <kossr@edl1.ksc.nasa.gov>
Message-ID: <33C14EB9.6F7B@edl1.ksc.nasa.gov>
Source record: 18547
Cross-posted to: rec.radio.amateur,rec.radio.amateur.space

Jesse: (And anyone else looking for rebroadcast shuttle audio):
Try the Amsat Web Page at:
http://www.amsat.org/amsat/sarex/shutfreq.html

I looked for Toronto, and didn't find anything. Only places in Canada
were Waterloo, ON, and Vancouver, BC.

I believe this web page also lists the HF frequencies.

Good Luck !

Roger

Jesse Michaels wrote:
>
> Hi all.
>
> Does anyone know if Shuttle comms are being re-broadcast locally on a ham
> frequency in the Greater Toornto Area?
>
> Any help would be appreciated.
>
> Thanks,
>
> Jesse
>
> --
> Computing: Apple Computer, Inc (Macintosh).
> Politics: Fiscal Conservatives with a social conscience.
> Music: Spirit Of The West, Great Big Sea, Loreena McKennitt
> Email: 1. jessem@globalserve.net 2. yu153887@yorku.ca
> Other: Politiking, Radio Scanners, Microbreweries, Toronto.
> Partisan Muse: Charest in 97!

1938. Please Link My Page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C125A7.5FB4@primenet.com>
Source record: 18548

Please Link My Page

Please add a link to my home page:
http://www.qsl.net/k7on

Topics:
RTTY, Amtor, Pactor, Clover, Packet
Homebrew, QRP
Modifications
Scanning
Contesting
V/UHF
SSTV, ATV
DX
Mailing List FAQs
Equipment Manufacturer Information
BoatAnchors, Collecting
RTTY Terminal Units
HF Linear Amplifiers
...many, many more...

1939. Re: QUALITY satellite tracking software?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-07 00:00:00 UTC
From: James O'Brien <kd4cdb@bellsouth.net>
Message-ID: <33C172F4.150A@bellsouth.net>
Source record: 18549

This is a multi-part message in MIME format.

--------------5CB9529ED68
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

James O'Brien wrote:
>
> CrACKeD wrote:
> >
> > Roberto Franceschetti <pamela@netwide.net> wrote:
> > : A new version of LogSat Professional has just been released this weekend.
> > : It features astounding maps that you will not find on any other software.
> > : Check out http://www.logsat.com for more information and an online order
> > : form. You can also see it on the latest AES catalog.
> >
> > I tried the demo, and wasn't impressed. LogSat couldn't even install
> > itself properly, let alone run. Nova for Windows looks good, and its maps
> > are also impressive once you get into the "large" sizes. The only thing I
> > don't like about this software is that it doesn't seem to be able to
> > predict passes. Someone correct me if I'm wrong. I think being able to
> > predict passes is a pretty vital feature in software like this.
> >
> > CrACKeD <cracked@primenet.com>
>
> No reason to take this guy seriously. He's Burt Fisher's little flame
> trolling suckboy.

And I MEAN suckboy. You see KB7UIX is a bit queer. You go boy!

--------------5CB9529ED68
Content-Type: text/plain; charset=us-ascii; name="crack.xp"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="crack.xp"

[Deja News - The Source for Newsgroups]

[Image] [Image]

AUTHOR PROFILE: CrACKeD <cracked@primenet.com>
----

* 414 unique articles posted.
* Number of articles posted to individual newsgroups (slightly skewed by
cross-postings):
o 77 alt.2600

o 31 rec.radio.scanner
o 29 alt.hacker
o 25 rec.radio.amateur.misc
o 22 alt.destroy.microsoft
o 12 az.forsale
o 11 alt.hackers.malicious
o 11 alt.unix.wizards
o 9 alt.engr.explosives
o 9 rec.pyrotechnics
o 8 alt.fan.bill-gates
o 7 alt.radio.scanner
o 6 alt.cracks
o 6 alt.os.windows95.crash.crash.crash
o 5 alt.privacy
o 5 comp.speech
o 5 comp.unix.questions
o 4 alt.comp.virus.source.code
o 4 alt.hackers.groups
o 4 alt.security.pgp
o 4 comp.os.ms-windows.advocacy
o 4 comp.sys.ibm.pc.hardware.misc
o 3 alt.comp.compression
o 3 alt.test
o 3 comp.compression
o 3 comp.os.msdos.programmer
o 3 comp.sys.mac.advocacy
o 3 sci.crypt
o 3 sci.electronics.misc
o 2 alt.2600.codez
o 2 alt.2600.crackz
o 2 alt.2600hz
o 2 alt.aol-sucks
o 2 alt.comp.virus
o 2 alt.crackers
o 2 alt.msdos.batch
o 2 alt.msdos.programmer
o 2 alt.tasteless.jokes
o 2 comp.lang.javascript
o 2 comp.os.linux.advocacy
o 2 comp.os.msdos.4dos
o 2 comp.security.misc
o 2 comp.sys.ibm.pc.misc
o 2 comp.sys.mac.hardware.video
o 2 comp.unix.misc
o 2 comp.unix.programmer
o 2 comp.virus
o 2 rec.puzzles
o 2 rec.radio.amateur.digital.misc
o 2 sci.engr.chem
o 2 sci.geo.satellite-nav

o 2 tnn.comm.pager
o 1 alt.2600.cardz
o 1 alt.2600.debate
o 1 alt.2600.hope.announce
o 1 alt.2600.hope.d
o 1 alt.anonymous.messages
o 1 alt.aol.rejects
o 1 alt.ascii-art
o 1 alt.binaries.games
o 1 alt.binaries.warez.ibm-pc
o 1 alt.brain.teasers
o 1 alt.cellular-phone.tech
o 1 alt.databases.xbase.clipper
o 1 alt.fan.power-rangers.puke.puke.kill
o 1 alt.fan.tolkien
o 1 alt.flame.ms-windows
o 1 alt.games
o 1 alt.graffiti
o 1 alt.homosexual
o 1 alt.lang.asm
o 1 alt.lasers
o 1 alt.law-enforcement
o 1 alt.locksmithing
o 1 alt.news.microsoft
o 1 alt.personals.teen
o 1 alt.phreaking
o 1 alt.privacy.anon-server
o 1 alt.rave
o 1 alt.security
o 1 alt.support.non-smokers
o 1 alt.tv.discovery
o 1 az.teens
o 1 comp.lang.c++
o 1 comp.lang.pascal.borland
o 1 comp.os.ms-windows.apps.compatibility.win95
o 1 comp.os.os2.misc
o 1 comp.programming
o 1 comp.protocols.nfs
o 1 comp.protocols.tcp-ip.domains
o 1 comp.society.privacy
o 1 comp.sys.ibm.pc.games.adventure
o 1 news.groups
o 1 news.software.readers
o 1 rec.radio.swap
o 1 sbay.hams
o 1 sci.electronics.components
o 1 sci.electronics.design

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--------------5CB9529ED68
Content-Type: text/plain; charset=us-ascii; name="crackgay.xp"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="crackgay.xp"

Article 1 of 1

Subject: 16 yr old m seeking same
From: cracked@primenet.com
Date: 1996/02/10
Message-Id: <4fhmqj$mpk@nnrp1.news.primenet.com>
Newsgroups: alt.homosexual
[More Headers]

I'm in Tucson, AZ, interested in anyone my age who might want to chat via e-mail and especially interested in meeting some others in the Tucson area. Leave mail in you're interested, thx.

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--------------5CB9529ED68--

1940. Re: MIR accident

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <33C22E6E.6BFE@mwt.net>
Source record: 18550

Dan O'Connell wrote:
>
> On 25 Jun 1997, BJ Arts wrote:
>
> > CAPE CANAVERAL, Florida (CNN) -- A Russian supply ship crashed into the
> > space station Mir Wednesday during a test, causing one module to lose
> > pressure, NASA said. The three men on board, including a U.S. astronaut,
> > were reported to be safe.
> I saw some video of it this morning on the news; a couple of the panels
> are really mangled. Dan WA7TDZ

Yup...saw it too...nice driving!
Scott N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

1941. Satellite Antenna Usage

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: Marty Bluhm <w8aks@tminet.coom>
Message-ID: <01bc8b31$08e33e60$1c8491d0@w8aks.tminet.com>
Source record: 18551

Has anyone used the Cushcraft A270-10S (2m/440m) antenna for satellite
work?

Appreciate any information>

73
Marty, w8aks/6

1942. Bifilar helical antenna for sale

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19970708010801.VAA14223@ladder02.news.aol.com>
Source record: 18552

Andrews brand bifilar helical, design frequency 245-315 MHz, but SWR is 1.5:1 or less over entire 430-450 band. 12 dB gain, RHCP. Obviously meant to be portable, as it knocks down into 2 sections, and the reflector folds up. Measures about 8 feet long assembled, reflector 3 feet in diameter.

Asking $150, picked up in Chicago area. Can't see any way to ship....

73 de KA3HSW

1943. Decode TLM from Rover Mars Pathfinder

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: maury <i862@rocketmail.com>
Message-ID: <5pt267qvb1@menelao.polito.it>
Source record: 18553
Cross-posted to: rec.ham-radio,rec.radio.amateur.space,uk.radio.amateur

Download the program to decode TL from Rover Mars Pathfinder

http://www-dx.deis.unibo.it/htdx/

Comments and suggestions welcome.
73, Maury

1944. HELP!! NEC pagers (Cyrillic) WANTED

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: "D.Ivanov" <divanov@dol.ru>
Message-ID: <01bc8b98$0e7575c0$aa1f57c2@ppm-comm>
Source record: 18554
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.space

2Moderator: Sorry if out of conference.

Hello All,

Your help is heavily requested!!!

Our company named "Multi-Communication". We were established at January 1994. Our business - trade. We have a number of branches in different countries. We employ Russian-speaking staff there. We use office alpha-numeric paging system to organise its work. We would like to buy NEC paging receivers (pagers) from you.
We would like to receive the price on NEC-21A, NEC-26B, NEC-20B and, possibly, other 2-language Cyrillic-Latin alpha-numeric pagers. Please, send us by fax delivery terms and conditions on them, too.
We consider to place an order on
1000 NEC-21A (100-200 monthly - depending on prices),
1000 NEC-20B (100-200 monthly - depending on prices),
1000 NEC-26B (100-200 monthly - depending on prices).
System:
Frequencies: 159,825+MHz and 161,950+MHz,
Rate: 1200 baud,
Format: POCSAG.
Please, call us:
007 095 921-4709,
007 095 971-5514,
007 095 971-5328.
Our fax:
007 095 921-7780.

Our email:
m-comm@dol.ru

If you have no possibility to deliver such volumes directly, please give us the list of distributors with contact numbers.

Best regards,

Dmitri Ivanov
Multi-Communication

1945. Check This Out!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: Darryl Hill <drhill@mts.net>
Message-ID: <5ptng3$7vd2@top.MTS.Net>
Source record: 18555

http://freedomstarr.com/?HI3009665

1946. Re: *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c272b2.16623284@news.atl.bellsouth.net>
Source record: 18556
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

On 6 Jul 1997 23:15:58 GMT, mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) wrote:
>On Fri, 04 Jul 1997 19:27:40 GMT, m@s@ <masa@writemeNOSPAM.com> wrote:
>>Please continue crossposting to "rec.radio.amateur" newsgroup.
>>
> Well, that's because rec.radio.amateur was split into topical groups
>several years ago. The reason that it has seen no traffic is that it's
>no longer a valid newsgroup. If it's appearing on your server, that only
>means that your news administrator isn't doing his job.

No. Rec.radio.amateur is a valid newsgroup. It *has* to exist in order
to have newsgroups below it in the heirarchy, IE the subdirectories
holding rec.radio.amateur.* go in the rec.radio.amateur directory on
the servers. But there is no reason to ever post directly to it, that's
what the topical newsgroups below it in the hierarchy are for. It
is merely a placeholder group in the heirarchy.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1947. Re: Mars Pathfinder Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: Anonymous@Anonymous.com
Message-ID: <33c27a6b.25036653@news.img.net>
Source record: 18557
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.scanner,rec.radio.scanner

http://www.geocities.com/Yosemite/1325/nasa.htm

Pacific Brimm: Internet Cafe

1948. radio waves in space

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: The Marlin Family <marlins@ocracoke.net>
Message-ID: <33C29FBE.6CB7@ocracoke.net>
Source record: 18558

very near 186.000 miles per second

1949. FAQ WANTED

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: 92chisht@news.scar.utoronto.ca
Message-ID: <ED0Iyo.6I8@news.scar.utoronto.ca>
Source record: 18559

HELLO EVERYONE. I WAS JUST WONDERING WHAT THIS NEWSGROUP WAS ABOUT. I HAVE A GENERAL IDEA JUST FROM WHAT I'VE READ AND I WAS JUST WONDERING IF SOMEONE COULD PLEASE ELABORATE.

THANKYOU.

JAMAL

1950. Re: *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: kd1hz@anomaly.ideamation.com.nospam
Message-ID: <5pu44i$33p@anomaly.ideamation.com>
Source record: 18560
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

In article <33c272b2.16623284@news.atl.bellsouth.net>,
Gary Coffman <ke4zv@bellsouth.net> wrote:

>No. Rec.radio.amateur is a valid newsgroup. It *has* to exist in order
>to have newsgroups below it in the heirarchy, IE the subdirectories
>holding rec.radio.amateur.* go in the rec.radio.amateur directory on
>the servers.

Sorry Gary, you're just plain wrong on this issue.

On news servers, the DIRECTORY "rec/radio/amateur" must exist in order
for "rec/radio/amateur/misc" (etc.) to exist.

There is no requirement for the news servers to recognize "rec.radio.amateur"
as a valid newsgroup. A review of existing USENET newsgroups will show
numerous examples where this is true.

USENET server software, primarily on UNIX systems, use an "active" file
to define which newsgroups are recognized by the site. The newsgroup
name is "mapped" to a physical directory name, where articles are stored
as individual numbered files based on an incremental value for the
group, as defined in the "active" file. There is absolutely no requirement
for me to define "rec.radio.amateur" in my active file before I can
define "rec.radio.amateur.misc".

MD
--
-- Ted Kennedy has killed more people with his car than I have
-- with my guns.
--
-- If you don't like my opinions, that's just too damn bad.

1951. ARLK053 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk053.1997@arrl.org>
Source record: 18561
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK053
ARLK053 Keplerian data

ZCZC SK53
QST de W1AW
Keplerian Bulletin 53 ARLK053
From ARRL Headquarters
Newington, CT July 8, 1997
To all radio amateurs

SB KEP ARL ARLK053
ARLK053 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-94
1 24849U 97032A 97189.67500000 .00001703 00000-0 36963-5 0 219
2 24849 28.4699 329.1163 0003950 53.6690 139.6953 15.90402606 1097
AO-10
1 14129U 83058B 97189.02219955 .00000048 00000-0 10000-3 0 04955
2 14129 26.0158 138.4185 6060909 132.4033 297.8873 2.05880396077815
RS-10/11
1 18129U 87054A 97189.16857219 .00000040 00000-0 27051-4 0 03793
2 18129 82.9249 223.2204 0011745 155.5737 204.5975 13.72380000503119
UO-11
1 14781U 84021B 97188.93663094 .00000079 00000-0 21273-4 0 00018
2 14781 97.8367 169.3409 0011037 302.7307 57.2834 14.69564221714303
RS-12/13
1 21089U 91007A 97189.18984535 .00000021 00000-0 70100-5 0 00036
2 21089 82.9219 263.0649 0027738 238.2248 121.6212 13.74082979322045
UO-14
1 20437U 90005B 97189.16001153 .00000003 00000-0 17995-4 0 02835
2 20437 98.5180 270.3763 0011256 142.2335 217.9641 14.29964748389219
RS-15
1 23439U 94085A 97188.82764269 -.00000039 00000-0 10000-3 0 02400
2 23439 64.8148 119.4616 0148539 128.6269 232.8056 11.27527887104263
AO-16
1 20439U 90005D 97187.63470878 -.00000044 00000-0 -15265-6 0 00926
2 20439 98.5347 271.8533 0011408 148.4772 211.7107 14.30011615389014
```

```
RS-16
1 24744U 97010A 97189.13700496 .00001845 00000-0 63059-4 0 00729
2 24744 97.2747 93.8062 0007903 31.7292 328.4443 15.31521476019294
DO-17
1 20440U 90005E 97189.15786703 -.00000065 00000-0 -83329-5 0 00933
2 20440 98.5381 274.2202 0011658 142.9673 217.2318 14.30154728389265
WO-18
1 20441U 90005F 97189.15622365 -.00000050 00000-0 -25152-5 0 01055
2 20441 98.5369 274.1159 0012312 143.2644 216.9386 14.30121983389260
LO-19
1 20442U 90005G 97189.19179199 .00000012 00000-0 21404-4 0 00951
2 20442 98.5428 274.8327 0012468 142.3973 217.8085 14.30237868389297
FO-20
1 20480U 90013C 97188.92651113 .00000017 00000-0 11593-3 0 00012
2 20480 99.0482 146.6165 0540663 330.5392 26.6215 12.83238982347367
AO-21
1 21087U 91006A 97189.09106729 .00000094 00000-0 82657-4 0 08356
2 21087 82.9401 36.1072 0033670 209.5476 150.3778 13.74583949323029
UO-22
1 21575U 91050B 97189.13363924 .00000035 00000-0 26009-4 0 07975
2 21575 98.2993 248.9369 0007256 184.7147 175.3971 14.37076213313492
KO-23
1 22077U 92052B 97189.12582595 -.00000037 00000-0 10000-3 0 06922
2 22077 66.0757 101.3925 0008380 208.0138 152.0427 12.86302616230442
KO-25
1 22828U 93061F 97189.15440903 .00000014 00000-0 22727-4 0 05592
2 22828 98.5403 263.2445 0009883 160.0272 200.1296 14.28183801165205
IO-26
1 22826U 93061D 97189.19520984 -.00000022 00000-0 83951-5 0 05791
2 22826 98.5429 263.1989 0008755 176.5808 183.5430 14.27839970197086
AO-27
1 22825U 93061C 97189.15829992 .00000012 00000-0 22170-4 0 05789
2 22825 98.5441 262.9145 0008128 173.7040 186.4248 14.27730460197062
FO-29
1 24278U 96046B 97189.14872639 -.00000034 00000-0 -14137-5 0 01107
2 24278 98.5379 227.5199 0352178 131.8130 231.3662 13.52631733043952
MO-30
1 24305U 96052B 97188.91591926 .00000204 00000-0 20364-3 0 01234
2 24305 82.9326 339.2591 0029440 145.5297 214.7768 13.73095205041904
Mir
1 16609U 86017A 97189.06637168 .00003534 00000-0 50000-4 0 4488
2 16609 51.6597 340.9792 0003825 227.1342 132.8794 15.59521877650285

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
July 12, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

1952. Radio Meteor Obs. Bull. June 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.122.33C2AA86@vvs.innet.be>
Source record: 18562

Radio Meteor Observation Bulletin No. 47 July 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.50 Sofia Bulgaria 10 24hrs
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elev 27 deg
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

June 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

```
Jun |
1997 | 20h 21 22 23 00 01 02 03 04 05 06
------+-----------------------------------------------------
1- 2 | 15 34 53 54 68 73 102 & & & &
2- 3 | 21 34 50 66 85 95 95 147 131 165 &
3- 4 | 31 47 59 69 101 100 142 152 & & &
4- 5 | & 40 & 62 112 141 137 176 & & &
5- 6 | 20 38 44 54 78 94 123 155 156 - -
6- 7 | 21 49 70 70 98 103 146 183 & & &
.......
10-11 | 21 27 51 61 81 118 153 174 176 & &
.......
```

```
14-15 | 13 28 45 52 74 94 122 171 156 121 151
15-16 | 18 29 51 69 81 93 142 134 164 - -
16-17 | 22 34 56 72 78 117 153 141 183 175 131
17-18 | 27 86 50 77 111 122 165 182 192 250 128
18-19 | & 25 75 117 81 117 140 189 124 149 &
19-20 | 37 53 71 82 82 101 118 168 157 158 114
20-21 | 23 47 54 85 100 125 119 176 200 147 131
21-22 |
22-23 | 12 29 35 59 96 29
23-24 | 29 34 40 110 81 89 95 125 105 138 89
24-25 | 21 41 39 68 70 89 107 142 129 131 139
25-26 | 14 18 43 68 87 87 150 144 114 105 118
26-27 | 12 31 64 57 89 93 114 144 128 106 78
27-28 | - 51 41 56 77 91 113 154 151 140 85
28-29 | - - 33 59 82 96 103 131 94 112 96
29-30 | - 20 41 72 80 80 81 133 140 117 106
30-01 | 21 28 79 68 71 115 132& & & & -
------+-----------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06
Jun |
```

Notes:
. & sporadic-E.
. no observations on June 7-10 and June 11-14 because of thunderstorms.
. local time = UT + 2 hours.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 30 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

```
-----------------------------------------------------------
| Jun 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---------------------------------------------------------------
0 | 28 16 11 17 29 16 30 13 27 45 21 43 38 33 52
1 | 17 22 20 38 30 51 26 42 33 19 41 43 108 50
2 | 22 28 31 39 55 57 37 58 58 52 87 86 76 79
3 | 33 66 55 129 58 77 69 79 120 129 128 113
4 | 92 63 61 125 84 66 84 82 145 129 150 119
5 | 55 61 146 142 91 112 88 180 154 197 129
6 | 101 148 153 102 107 109 185 160 198 155
7 | 62 88 158 108 117 108 68 159 140 241 165
8 | 23 39 109 117 93 125 74 187 145 220 155
9 | 29 33 97 114 120 112 108 56 107 115 152 153
10 | 30 24 22 81 106 67 85 51 82 189 102 103
11 | 26 10 10 59 64 96 33 45 23 52 115 79
12 | 16 13 103 31 17 63 17 30 50 37 55 52
13 | 18 7 14 52 31 24 58 14 11 20 23 66 38
14 | 15 4 15 35 23 44 20 12 22 29 38
15 | 12 4 56 27 62 19 23 22 36 35 41
16 | 14 11 20 39 18 23 27 33 46 27
17 | 16 10 8 5 7 13 13 13 20
18 | 4 9 47 19 27 16 20 17 23
19 | 6 9 13 11 10 9 9 9 12
20 | 15 9 8 11 19 11 9 26 15 10 16 14
21 | 8 9 13 12 9 14 9 23 12 19 18 22 17 18
22 | 10 5 21 16 15 17 14 19 10 15 23 23 18 30 24
23 | 19 11 18 13 16 26 15 22 21 20 17 23 21 37 24
---+---------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

-----------------------------------------------------------
| Jun 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+---------------------------------------------------------------
0 | 30 26 35 26 29 24 35 29 38 42 36 53 37 45 40
1 | 44 53 40 43 43 72 55 43 38 74 53 50 56 81 48
2 | 61 50 65 44 43 64 73 77 58 96 96 65 63 69 71
3 | 92 94 119 110 98 113 95 98 95 86 102 126 110 110 105
4 | 116 104 139 87 118 111 93 98 102 124 110 97 99 134 123
5 | 107 133 136 138 118 102 108 151 187 127 132 111 128 124
6 | 99 136 145 101 151 108 132 153 166 142 161 113 142
7 | 71 166 91 130 118 122 84 97 98 124 170 111 110
8 | 88 100 72 118 121 60 97 99 165 140 92
9 | 156 84 52 78 94 109 60 91 165 87 128 113 94
10 | 156 111 58 47 121 97 72 49 82 86 94 81 49
11 | 55 38 30 29 72 66 76 92 66 66
12 | 40 26 15 91 45 14 17 37 48 40 34
13 | 36 22 17 38 25 32 50 18 12 47 13 47 23 27
```

```
14 | 19 13 20 10 31 36 20 20 22 22 11 67 33 14
15 | 26 21 21 26 27 49 28 32 25 28 32 30
16 | 23 20 24 43 23 32 24 30 32 23 12
17 | 29 12 12 16 19 29 14 19 30 20
18 | 19 11 12 14 37 13 14 24 14 14 12
19 | 9 46 11 8 17 10 16 16 26 10
20 | 23 12 16 27 16 15 12 29 18 19 24 28 14
21 | 13 20 18 22 19 18 40 24 20 17 23 33 23 36 13
22 | 12 23 18 20 14 18 21 13 26 23 30 17 35 35 17
23 | 17 29 15 24 34 17 20 23 31 26 26 24 31 27 20
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

Notes:
. local time = UT + 2 hours.

Pierre De Groote

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitter: 30 kW TV video carrier near Bari, Italy, distance 700 km,
direction south. Several high mountains in transmitter
direction prevent direct and tropospheric reception.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record
the audio signal. 20 channels of 2 Hz width are used for meteor
identification, pictures with interference or sporadic-E signatures
are manually rejected.

All meteor counts below are corrected for a full hour observing time. If
the recording duration is 20-40 minutes, a dot is shown after the value.
Data for less than 20 minutes observing time are not shown here.

Meteor counts of reflections longer than 6.5 seconds: assumed
to be overdense.

```
| Jun 1997
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
----+------------------------------------------------------------
0 | 1 3 2 2 2 6 1 4 5 2 4 11 3
1 | 6 11 3 11 3 4 8 6 4 4 8 3
2 | 3 6 6 7 6 6 4 12 3 13 1
3 | 9 4 7 12 11 13 18 10 3 4 14 7
4 | 5 4 12 10 7 15 15 15 12 24 25 16 20
5 | 6 16. 21 15 8 23 13 26 24 20 20 15 37 13
6 | 6 5. 21 30. 19 29 24 25 20 43 18 55
7 | 11 27 16 26 17 21 62. 39 55 30 47
8 | 12 20 20 12 23 18 33 17 25
9 | 13 17 13 11 9 16 20. 25
10 | 7 17 22 24 30 10 25 25
```

```
11 | 10 28. 19 25 33. 11
12 | 6 8. 10 16. 21. 21.
13 | 5 6 13. 8 9.
....
20 | 1 1 1 1 2 0 0 2. 5. 0. 4 0
21 | 0 2 2 10 1 3 0 1 0. 5 1 4 1
22 | 4 5 5 2 3 2 1 6 1 4 5 3 4
23 | 1 13 3 5 5 5 3 7 0 3 4 3 10
----+------------------------------------------------------------
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Jun 1997

| Jun 1997
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
----+------------------------------------------------------------
0 | 12 5 11 11 12 6 7 3 5. 12 4 7 0
1 | 6 3 6 13 16 6 4 10 6 9 8 3 10
2 | 3 8 13. 13 14 2 8 14 7 7 6 6
3 | 10 8 24 11 17 6 10 8 13 10 7 8
4 | 11 15 23. 19 10 16 11 14 17 9 7 7 6
5 | 13. 23. 39. 19 12 13. 8 26 10 7 10 21 12
6 | 34 12 28. 21 6 14 7 20 16 13 15 12
7 | 50 6 17 9 14 10 23 22 12. 15 10.
8 | 44. 13. 19 15 13. 6 25. 11 11 10
9 | 46. 12 5. 10 4 15 10 11
10 | 18. 11. 14 13 5 9 7 14
11 | 22 28 16. 18. 13 13. 2.
12 | 15. 11 13 8 13
13 | 13. 11. 7. 4 0.
....
20 | 1 0 3. 3 4. 1
21 | 2 3 3. 4. 3 7 2 0
22 | 6 4 0 1 2 6 10 10 2 3
23 | 6 3. 16 7 3 7 2 7 5 24. 5 1
----+------------------------------------------------------------
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
| Jun 1997

Meteor counts of 0.5 seconds length (shortest duration available,
assumed to be underdense).

| Jun 1997
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
----+------------------------------------------------------------
0 |173,173, ,198,197,154,203,197,217,213,189,235, ,231,252
1 |169,192, ,239,217,243,220,225,246,249,236,264, , ,281
2 |219,209, ,235,252,250,255,246,284, ,245,347, , ,340
3 |200,231, ,219,270,236,258,236,278,251,228,289, , ,287
4 |181,217, ,250,261,247,270,249,218,249,245,243, ,263,284
5 |190,249, ,277,252,219,246,249,251,215,268,251,293,212,307
6 |226,208, ,273, ,253,241,213,279,269,249,245,289,224,
```

```
7 |223, , ,244, ,217,245,221,225,187,205,239,241,255,
8 | ,200, , , ,196,226,224,247,223, ,246,287,265,
9 | ,175, , , ,170,226,208,216,217, ,190,235, ,
10 | ,162, , ,189,195,209,210,188,217, ,214, , ,
11 | ,184, , , ,209,187,183,191,218, , , , ,
12 | ,189, , , ,209,182,219, ,181,186, , , ,
13 | ,148, , , ,154,133, ,189,204, , , , ,
....
20 |103, ,135, 71, 87, , 62, 83, , 92,114,135,146,148,124
21 |102, ,171,132, 92,147,128,136, ,110,156,159,156,132,122
22 |146, ,218,145,115,213,138,144,177,146,213, ,185,183,162
23 |155, ,229,151,146,186,176,174,185,168,234, ,222,225,198
----+------------------------------------------------------------
UT | 1 2 3 4 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
| Jun 1997

| Jun 1997
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
----+------------------------------------------------------------
0 |221,207,225,271,258,234, , ,266,284,208,247,290,199,239
1 |265,275,301,286,301,265, , ,324,299,274,284,271,279,236
2 |258,251, ,322,316,256, , ,285,276,289,301,272,272,248
3 |288,278, ,283,286,243, , ,314,310,270,265,267,233,237
4 |232,232,251,256,283,258, , ,255,317,239,305,261,247,210
5 |263, ,280,230,251,261, ,271,254,255,268,253,275,214,196
6 |248,237, ,274,273,260, ,254,207,288,245,272,263,222,
7 |221,218, , ,270,268, ,261,241,283,246,251,238,214,
8 |191,206,206, ,240, , ,318,274,241,217,233,242, ,
9 |198, , , ,214,244, ,193,210, ,202,197,208, ,
10 | ,223, , ,233,198, ,192,186, ,192,184,188, ,
11 | , , , ,207, , ,187, ,218,215,164,206,137,
12 | , , , ,226, , , , ,180,166,156,127, ,
13 | , , ,254, , , , , ,208,128,135,126, ,
....
20 | 98, , ,150, , 93, , , , ,108,128, ,108,
21 |120, , , , ,155, , ,186,162,139,156, ,125,109
22 |166, , , , ,183, ,182,200,167,189,191,182,146, 97
23 |209,198,260, , ,192, ,187,226,213,210,199,212,199,123
----+------------------------------------------------------------
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
| Jun 1997
```

Notes:
. blank value means either few or no data available, interference,
data loss due to hard disk failure (!) or offline during thunderstorms.

. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)

Werfried Kuneth

Observer: Chikara Shimoda

Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were recorded on a pen-recorder chart.

June	UT												
1997	11	12	13	14	15	16	17	18	19	20	21	22	*(1) **(2)
1	4	22	20	18	18	27	12	20	31	35	35	31	18.2 27.3
2	13	10	19	22	16	16	17	20	19	28	50	30	16.0 27.3
3	11	19	20	18	16	24	17	22	34	46	39	39	18.0 32.8
4	10	15	17	19	21	20	10	22	33	45	42	38	17.0
5	10	13	22	15	22	19	19	19	35	43	29	26	16.8 28.5
6	7	10	19	13	21	16	19	31	37	43	38	31	14.3 33.2
7	9	11	18	27	31	27	23	19	46	44	46	47	20.5 37.5
8	7	15	20	24	25	25	13	21	32	54	57	35	19.3 35.3
9	12	11	19	22	17	16	16	31	44	33	55	45	16.2 37.3
10	13	10	24	22	22	36	24	27	28	35	48	40	21.2 33.7
11	21	16	20	22	30	23	22	31	40	52	57	40	22.0 40.3
12	12	12	21	26	30	21	26	32	39	50	52	41	20.3 40.0
13	9	12	20	27	22	18	18	27	36	44	43	44	18.0 35.3
14	16	13	22	22	26	18	18	20					19.5
15	15												
16	10	20	31	26	23	15	21	32	29	45	48	40	20.8 35.8
17	10	11	17	24	24	20	21	28	35	38	45	40	17.7 34.5
18	12	23	14	29	19	12	17	22	21	48	41	39	18.2 31.3
19	12	24	15	30	22	27	22	22	31	34	41	20	21.7 28.3
20	14	14	28	26	27	32	25	40	32	28	33	37	23.5 32.5
21	12	23	18	20	25	22	24	25	25	29	33	24	20.0 26.7
22	11	20	18	29	25	28	36	45	40	29			21.8 37.5
23	11	15	14	24	20	18	20	29	24	27	27	21	17.0 24.7
24	11	18	29	33	25	19	23	23	28	38			22.5 28.0
25	13	14	20	26	21	24	18	14	26	32	32	30	19.7 25.3
26	8	16	21	21	22	23	26	22	25	36	31	26	18.5 27.7
27	6	12	21	20	23	19	26	15	24	26	28	21	16.8 23.3
28	11	18	31	28	21	21	25	27	28	26	29	26	21.7 26.8
29	12	19	25	31	34	28	36	42	42	41			24.8 40.3
30	13	23	20	31	32	19	23	35	29	41	32	29	23.0 31.5
1997	11	12	13	14	15	16	17	18	19	20	21	22	*(1) **(2)
June	UT												

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

- local time = JST = UT + 9 hours

Chikara Shimoda

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)

Arietids, zeta Perseids

Meteor counts in one hour intervals starting at:

| 1997
UT | 5 Jun 6 Jun 7 Jun 8 Jun 9 Jun 10 Jun 11 Jun 12 Jun
----+---
0 | 230 125 312 258 314 219 273 301
1 | 261 156 346 317 339 425 358
2 | 377 194 448 366 381 446 601
3 | 402 254 426 485 554 592 705
4 | 603 402 516 465 590 697 691
5 | 548 575 627 657 606 718 693 880
6 | 603 716 606 587 721 726 825
7 | 542 707 638 683 824 672 837
8 | 492 674 629 525 717 541 680
9 | 368 381 447 452 384 497 526 459
10 | 467 231 426 260 299 374 308 371
11 | 320 339 281 244 276 393 341 332
12 | 420 489 544 453 445 528 480 474
13 | 380 498 471 458 594 501 445 467
14 | 286 475 371 334 411 459 391 398
15 | 245 244 249 228 283 263 279 269
16 | 162 136 153 154 177 221 198 197
17 | 131 104 140 80 105 146 138 113
18 | 94 95 101 83 78 102 101 164
19 | 88 92 103 111 99 114 98 114
20 | 71 128 95 127 91 123 142 123
21 | 91 130 121 175 145 163 132 151
22 | 78 156 154 192 167 187 195 156
23 | 92 215 228 233 198 247 229 268
----+---
UT | 5 Jun 6 Jun 7 Jun 8 Jun 9 Jun 10 Jun 11 Jun 12 Jun
| 1997

. sporadic-E on June 5, 8, and 9.

Ilkka Yrjola / via M. De Meyere

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. CONTRIBUTORS / USEFUL ADDRESSES

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: kuneth@net4you.co.at

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532

E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
homepage: http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

--
Christian Steyaert (RMOB9706) 8 July 1997
--

1953. Pathfinder freqs ???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: radio@alaska.net
Message-ID: <5puecs$84f$1@binary.alaska.net>
Source record: 18563

Anyone know the frequencies that Pathfinder is using to transmit back
to Earth?? Steve

1954. Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-08 00:00:00 UTC
From: radio@alaska.net
Message-ID: <5puf2h$8cu$1@binary.alaska.net>
Source record: 18564

What antennas and tx power on Pathfinder? What's the link between the rover and pathfinder? Thanks Steve

1955. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: pwinter@best.com
Message-ID: <5q1sv4foc1@shell5.ba.best.com>
Source record: 18425

In article <5puf2h$8cu$1@binary.alaska.net>, <radio@alaska.net> wrote:
>What antennas and tx power on Pathfinder? What's the link between the
>rover and pathfinder? Thanks Steve

Phil Karn, KA9Q, has pulled together quite a bit of info about
the Pathfinder radio links in order to figure out approximately
what the signal strength is at Earth; see his Web site at:

http://people.qualcomm.com/karn/

Of course, his calculations assume that you have a 34m dish in
your back yard. :-)

Also, for the other person who asked about decoding MPF telemetry,
JPL is posting the data and some Italian hams have written a
program to decode it. See:

http://www-dx.deis.unibo.it/htdx/mars/ind_mars.html

I think it's a zipped file, so it's probably for Windows or
DOS systems.

Patty

================================ N6BIS ================================
"Due South" will be back this fall!
See http://fly.HiWAAY.net/~warydbom/duesouth/3seasus.htm for a list
of the U.S. stations that will be carrying it in syndication.
========== patty@wintertime.com ======= Sunnyvale, Calif. =============

1956. Power problems on the sats

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8c0a$feaf6380$d9280ace@home.the-bridge.net>
Source record: 18565

As an OO I have received many completes about ops running High power on many of the amateur birds. During the past few days I have observed stations on FO -20 and 29 running enough power so that they are 5 to 10 s units above the beacon signal. In one case, the operators, 2 of them, were causing FO-20's agc to block out all other incoming signals. Just a rule of thumb for the satellites, keep an eye on your power and make sure that your downlink signal is not stronger then the beacon signal. A few s-units higher or lower is not too much of a problem. By running HIGH POWER the offending station(s) over a short or long period of time, make the use of these birds impossible for other stations, with low power or low gain antenna, to work. I can personally keep my power down to 5 watts and work the birds very well and still keep at the same signal strength as the beacon.

Some fixes to this problem. If you need that much power to hear your own downlink signal, its time to upgrade your receive hardware. Better coax, or preamps will help. As would better antenna(s). Also take a look at what the beacon is doing while you are on. See how high it gets during a pass. Use this high mark as a bench mark for your signal during the pass. I'm sure there are other good suggestions out there to help in keeping your power down.

I send this message to help others who might want to use the birds but do not have big gun stations. The complaints I have received covered the RS birds to AO-10. I have received many complaints and will observe the birds for power compliance. Both CW and SSB ops should take a look at what they need power wise to work the birds. Too much power can and does cause others to be knocked out of use of the sats. I hope this helps others out there to be able to work the sats with lower or low power. 73 de Bj

--

BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

1957. Re: radio waves in space

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <33C36A91.43EA@phoenix.net>
Source record: 18566

The Marlin Family wrote:
>
> very near 186.000 miles per second
In other words if you lived in space it would take about 16 secs to send
a sig 3000 miles. Too slow for me I'll stay in Texas where things move
a bit faster...

1958. photos from mars

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: bnoordew@pi.net
Message-ID: <33c378c0.949543@news.pi.net>
Source record: 18567

Dutch page, but click on the first chance youve got
http://home.pi.net/~bnoordew/home.htm
Vrije radio een noodzaak en meer over de media.
http://home.pi.net/~bnoordew/home.htm

1959. Sale: M2 sat antennas, HTs, mobile, more!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <n1tx@amsat.org>
Message-ID: <33C3A44A.4225@amsat.org>
Source record: 18568

BIG Ham/SWL sale!

ICOM IC-3220H 144/440 MHz mobile xcvr w/ manual $300

Diamond SG7500NMO dual-band ant with mag mount $30

Kenwood TH-75A 144/440 MHz HT with case, ant, $140
two batteries, wall chgr, mic/headset with VOX

ICOM IC-2AT 2m HT with Larsen Kulduckie ant, $110
two batteries and wall charger

M2 2MCP14 10.3 dBdc satellite antenna* $80

M2 435CP30 14.8 dBdc satellite antenna* $95

Info-Tech M6000 CW/RTTY/PACKET/TOR/TDM $275
digital communications decoder, v9.01 firmware
and video output with manual

Koyo 9" B&W monitor for M6000 $55

Sony ICF-SW77 shortwave receiver w/ manual $285

All equipment in very good to excellent condition except Isopole
(good). Note that HT batteries are NiCds and are not new. They
have not been abused, but their capacity is limited.

PRICES ARE FIRM AND INCLUDE UPS COD SHIPPING TO LOWER 48 STATES.
SAVE 5% AND GET FREE DELIVERY FOR CASH WITHIN 50 MILES OF CONCORD,
NH.

*Sorry, but satellite antennas cannot be shipped.

Phone weekdays: 603-429-0111 x530
Evenings/Weekends: 603-588-6103
Email: n1tx@amsat.org

Please, NO calls before 0900 or after 2100 EDT. Thanks!

73 Larry Ledlow N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

1960. ! FREE PREDICTIONS BY PTOVEN PSYCHICS

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: dov@superlink.net
Message-ID: <5q0jhtaec4876@earth.superlink.net>
Source record: 18569

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1961. * Amateur CW/Voice Satellite Frequencies FAQ 07.08.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0907971103020001@cqtlm-pm2-074.dowco.com>
Source record: 18570
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ07.08
Amateur CW/Voice Satellite Frequencies for July 8, 1997.

BID: $FREQ0708
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
```

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-10's beacon, ROBOT and transponder remain silent while designer and builder Andy Papkov carries out experimental work with the satellite from the RS3A command station. Leonid Labutin UA3CR reports that it is hoped that RS-10 will be active again soon, long before it's tenth birthday.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

1997 July 8(Fri) 09:06z JA

* Mir Simplex - Astronaut Mike Foale has been making the odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and the 145.985 simplex have been used.

* SAREX Mission STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

CREW MEMBERS with Amateur Radio call signs:
James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

The following STS-94 SAREX summary information was obtained from several sources at NASA, the ARRL, and AMSAT including portions of AMSAT News Service bulletin numbers $ANS-166.02 and $ANS-159.02.

During SAREX missions, the astronauts will typically make scheduled radio contacts with schools, random radio contacts with the Amateur Radio community and personal contacts with their families.

Seventeen schools, including one in the People's Republic of China, are scheduled to talk with the astronauts. During the earlier mission, Columbia's premature return to Earth on April 8 posponed all scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for the July mission, which will again carry the microgravity science lab. Three hams are among the STS-94 crew members.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in science, math, technology and the U.S. space program.

STS-94 is a long duration shuttle flight where crew members will work in shifts around the clock. Shift team members are as follows:

RED TEAM
Commander (CDR): Jim Halsell, KC5RNI
Pilot (PLT): Susan Still

Mission Specialist (MS3): Donald Thomas, KC5FVF
Payload Specialist (PS2): Greg Linteris

BLUE TEAM
Mission Specialist (MS1): Janice Voss, KC5BTK
Mission Specialist (MS2): Michael Gernhardt
Payload Specialist (PS1): Roger Crouch

The SAREX Working Group has designated the following frequencies during the STS-94 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz FM
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz***
FM Packet Uplink: 144.49 MHz***

***If packet is on the air.

CONFIGURATION: Officially, the SAREX hardware is flying in Configuration B. SAREX Configuration B is voice only, battery operation. The SAREX equipment on-board STS-94 includes the Motorola 2-meter FM hand-held transceiver, 15 spare batteries, the window antenna, SAREX headset assembly, personal recorder and the required interconnecting cables. Since STS-94 is an extended duration flight with power hungry primary experiments, the power allocated for SAREX is zero watts. The SAREX team is also flying the Heathkit Packet Radio TNC for potential use later in the flight. In the event that power conservation measures are successful, the mission control team will advise SAREX and the astronauts to initiate use of the Packet Radio system which also includes one of the shuttle laptop computers or PGSCs.

Please stay tuned to these SAREX Working Group bulletins and sarex@amsat.org during the mission for late breaking news regarding packet operation.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1 (If turned on during the flight)

Hams should avoid transmitting on the shuttle's downlink frequencies. The crew will not favor any uplink frequency, so your ability to communicate with SAREX will be the "luck of the draw." Transmit only when the shuttle is within range of your station, and when the shuttle station is on-the-air.

The crew is using separate receive and transmit frequencies. PLEASE do not transmit on the shuttle's DOWNLINK frequency. The DOWNLINK is your receiving frequency. The UPLINK is your transmitting frequency.

QSL VIA: Send reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Include the following information in your QSL or report: STS-94, date and time in UTC, frequency and mode

(FM; voice or packet). In addition, you must also include a SASE using
a large, business-sized envelope if you wish to receive a card.

STS-94 is the 23rd flight of Columbia and the 85th mission
flown since the start of the Space Shuttle program in April 1981.

[Radio amateurs are encouraged to relay these SAREX bulletins to
their local packet BBS as long as the Bulletin IDentification (BID)
is preserved. The BID is the character string beginning with the
dollar sign ($), for example as in "SB SAREX @ AMSAT $STS-94.001"
without the quotation marks.]

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

1962. ! TROUBLE WITH LOVE? TRY A PSYCHIC FREE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: dov@superlink.net
Message-ID: <5q0qfreik4876@earth.superlink.net>
Source record: 18571

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

1963. Help for Mir On The Way

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33C425BD.7A2D@ix.netcom.com>
Source record: 18572

Found this on rec.humor.funny - sorry for cross-post, but it's
appropriate here :-)
--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
--
Subject:
Help for space station on the way
Date:
Mon, 7 Jul 97 3:20:01 EDT
From:
patra@lorenz.physik.tu-berlin.de (Michael Patra)
Newsgroups:
rec.humor.funny

MOSCOW. The Russian space authority has today successfully launched an unmanned supply ship, Progress M-35. It carries much needed material for repairing space station Mir, which was damaged when another supply ship crashed into it. Progress M-35 is scheduled to collide with Mir on Monday.

1964. My Web Page Needs Help!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C447B7.538E@primenet.com>
Source record: 18573

My Web Page Needs Help!

And if you don't beleive me,
just take a look:
http://www.qsl.net/k7on

Anyway, I am looking for new
materials to add to my web
page: computer, electronics,
amateur radio, swl, scanning,
experimenting, homebrew, etc.

All contributors will receive
proper credit for their work
and I will maintain on WWW at
my site for you.

You may submit any text files,
GIF or JPG pictures, WAV sounds,
etc. I can also accept photographs
and text via snail mail (see below).

Please contribute your knowledge to
this worthwhile project.

Brian Short
1994 E Laguna Dr
Tempe, Az 85282

1965. Re: MIR accident

Newsgroup: rec.radio.amateur.space
Date: 1997-07-09 00:00:00 UTC
From: PriceDav.RadOnc@Shands.ufl.edu
Message-ID: <5q0gqc$8ub@no-names.nerdc.ufl.edu>
Source record: 18574

In article <33C22E6E.6BFE@mwt.net>, acepilot@mwt.net says...
>
>Dan O'Connell wrote:
>>
>> On 25 Jun 1997, BJ Arts wrote:
>>
>> > CAPE CANAVERAL, Florida (CNN) -- A Russian supply ship crashed
into the
>> > space station Mir Wednesday during a test, causing one module to
lose
>> > pressure, NASA said. The three men on board, including a U.S.
astronaut,
>> > were reported to be safe.
>> I saw some video of it this morning on the news; a couple of the
panels
>> are really mangled. Dan WA7TDZ
>
>Yup...saw it too...nice driving!
>Scott N0EDV
>
>--
>Gotta Fly or
>Gonna Die !
>--Ask me about my
> Aeronca Super Chief--

I thinks time to push the delete button on MIR

1966. This is great-Like ice tea

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: james@elivenet.net
Message-ID: <5q18tq$6da$31@nw003.infi.net>
Source record: 18426

Hey, just thought i'd share with everyone,
I found a site with loads of nude CHEERLEADERs. The
address is:

http://www.mid-night.com/

--Jason--

(Sorry for the intrusion, everyone needs some short skirts in their life)

P.S. They also a have spanish / latina women archive

1967. Re: Pathfinder freqs ???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: n9rze@prairienet.org
Message-ID: <n9rze-0907972145080001@aardvark-3.slip.uiuc.edu>
Source record: 18427

In article <5puecs$84f$1@binary.alaska.net>, radio@alaska.net wrote:

> Anyone know the frequencies that Pathfinder is using to transmit back
> to Earth?? Steve

Somewhere in the 1.9 GHz range. Thats all I heard. It would be neat if a HAM could RX the signal, now decoding it would be another thing. Then you could debunk all those skeptics saying Pathfinder is not on Mars.

-Marcus Damberger / N9RZE Amateur Radio

1968. Re: radio waves in space

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: "Paul Titze VK2THN [HACK.AU.]" <ptitze@astron.physics.usyd.edu.au>
Message-ID: <33C43CF7.6EE3@astron.physics.usyd.edu.au>
Source record: 18428

jedent@phoenix.net wrote:
>
> The Marlin Family wrote:
> >
> > very near 186.000 miles per second
> In other words if you lived in space it would take about 16 secs to send
> a sig 3000 miles. Too slow for me I'll stay in Texas where things move
> a bit faster...

You're right it is slow, better use subspace to convey information then
electromagnetic waves in free space. :)

Paul.

==========
Email : ptitze@astron.physics.usyd.edu.au
Website : http://www.physics.usyd.edu.au/~ptitze
Cyberspace: http://www.physics.usyd.edu.au/~ptitze/vrml/vk2thn.wrl
==========

1969. Re: NASA time-delay exposed - marsx.jpg (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: "Paul Titze VK2THN [HACK.AU.]" <ptitze@astron.physics.usyd.edu.au>
Message-ID: <33C43E74.69FD@astron.physics.usyd.edu.au>
Source record: 18429

Graetel Fromm wrote:
>
> The well-known NASA time-delay mechanism has again been implicated in
> a cover-up. The following image was recieved by an amateur radio
> operator monitoring the GE2-9c satellite transponder. Officially,
> transponder 9b carries the Pathfinder mission imagery, in the vertical
> polarization mode. By accident, transponder 9C was found to be active
> as well, though modulated with Horizontal polarization. The attached
> snapshot demonstrates the reason for the time-delay. As in the 1994
> Shuttle coverup the public has been robbed of free information
> concerning our closest neighbors.
> Demand the Truth!
>
> gf - San Antonio

Some people think there is a massive conspiracy out there, governments
covering up UFOs, faking everything, telling people lies etc.
Well I have shocking news for you, the pictures you see are actually
real, there is no "cover-up". Your "cover-up" story is too perfect for
such thing to exist. When will you come back to the real world?

Paul.

==
Email : ptitze@astron.physics.usyd.edu.au
Website : http://www.physics.usyd.edu.au/~ptitze
Cyberspace: http://www.physics.usyd.edu.au/~ptitze/vrml/vk2thn.wrl
==

1970. Re: radio waves in space

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33C4D499.2358@larc.nasa.gov>
Source record: 18430

The speed is 186,000 miles per second, not 186.000 miles per second.
To go 3000 miles requires only 0.016 seconds, not all that shabby.
John
j.m.franke@larc.nasa.gov

1971. Re: Pathfinder freqs ???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: Steve Schindler <Steven.Schindler-1@ksc.nasa.gov>
Message-ID: <33C4E08D.314@ksc.nasa.gov>
Source record: 18431

radio@alaska.net wrote:
>
> Anyone know the frequencies that Pathfinder is using to transmit back
> to Earth?? Steve

8427.22222 MHz and 8429.938271 MHz

1972. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: Steve Schindler <Steven.Schindler-1@ksc.nasa.gov>
Message-ID: <33C4E131.619@ksc.nasa.gov>
Source record: 18432

radio@alaska.net wrote:
>
> What antennas and tx power on Pathfinder? What's the link between the
> rover and pathfinder? Thanks Steve

I don't have antenna info, but the transmitter power is 12 W.

The rover is running .1 W at 459.7 MHz.

1973. Re: NASA time-delay exposed - marsx.jpg (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <33C4E888.5F34@ix.netcom.com>
Source record: 18433

Paul Titze VK2THN [HACK.AU.] wrote:
>
> Graetel Fromm wrote:
> >
> > The well-known NASA time-delay mechanism has again been implicated in
> > a cover-up. The following image was recieved by an amateur radio
> > operator monitoring the GE2-9c satellite transponder. Officially,
> > transponder 9b carries the Pathfinder mission imagery, in the vertical
> > polarization mode. By accident, transponder 9C was found to be active
> > as well, though modulated with Horizontal polarization. The attached
> > snapshot demonstrates the reason for the time-delay. As in the 1994
> > Shuttle coverup the public has been robbed of free information
> > concerning our closest neighbors.
> > Demand the Truth!
> >
> > gf - San Antonio
>
> Some people think there is a massive conspiracy out there, governments
> covering up UFOs, faking everything, telling people lies etc.
> Well I have shocking news for you, the pictures you see are actually
> real, there is no "cover-up". Your "cover-up" story is too perfect for
> such thing to exist. When will you come back to the real world?
>
> Paul.
>
> ==
> Email : ptitze@astron.physics.usyd.edu.au
> Website : http://www.physics.usyd.edu.au/~ptitze
> Cyberspace: http://www.physics.usyd.edu.au/~ptitze/vrml/vk2thn.wrl
> ==
Folks,
I guess you didn't see the follow-up .JPG file (it's a picture of
"Bigfoot?" running across the martian landscape.) I guess Graetel did
a "GOTCHA!". Lighten up... :)

Regards,
Rolf

1974. ! FREE PSYCHIC READINGS!! 1-800-677-8048 FREE!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: julie@aaaa.net
Message-ID: <5q1jat$3s3$5013@kayrad.ziplink.net>
Source record: 18434

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

1975. Mir on 145.985?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: shorton@juno.COM
Message-ID: <19970710.071150.4671.0.shorton@juno.com>
Source record: 18435

Heard Mir this mourning (7-10-97)on 145.985 using what sounded like
packet but my 1200 baud
kam+ could not decode it anybody know what's going on?????
de kd4esv samuel
^^^^^^^^^^^^^PINEAPPLE MOGUL OF BRADENTON^^^^^^^^^^^^^

1976. http://www.love.com

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: randy97
Message-ID: <33c5303d.5@pgh.nauticom.net>
Source record: 18436

Looking to find people in your area that enjoy the same things
as this newsgroup?

Check out http://www.love.com

It's free, it's new, and it's awesome.

Rand

1977. Re: !!!Talk to Other Hams via The Web!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: dpt@super.zippo.com
Message-ID: <33c63d93.16475512@snews.zippo.com>
Source record: 18437
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Sat, 28 Jun 1997 02:01:28 -0400, "Jamie R. Dean"
<ke4htm@wp.cc.nc.us> wrote:

>Talk with other Amateur Radio Operators just like yourself via the World
>Wide Web.
>
>There are no fees and no extra programs to install. You can chat with Hams
>from around the world.

Great! When will the handheld version be available?

I'm working on a new UDP protocol, perhaps you would like to implement
it on your web site. It's called CWTP "Continuous Wave Transport
Protocol". It will allow you to send morse code over the Internet and
you can even call CQ with multicast.

de N9OMH

1978. Re: photos from mars

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: ROCHEFEUILLE <rochefeuille@cyberscope.fr>
Message-ID: <01bc8d83$e4ee83c0$105dcec2@roller2.cyberscope.fr>
Source record: 18438

test de r&#65533;ponse

Bob Noordewier <bnoordew@pi.net> a &#65533;crit dans l'article
<33c378c0.949543@news.pi.net>...
> Dutch page, but click on the first chance youve got
> http://home.pi.net/~bnoordew/home.htm
> Vrije radio een noodzaak en meer over de media.
> http://home.pi.net/~bnoordew/home.htm
>

1979. GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: dnult <dnult@concentric.net>
Message-ID: <33C56CDC.E42@concentric.net>
Source record: 18439
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

Are there any hams (or non-hams) out there that have built or seen plans for a mobile GPS antenna? I have a Garmin GPS-40 GPS reciever with an external jack. An external antenna, I've found, is a requirement for reliable mobile GPS operation.

The GPS frequency is 1575.42 Mhz. The antenna needs to have enough gain to exceed coaxial cable losses (haven't selected a cable yet) and have resonably omni-directional response. I'm not sure, but I'd guess the satalite signal is horizontally polarized. I've wondered about a 1 turn helical and even a spiral on copper clad. Problem is I don't have equipment to test antennae at this frequency.

Thanks in Advance

73s de KI5XW

1980. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33C57784.4E37@larc.nasa.gov>
Source record: 18440
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
patch antenna for GPS.
It can also be found under:
gpspatch.zip (11530 bytes) has a description and drawing for the
construction of a simple patch antenna for GPS reception.
at website:
http://vancouver-webpages.com/peter/index.html
By the way, the satellite signal is right hand circularly polarized.
Good luck,
John
j.m.franke@larc.nasa.gov

1981. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33C57754.622A@larc.nasa.gov>
Source record: 18441
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
patch antenna for GPS.
It can also be found under:
gpspatch.zip (11530 bytes) has a description and drawing for the
construction of a simple patch antenna for GPS reception.
at website:
http://vancouver-webpages.com/peter/index.html
Good luck,
John
j.m.franke@larc.nasa.gov

1982. ! PSYCHIC PREDICTIONS! TRY-IT-FREE! 1-800-676-3733

Newsgroup: rec.radio.amateur.space
Date: 1997-07-10 00:00:00 UTC
From: julie@aaaa.net
Message-ID: <5q19gr$231$5013@kayrad.ziplink.net>
Source record: 18442

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

1983. Re: Mir on 145.985?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5q42el$1d6$1@news.mhv.net>
Source record: 18443

In article <19970710.071150.4671.0.shorton@juno.com>, shorton@juno.COM (samuel c horton) wrote:
>Heard Mir this mourning (7-10-97)on 145.985 using what sounded like
>packet but my 1200 baud
>kam+ could not decode it anybody know what's going on?????
> de kd4esv samuel
>^^^^^^^^^^^^^PINEAPPLE MOGUL OF BRADENTON^^^^^^^^^^^^^

I know they have the option of using the new freq. while over the U.S.,
don't know why you couldn't decode it though. Have you been able to decode it
before this? Was the signal strong enough?

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

1984. Re: !!!Talk to Other Hams via The Web!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33c5b397.12445895@news.bctel.ca>
Source record: 18444
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Thu, 10 Jul 1997 20:23:56 GMT, dpt@super.zippo.com (David Turnbull)
wrote:

>On Sat, 28 Jun 1997 02:01:28 -0400, "Jamie R. Dean"
><ke4htm@wp.cc.nc.us> wrote:

>>Talk with other Amateur Radio Operators just like yourself via the World
>>Wide Web.

>>There are no fees and no extra programs to install. You can chat with Hams
>>from around the world.

>Great! When will the handheld version be available?

I know you can access to the internet through 2m packet... now... if
you can connect to www... you should be able to use your handheld to
talk...

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

1985. Re: *** Crossposting to rec.radio.amateur ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c649ab.8691564@news.atl.bellsouth.net>
Source record: 18445
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

On 8 Jul 1997 15:24:02 -0400, kd1hz@anomaly.ideamation.com.nospam (Michael P. Deignan) wrote:

>USENET server software, primarily on UNIX systems, use an "active" file
>to define which newsgroups are recognized by the site. The newsgroup
>name is "mapped" to a physical directory name, where articles are stored
>as individual numbered files based on an incremental value for the
>group, as defined in the "active" file. There is absolutely no requirement
>for me to define "rec.radio.amateur" in my active file before I can
>define "rec.radio.amateur.misc".

That's true, you can manually hack the system and create a directory without making an entry in the active file. But that isn't usual practice. Normally when a hierarchy is created, group creation control messages will be generated for every level of the hierarchy tree. The news server will then automatically create both the directories and the entries in your active file.

If you're one of the relatively rare ultra-paranoid sysops, you may have the flag set to prevent automatic group creation, and do as you suggest manually. I don't think many full feed server sysops do this though. Sysops who only carry a partial feed may be more likely to do this.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

1986. QTVR movies of Mars

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: jamie@zusammen.com
Message-ID: <33c6716a.30452852@news.sol.co.uk>
Source record: 18446

3 QTVR movies of Mars are available at:

http://www.zusammen.com/probed/

...j

1987. ARLS023 SAREX contacts successful

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls023.1997@arrl.org>
Source record: 18447
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS023
ARLS023 SAREX contacts successful

ZCZC AS23
QST de W1AW
Space Bulletin 023 ARLS023
From ARRL Headquarters
Newington, CT July 11, 1997
To all radio amateurs

SB SPACE ARL ARLS023
ARLS023 SAREX contacts successful

Ham radio has had a very prominent role in the shuttle Columbia mission STS-94, which continues until July 17. So far, the STS-94 crew--which includes three hams--has racked up 13 successful SAREX contacts with school groups as well as random QSOs with earthbound hams. Aboard the shuttle are Jim Halsell, KC5RNI, the mission commander; Janice Voss, KC5BTK; and Donald Thomas, KC5FVF, who set up the orbiting ham shack and completed 19 random contacts before the ''official'' scheduled test pass.

Seventeen schools, including one in the People's Republic of China, are scheduled to talk with the astronauts via Amateur Radio. So far, all SAREX contacts have been successful.

On Thursday, July 3, students at Edgewater High School in Orlando, Florida, spoke with the astronauts. Later the same day, the Lexington Traditional Magnet School in Lexington, Kentucky, made contact with Columbia after a frustrating initial attempt. All of the students asking questions are recently licensed amateurs.

On Friday, July 4, the students of Crittenden Middle School of Mountain View, California quizzed Commander Jim Halsell, KC5RNI, via the AMSAT Telebridge Network through Gordon Williams, VK6IU, in Western Australia. In closing, the students chanted ''Happy Independence Day, Columbia.''

On Monday, July 7, the Columbia crew spoke with students at the S. J. Davis Middle School in San Antonio, Texas (via Steve Cerwin, WA5FRF). Fourteen students at the school got to chat with Halsell, and the school district taped the event.

Also on Monday, pupils at Burch Elementary School in Tyrone, Georgia, (via Bob Watson, KN4HH) got to ask the astronauts an even dozen questions. Teacher Kathy Akins reported an ''excellent'' contact

with astronaut (payload specialist) Greg Linteris aboard the Columbia. Later on Monday, a crowd of 600 was in the audience as youngsters at Artesia Public Schools in Artesia, New Mexico, (via Bob Perkins, KU5J) put 18 questions to the astronauts. ''It was great.'' said teacher Camille George.

On Tuesday, July 8, pupils at Mountain View Elementary in Dewey, Arizona, started their day with a very nice chat with Halsell, via the station of Dave Boone, AB7JA. For most of the pass, signals were quite strong. Approximately 100 people were in attendance, and six students got to ask 11 questions. Later on Tuesday, Jenny Dunklee's summer astronomy class at the Ione Junior High School in Jackson, California, was excited to be able to include a contact with Janice Voss on their second day of summer classes. Dunklee spoke enthusiastically about this ''great opportunity for my students'' to learn firsthand about space exploration.

On Wednesday, July 9, students and members of the Foursquare Radio Amateur Youth club, KE6SWH, were excited to complete a contact with Halsell aboard Columbia. A number of the students had recently obtained ham tickets in preparation for the shuttle contact. Students were from Oxnard High School and Hale Middle School of Woodland Hills. Oxnard High Principal Daisy Tatum said the students were very enthusiastic and excited about completing the contact. Also on Wednesday, students at Lawrence Intermediate School, Lawrenceville, New Jersey, enjoyed a chat with Halsell. Students asked 11 questions as an audience of 450 looked on.

On Thursday, July 10, Alvin C. York Agricultural Institute, Jamestown, Tennessee, had what was described as ''a difficult contact'' with Jamestown native (and payload specialist) Roger Crouch at the mike of KC5RNI. Despite the very rough copy, the school reported five questions were answered. Crouch's mother was in attendance.

On Friday, July 11, successful SAREX contacts took place with Dunn's Corners Elementary School, Westerly, Rhode Island, and Center Street School, El Segundo, California. A SAREX contact with Tsinghua University in the People's Republic of China is set for Monday, July 14.

The STS-94 crew will use KC5RNI, KC5BTK, and KC5FVF on FM voice and W5RRR-1 on packet. They'll be available for random QSOs during their breaks, before and after meal time, and during their pre-sleep time. The astronauts also have activated the robot packet system. (Do not be surprised if you see ''STS-83'' in its beacon.) Edward Chuang, BV1AF, reported hearing the STS-94 packet signal July 10, at 0057 UTC from his QTH in the northeastern part of Taiwan, although he did not connect.

Additional STS-94 mission information is available from NASA at the NASA Shuttle Web site, http://shuttle.nasa.gov.

Thanks to Charlie Sufana, AJ9N; Tim Bosma, W6ISS; Pat Kilroy, WD8LAQ; Frank Bauer, KA3HDO; and Rosalie White, WA1STO, for their assistance in compiling this bulletin.
NNNN
/EX

1988. CABLE TV--FREE DECODER PLANS--

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: Edward Witt <superted@worldnet.att.net>
Message-ID: <01bc8e48$0aa97b00$537074cf@default>
Source record: 18448

Now you can get new plans to build a Cable Descrambler System, US and UK plans.

This is not the origonal Radio Shack plan (now obsolete), but a choice of six new up to date plans designed to work on any cable box in any area. Just send me details of which cable box you have and in what area you reside as the plan needed will vary area to area, and you will be able to view all premium and pay per view channels.

It works on all Cable Tv Systems. The parts to make the box cost appoximately $15 (depending on the plan) and you can find them at any local electronic part supplier(US Residents will be supplied with radio shack part numbers). British Sky Cable descrablers cost approx 20 Pounds. Remember this is for educational purposes only, you still have to pay for the channels you view. I have to say that to protect myself for any liablity.

For the Plans just send $ 2 or 2 Pounds to:

Ed Hacker
409 Adams Street # 7
Hoboken, NJ 07030
USA

The reason I charge two dollars is for the stamp, envelop, and paper your plans are on. I am doing this for you not for me to make money. Lets get real you cant buy much for two bucks. I am not in this for the money but to get back at the cable companys that over charge people.

CABLE HANDBOOK (Additional $2)

Everything you ever wanted to know about cable boxes. Includes a cross reference list for upgrading your box using upgrade converts, cubes, plug-in activators and service code-generators. Also explains general cable operation, this handbook is very COMPLETE, a must have!

TURN ME ON!

Turn on all your premium channels with nothing to buy.

The Notch Filter

A notch filter allows you to selectively descramble channels. For instance, if HBO is on channel 7 and Cinemax is on channel 14 or pay-per-view is on 22, you may build a notch filter to descramble each of those channels. This method is fairly simple to build; However, it requires several more parts than the Fifteen Dollar Box. This system will work on your cable system, no matter what frequency your cable system operates on. A cable box is NOT

REQUIRED, and parts cost in the range of $25-30 depending on how many channels pay channels you wish to descramble. NOTE: I used channel 7,14 and 22 as an example. Your premium services may be on other channels and the notch filter can be built for whatever channel your premium services are on. (between the range of 2-22) Parts can be purchased from a electronics wholesaler/retailer in your phone.

The Gated Sync is the Grand Daddy of descramblers (in band and out band). It can be configured to operate on your cable systems frequency. This system is for the serious home electronics buff. It is a bit more complex to build; However, it sells for a lot of money. And, it will descramble EVERY channel.

SSAVI was created by Zenith, and used by many Zenith converters. The system is very difficult to build, but it will descramble EVERY channel, and also sells for a lot of money. Novices should not attempt to build the SSAVI system.

FREQUENTLY ASKED QUESTIONS

What is a Descrambler?

A descrambler is a device that restores the picture and sound of a scrambled channel. In most cases, ALL channels which are scrambled will be restored.

Are Descramblers legal?

YES! It is legal to build, sell, ship, use, and own a descrambler; However, when you use a descrambler, it is your responsibility to notify the cable company that you are accessing their signal.

Do I need a converter from my cable company?

In most cases NO. A cable ready VCR or TV will work.

Is it difficult to build a descrambler?

Turn me on, the Fifteen Dollar Box, the Oak converter and the Foil method are very simple methods! The instructions provide step by step instructions. No special skill or knowledge are needed. The Notch filter is still fairly simple. The Gated Sync is not for the beginner, it requires electronics knowledge.

Can I build more than one?

YES! You may build as many descramblers as you want! They are legal to sell and demand fairly high prices!

Just send me details of which cable box you have and in what area you reside as the plan needed will vary area to area
For the Plans just send $ 2 or 2 Pounds to:

Ed Hacker
409 Adams Street # 7

Hoboken, NJ 07030
USA

CABLE TV--FREE DECODER PLANS--

1989. ARLS024 KB5UAC grateful for ham radio on Mir

Newsgroup: rec.radio.amateur.space
Date: 1997-07-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls024.1997@arrl.org>
Source record: 18449
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS024
ARLS024 KB5UAC grateful for ham radio on Mir

ZCZC AS24
QST de W1AW
Space Bulletin 024 ARLS024
From ARRL Headquarters
Newington, CT July 11, 1997
To all radio amateurs

SB SPACE ARL ARLS024
ARLS024 KB5UAC grateful for ham radio on Mir

In a packet message to Dave Larsen, N6CO, of the MIREX support team, US astronaut Mike Foale, KB5UAC, expressed the gratitude of the Mir crew ''for all the good wishes and interest over the world, in our troubles and tribulations.'' The MIREX support team--Miles Mann, WF1F, and Larsen--has been handling family traffic for Foale via ham radio and attempting to help him with his radio problems (the Mir's transceiver was cutting out on high power because of a circuit overload). Foale singled out for special mention ''the few hams who work tirelessly on our behalf'' to pass personal messages. Foale said that he and his wife were ''extremely grateful to those hams who pass our messages for us.'' After the Mir*s collision with a Progress cargo rocket, Foale said, ''it was impossible to get any personal news of our well-being to our families'' via the official communication channels. ''Ham radio allowed us to fill the gap.''

''We are particularly interested in longer contacts, than simple QSO exchanges,'' Foale said. ''It is good to tell people about our life here on Mir, and our problems, but the lives of hams on Earth are also interesting to us, and I hope more hams will take the time to tell us about their QTH and surroundings also,'' he concluded.

Ham radio has served as a convenient ''chat'' medium between the US space shuttle Columbia and the troubled Russian Mir space station in recent days. Last weekend, shuttle Commander Jim Halsell, KC5RNI, had two short, direct 2-meter contacts with Foale aboard Mir. The first ship-to-ship SAREX/MIREX contact happened Saturday, July 5, during a Mir/Columbia ''conjunction'' over the Indian Ocean. The contact lasted less than a minute. A little while later, with both spacecraft over the Pacific Ocean, another 30-45 second contact took place, according to Will Marchant, KC6ROL, of AMSAT. ''The shuttle crew was pretty excited about their contact,'' he said. But the best QSO was yet to come. On Tuesday, July 8, 1900 UTC, Foale contacted

W5RRR, which patched him through NASA's communications circuits to the space shuttle, enabling Foale to speak at length with the Columbia crew. During the ten-minute contact, Foale filled in his fellow astronauts about the situation aboard Mir, where a Progress supply rocket had just successfully been docked.

''We'd like to invite you to visit Mir,'' Foale said to the shuttle crew, which respectfully declined. Foale said the arrival of the Progress was ''almost like Christmas.'' He said his personal items still in the damaged Spektr module had been replaced, along with a videocassette player. Foale told Halsell the Mir crew enjoys watching American movies when they have the time. He also told his fellow astronauts aboard the Columbia that he had not had a chance to see any of the pictures from the Mars Pathfinder mission as yet. Foale said the Progress carried tea, coffee, chocolate and even fresh food.

Other Columbia-Mir conjunctions will be possible through the mission but whether another contact is attempted depends on the Columbia and Mir work schedules.

On July 10, Foale told N6CO in another packet message that the crew was ''extremely busy, trying to crawl through all the bags unloaded from Progress.'' Foale said the crew will do a training run on July 15 prior to the space walk to attempt to repair the damage and restore power to the space station. Foale will sit out the space walk in the Soyuz vehicle.

Thanks to Philip Chien, KC4YER, Pat Kilroy, WD8LAQ, Frank H. Bauer, KA3HDO, Dave Larsen, N6CO, Matt Bordelon, KC5BTL, and Rosalie White, WA1STO, for their contributions to this bulletin.
NNNN
/EX

1990. ! PROVEN PSYCHICS! TRY-IT-FREE! 1-800-677-8063

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: susan13@cybernex.net
Message-ID: <5q6ivv$5hk$5010@news.cybernex.net>
Source record: 18450

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

1991. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: geoff <gefhor@bigpond.com>
Message-ID: <33c6ea19.0@139.134.5.33>
Source record: 18451
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

"John M. Franke" <j.m.franke@larc.nasa.gov> writes: > There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
> patch antenna for GPS.
> It can also be found under:
> gpspatch.zip (11530 bytes) has a description and drawing for the
> construction of a simple patch antenna for GPS reception.
> at website:
> http://vancouver-webpages.com/peter/index.html
> Good luck,
> John
> j.m.franke@larc.nasa.gov
john
just for info i attempted to make one on following the details of
one i broke up... but it be a very fussy antenna to make ..
i now currently use another one off another unit.. but this one has
an low noise amp in side of it...
best of luck
geoff vk6npn
gefhor@bigpond.com

1992. Re: Satellite Antenna Usage

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970712032201.XAA14567@ladder02.news.aol.com>
Source record: 18452

AO27 Satellite can be worked with a dual band HT (5 watts or less)
and a hand held Antenna.
See the Model 146/437-10 at...

<A HREF="http://members.aol.com/Arrow146/index.html">Arrow Antenna</A>

or

http://Members.aol.com/Arrow146/index.html

1993. career in sat. communications???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: Mark Polege <antony@crl3.crl.com>
Message-ID: <5q71au$b9t$1@nnrp1.crl.com>
Source record: 18453

I have been interested in Astromoy for years and have recently taken an interest in going to school for satalite communications. Can anyone from the field tell me where and how I should go about accomplishing this goal? Please email me at the given address. Thank-you

-M. Polege

1994. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: ad7k@accessnv.com
Message-ID: <33c7193b.4142054@news.accessnv.com>
Source record: 18454

On Thu, 10 Jul 1997 09:18:41 -0400, Steve Schindler
<Steven.Schindler-1@ksc.nasa.gov> wrote:

>radio@alaska.net wrote:
>>
>> What antennas and tx power on Pathfinder? What's the link between the
>> rover and pathfinder? Thanks Steve
>
>I don't have antenna info, but the transmitter power is 12 W.
>
>The rover is running .1 W at 459.7 MHz.

On his website, located at
http://people.qualcomm.com/karn/mpf_budget.html
Phil Karn, KA9Q, states that the transmit frequency from
Mars to Earth is 8420 MHz, with transmitter power of 35
Watts.

Lots of other interesting data at that web page ... address
found in the current issue of "The ARRL Letter".

73 to all,

"Squeak" Porray, AD7K
Manager, Amateur Electronic Supply/Las Vegas

1995. Re: Communication with Mars Rover

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: joel <unit77@concentric.net>
Message-ID: <33C7880F.F4153637@concentric.net>
Source record: 18455

camoore@nwu.edu wrote:

> What is the speed of radio waves? I am interested in knowing if NASA
> is using
> radio to communicate with the Mars Rover and if so how long it takes a
> signal
> leaving Mars to reach Earth.
>
> Thanks.

Radio waves travel at the speed of light,which is,if my mem serves me correctly,something on the order of 186,000 MPS.A co-worker told me,during a casual discussion,he heard it took appx 11 minutes for comms between Earth and Mars.I dont know how accurate this is and not sure if it was one way or round trip.

1996. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: pwinter@best.com
Message-ID: <5q8h17$2uv$1@shell5.ba.best.com>
Source record: 18456

In article <33c7193b.4142054@news.accessnv.com>,
Dale ("Squeak") Porray, AD7K <ad7k@accessnv.com> wrote:
>
>>radio@alaska.net wrote:
>>>
>>> What antennas and tx power on Pathfinder? What's the link between the
>>> rover and pathfinder? Thanks Steve
>
>On his website, located at
>http://people.qualcomm.com/karn/mpf_budget.html
>Phil Karn, KA9Q, states that the transmit frequency from
>Mars to Earth is 8420 MHz, with transmitter power of 35 Watts.

Phil estimated that value. If you look at message
<33C4E08D.314@ksc.nasa.gov> from this newsgroup, you'll
see that Steve Schindler later posted that the actual
freqs. are 8427.22222 MHz and 8429.938271 MHz. But Phil's
estimate was sufficient for what he was trying to do.

I also recommend that people go to Phil's main page
first and then follow the link to his Pathfinder data
calculations page. That way you can see his photo of
John De Lancie and Brent Spiner. :-)

Patty

========================= patty@wintertime.com =========================
"Here's the copy for Miller's segment on the hot new comedies on CBS."
"Isn't that sort of blatantly self-promotional?"
"Oh, no! It's a very *critical* look at the hot new comedies on CBS."
-- "Murphy Brown"
======================== Sunnyvale, California =========================

1997. Re: Mir on 145.985?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: "BOB V." <usa50xx@cyberenet.net>
Message-ID: <01bc8e6a$36a82cc0$e98011d0@usa50xx>
Source record: 18457

hi all
samuel c horton <shorton@juno.COM> wrote in article
<19970710.071150.4671.0.shorton@juno.com>...
> Heard Mir this mourning (7-10-97)on 145.985 using what sounded like
> packet but my 1200 baud
> kam+ could not decode it anybody know what's going on?????
> de kd4esv samuel
> ^^^^^^^^^^^^^PINEAPPLE MOGUL OF BRADENTON^^^^^^^^^^^^^
>

1998. 32 BIT(win95)Sat/STS tracking prog

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: joel <unit77@concentric.net>
Message-ID: <33C81362.41DE@concentric.net>
Source record: 18458

I am looking for a good Sat/STS tracking prog,on the order of
STSORBIT but for Win95.
Thanks

1999. Dove

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: geoffc@xtra.co.nz
Message-ID: <5q996s$jj5$1@wolfman.xtra.co.nz>
Source record: 18459

Hi all,

Has anyone heard from Dove recently? I have heard nothing for the last couple of weekends. Amy clues?

73 de Geoff ZL3TGC
Christchurch, New Zealand

2000. * SpaceNews 14-Jul-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-12 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0714.1997@ampr.org>
Source record: 18460
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0714
* SpaceNews 14-Jul-97 *

BID: $SPC0714

=========
SpaceNews
=========

MONDAY JULY 14, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
News of Mir's Progress docking and EVA has been reported by Mike Foale via
the Amateur Packet Radio communications system on-board the Mir space station:

Stat : PR
Posted : 07/07/97 09:40
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir Progress Docking

Progress docked normally this morning. We are waiting 3 orbits before
we start to unload it, checking the integrity of the hatch seals.
The station attitude control system is working well, using the girodynes,
and the power sth the base block and module Kvant 2 powered (airlock and
toilet) with modules Kristal and Priroda [are] unpowered. Greenhouse
experiment is continuing, using power from the base block, to dry the
seed pods that have formed quite nicely.

Stat : PR
Posted : 07/11/97 16:08
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir EVA

The crew is now extremely busy, trying to crawl through all the bags
unloaded from Progress, which are now stored in dark, wet modules, which
have no power. We are trying to inventory and assemble the 30 or so

cables and adapt, required to install the hatch
umbilical. A training run will be done on the 15th, and the real eva
sometime after that. I will get some refresher training on preparing the
soyuz for evacuation, and will be in a spacesuit,b,in the Soyuz during the
eva itself.

I will still try to read all your messages, but will have to leave most
unanswered because of the little time available to us. Mike. KB5UAC

[Info via Dr. Dave Larsen, and Miles Mann]

* HIGH POWER NOT WELCOME ON OSCARS *
==========

BJ Arts, WT0N, serves as an Official Observer (OO), and has received many complaints about satellite operators running excessively high levels of transmitter power within the uplink passband of Amateur communication satellites. Last week he observed stations on FO-20 and FO-29 running enough power to be 5 to 10 'S' units above the level of the beacon signal. In one case, two operators, who were in contact with one another, were causing FO-20's AGC to block out all other incoming signals operating with normal levels of transmitter power.

Satellite users should make certain that their downlink signals are no stronger than that of the beacon transmitter. Excessive levels of uplink power pervent other users from equally sharing the satellite's transponder. It only takes several watts of transmitter power to make contacts through low-earth orbiting Amateur satellites. If groundstations have difficulty hearing their uplink signal with more than several watts of power, then a significant upgrade in receiver sensitivity may be in order. This can be accomplished by using a higher gain downlink antenna, high quality coax, or the use of a low-noise preamplifier (preferably mounted at the feedpoint of the antenna).

* AO-27 SCHEDULE *
==========

AO-27 TEPR (Timed Eclipse Power Regulation) States are expected to follow the following schedule (as of July 6, 1997):

TEPR STATE	Time	TX Status
1	N/A	OFF
2	N/A	OFF
3	---	OFF
4	21	OFF
5	17	ON at Medium Power
6	---	OFF

The TEPR States are defined as follows:

TEPR 1, Started when the satellite enters the earth's shadow (eclipse)
TEPR 2, Started at (TEPR 1 time) after the eclipse starts
TEPR 3, Started at (TEPR 1 time) + (TEPR 2 time) ...

TEPR 4, Started when the satellite enters sunlight
TEPR 5, Started at (TEPR 4 time) after the satellite enters sunlight
TEPR 6, Started at (TEPR 4) + (TEPR 5) ...

Please note that TEPR states 1, 2 and 3 occur during nighttime passes, and TEPR states 4, 5 and 6 occur during the day. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

Users are reminded that as an FM-mode repeater, AO-27 is subject to the "capture effect" and can only transmit one signal at a time. Users are asked to cooperate, keep calls short, give breaks so as many stations as possible can work a pass, and above all, listen before and while transmitting. The satellite has a very sensitive receiver, and stations running approximately 25 watts power to moderate-gain omnidirectional antenna can get a good uplink signal into the satellite. A sensitive UHF-FM receiver with a preamplifier and an omnidirectional antenna can receive AO-27's downlink with some fading; moderate-gain directional arrays should provide a solid receive signal. Remember to correct for the +/- 9 kHz of Doppler shift on the 436 MHz downlink signal during a pass. No Doppler correction is needed for the 145.850 MHz uplink signal.

Users are asked not to transmit on 145.85 MHz if they do not hear the satellite's downlink so as to avoid possible interference to other satellite uplinks and downlinks on adjacent frequencies.

This, and other information on the AO-27 satellite can be can be found at: http://www.umbra.com.

[Info via Michael Wyrick, N4USI, AO-27 Control Operator]

* FO-29 SCHEDULE *
==========
The following is from the July issue of JARL News (magazine of Japan Amateur Radio League), originally in Japanese, and is provided by Kazu Sakamoto, JJ1WTK:

July 4 (Fri) 09:13z Digitalker
July 8 (Tue) 09:05z JA
July 11 (Fri) 09:51z JD 1200 bps
July 18 (Fri) 00:20z JD 9600 bps
July 25 (Fri) 09:23z JA

Aug 1 (Fri) 08:17z JD 1200 bps
Aug 8 (Fri) 00:30z JD 9600 bps
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD 1200 bps
Aug 29 (Fri) 00:40z JD 9600 bps

Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD 1200 bps

Sept 19 (Fri) 00:51z JD 9600 bps
Sept 26 (Fri) 08:09z JA

FO-20 is in Mode JA continuously.

* RS-12 NEWS *
==============
Rusty, NM1K, reports a new regular on RS-12: KL7AH. KL7AH can often be heard on the east coast of US during passes having elevations of 20 degrees of less above the horizon.

* STS-94 SAREX NEWS *
=====================
The SAREX experiment package on Space Shuttle Columbia has been activated in both voice and packet radio modes. An archive of messages regarding STS-94 SAREX bulletins is available at:

http://www.gsfc.nasa.gov/sarex/sarex_mainpage.html

The SAREX Working Group has designated the following frequencies during the STS-94 mission:

FM Voice Downlink: (Worldwide) 145.55 MHz FM
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz
FM Packet Uplink: 144.49 MHz

FM Voice call signs: KC5RNI, KC5BTK and KC5FVF
FM Packet call sign: W5RRR-1

A surplus of power in the Microgravity Science Laboratory has permitted packet radio operations to take place on STS-94. Since STS-94 is a re-flight of the shortened STS-83 flight, and since the SAREX gear did not go back to NASA/JSC from KSC and was not re-programmed after STS-83, the Heathkit SAREX TNC aboard Columbia reports "STS-83" in downlink packets.

Hams should avoid transmitting on the shuttle's downlink frequencies. The crew will not favor any uplink frequency, so your ability to communicate with SAREX will be the "luck of the draw." Transmit only when the shuttle is within range of your station, and when the shuttle station is on-the-air.

The crew will use separate receive and transmit frequencies. PLEASE do not transmit on the shuttle's DOWNLINK frequency. The DOWNLINK is your receiving frequency. The UPLINK is your transmitting frequency.

Late aquisition of signal continues to be observed while the orbiter attitude is roughly "tail down, main engines forward". Most contacts reported occur well after rise time, but not necessarily after TCA, due to the observers squint angle of the antenna on Columbia. AOS seems to be about 1.5 to 2 minutes after rise.

Send reception reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street,
Newington, CT 06111-1494, USA. Include the following information in
your QSL or report: STS-94, date and time in UTC, frequency and mode
(FM voice or packet). In addition, you must also include a SASE using
a large, business-sized envelope if you wish to receive a card.

STS-94 represents the 23rd flight of Columbia and the 85th mission flown
since the start of the Space Shuttle program in April 1981. Be advised
that the next SAREX mission is not scheduled until August 1998. A great
deal of effort is being made toward the next phase of SAREX: implementation
on the International Space Station.

[Info via Pat Kilroy, WD8LAQ]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

2001. Re: 32 BIT(win95)Sat/STS tracking prog

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33cc5609.27888795@news.capital.net>
Source record: 18461

On Sat, 12 Jul 1997 19:29:38 -0400, joel <unit77@concentric.net>
wrote:

>I am looking for a good Sat/STS tracking prog,on the order of
>STSORBIT but for Win95.
> Thanks

STSplus will run just fine in Win 95. David Ransom has a webpage where
the program can be found. The url is: http://www.dransom.com/

--
Butch N2YMJ

To send mail,
delete the xyz
from my address.

2002. need info. dx radios for sat. audio

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: fatdaddy <tmerriwe@bellsouth.net>
Message-ID: <01bc8f5c$6f315b00$e2ef48a6@tmerriwe>
Source record: 18462
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap

i would like to know what dx radio i need to pick up sat. audio on using a small sat. dish?. i would like to pick up the hidden ch. too. do they make a small dx radio for this? i need model number and name.

2003. Re: Communication with Mars Rover

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5qafc1$fm0$1@news.mhv.net>
Source record: 18463

In article <33C7880F.F4153637@concentric.net>, unit77@concentric.net wrote:
>camoore@nwu.edu wrote:
>
>> What is the speed of radio waves? I am interested in knowing if NASA
>> is using
>> radio to communicate with the Mars Rover and if so how long it takes a
>> signal
>> leaving Mars to reach Earth.
>>
>> Thanks.
>
> Radio waves travel at the speed of light,which is,if my mem serves me
>correctly,something on the order of 186,000 MPS.A co-worker told
>me,during a casual discussion,he heard it took appx 11 minutes for comms
>between Earth and Mars.I dont know how accurate this is and not sure if
>it was one way or round trip.

It's accurate and one way....

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

2004. Pics from Mars my web:www.arrakis.es/~eb2dvt

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: eb2dvt@arrakis.es
Message-ID: <33c91da8.0@news.arrakis.es>
Source record: 18464

Hello all
If you want get some pics from Mars you can go into my home page in
www.arrakis.es/~eb2dvt and pic "Fotos de marte, mir, ..."

Excuse my bad English... bye from Zaragoza, SPAIN,

You can see also the lastest pic from meteosat satellite (Europe and
Canary Islans)

2005. Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: jacob <jacob@friesl.net>
Message-ID: <5qbbg9$rtk@halley.pi.net>
Source record: 18465

I've found the pefect site with nude Asian ladies.
Much more than you can find in any newsgroup.

http://home.pi.net/~sappie/playboy.htm

2006. ANS-194 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <01bc8fbe$a1dffae0$d9280ace@home.the-bridge.net>
Source record: 18466

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-194.01
QUESTIONABLE COMMUNICATION(S)

HR AMSAT NEWS SERVICE BULLETIN 194.01 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.01

For some months, complaints have been received from KO-23 and KO-25 users that communications many felt were inappropriate to be carried over Amateur Radio, have been taking place on those satellites. Reports stated that the offending traffic was taking place between a station located in Brazil and another at a Brazilian scientific research base in Antarctica.

AMSAT-NA officials have been concerned about this issue for some time and have been monitoring the situation. However, they did not feel it appropriate for them to become directly involved, as the satellites in question are licensed in Korea and the communication was between stations licensed by Brazil.

It has now been learned that the communications in question have ceased. Resolution of the situation was apparently brought about through agreements reached between the Brazilian users of the satellites and the Korean command station.

Although AMSAT-NA officers did not believe it appropriate to directly intervene, they are, nevertheless happy that the situation has apparently been resolved satisfactorily.

[ANS thanks AMSAT-NA President, Bill Tynan, W3XO, for this bulletin.]

/EX

SB SAT @ AMSAT $ANS-194.02
KB5UAC GRATEFUL FOR HAM RADIO

HR AMSAT NEWS SERVICE BULLETIN 194.02 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.02

In a packet message to Dave Larsen, N6CO, of the MIREX support team, US astronaut Mike Foale, KB5UAC, expressed the gratitude of the MIR crew ''for all the good wishes and interest over the world, in our troubles and tribulations.'' The MIREX support team--Miles Mann, WF1F, and Larsen--has been handling family traffic for Foale via ham radio and attempting to help him with his radio problems (the MIR's transceiver was cutting out on high power because of a circuit overload). Foale singled out for special mention ''the few hams who work tirelessly on our behalf'' to pass personal messages. Foale said that he and his wife were ''extremely grateful to those hams who pass our messages for us.'' After the MIR's collision with a Progress cargo rocket, Foale said, ''it was impossible to get any personal news of our well-being to our families'' via the official communication channels. ''Ham radio allowed us to fill the gap.''

''We are particularly interested in longer contacts, than simple QSO exchanges,'' Foale said. ''It is good to tell people about our life here on MIR, and our problems, but the lives of hams on Earth are also interesting to us, and I hope more hams will take the time to tell us about their QTH and surroundings also,'' he concluded.

Ham radio has served as a convenient ''chat'' medium between the US space shuttle Columbia and the troubled Russian MIR space station in recent days. Last weekend, shuttle Commander Jim Halsell, KC5RNI, had two short, direct 2-meter contacts with Foale aboard MIR. The first ship-to-ship SAREX/MIREX contact happened Saturday, July 5, during a MIR/Columbia ''conjunction'' over the Indian Ocean. The contact lasted less than a minute. A little while later, with both spacecraft over the Pacific Ocean, another 30-45 second contact took place, according to Will Marchant, KC6ROL, of AMSAT. ''The shuttle crew was pretty excited about their contact,'' he said. But the best QSO was yet to come. On Tuesday, July 8, 1900 UTC, Foale contacted W5RRR, which patched him through NASA's communications circuits to the space shuttle, enabling Foale to speak at length with the Columbia crew. During the ten-minute contact, Foale filled in his fellow astronauts about the situation aboard MIR, where a Progress supply rocket had just successfully been docked.

''We'd like to invite you to visit MIR,'' Foale said to the shuttle crew, which respectfully declined. Foale said the arrival of the Progress was ''almost like Christmas.'' He said his personal items still in the damaged Spektr module had been replaced, along with a videocassette player. Foale told Halsell the MIR crew enjoys watching American movies when they have the time. He also told his fellow astronauts aboard the Columbia that he had not had a chance to see any of the pictures from the Mars Pathfinder mission as yet. Foale said the Progress carried tea, coffee, chocolate and even fresh food.

Other Columbia-MIR conjunctions will be possible through the mission but whether another contact is attempted depends on the Columbia and MIR work schedules.

On July 10, Foale told N6CO in another packet message that the crew was ''extremely busy, trying to crawl through all the bags unloaded from Progress.'' Foale said the crew will do a training run on July 15 prior to the space walk to attempt to repair the damage and restore power to the space station. Foale will sit out the space walk in the Soyuz vehicle.

[ANS thanks the ARRL, Philip Chien, KC4YER, Pat Kilroy, WD8LAQ, Frank H. Bauer, KA3HDO, Dave Larsen, N6CO, Matt Bordelon, KC5BTL, and Rosalie White, WA1STO, for their contributions to this bulletin.]

/EX

SB SAT @ AMSAT $ANS-194.03
HONG KONG ON AO-10

HR AMSAT NEWS SERVICE BULLETIN 194.03 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.03

Terry, G1WPR, a regular contributor to the AMSAT-UK Central England Net, reported a contact on AO-10 with Charlie, VR2XMT, in Hong Kong. Terry made the contact just after Charlie completed a QSO with a ZS6 station. QSL for VR2XMT is via the bureau or direct to PO. Box 541 Hong Kong.

[ANS thanks John Heath, G7HIA, fir thus story.]

/EX

SB SAT @ AMSAT $ANS-194.04
RS-10 AND 16 UPDATES

HR AMSAT NEWS SERVICE BULLETIN 194.04 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.04

Here's part of a message just received 10th July '97, from Leonid Labutin, UA3CR, in answer to queries regarding the status of RS-10 and two parameters of the RS-16 telemetry They were Channel 'G' "U of transponder V" and Channel 'F' "U o f stabilizer V".

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

"Regarding G and F (of RS-16) TLM, G is Voltage on the transponder in Volts units, F is Voltage on BCR (14->27 V) in Volts units. It used only for scientific experimental equipment installed on the board."

[ANS thanks Leonid Labutin, UA3CR, and Pat Gowen, G3IOR, for this
updated news.]

/EX

SB SAT @ AMSAT $ANS-194.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 194.05 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.05

MIR:
Mike Foale, KB5UAC, has been active on amateur radio.. The radio has
served as a valuable link between Mike and his family and friends during
this crisis . Also activity from the MIR packet station has been reported.
Frequencies with activity have been 145.985 MHz and the 145.200/800 MHz
split.

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Not operational at this time..

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 MHz CW/SSB)
Operational.
If the activity on RS-12/13 the weekend of 28/29 June, the US-Canadian
Amateur Field Day, was indicative of activity on all satellites, it is
surprising that all space station receivers aren't still de-sensed.
This bird remains active and continues to provide good signals into
eastern North America. The passes will remain somewhat inconvenient
through July for those of us with day jobs, occurring in the late
morning and the very late evening as they do. August will result in
more convenient times during the weekdays."
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.
WT0N reports that downlink signals are still weak from RS-15,
but the bird is still workable.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
RS-16's 435.504 MHz beacon is active. Also,
the 29.408 MHz beacon is reported as being heard.

No transponder activity yet.
RS-16 CW Telemetry.
P PSU voltage Volts..... x0.1
O Solar panel voltage Volts..... x0.1
N Solar panel current mA
M TX 29 MHz Output Power mW..... x10
L TX 29 MHz current mA
K TX 29 MHz voltage 7V nominal
J TX 435 MHz Output Power mW..... x10
I TX 435 MHz current mA
H TX 435 MHz voltage V..... x0.1
G U of the transponder V..... x0.1
F U of stabilizer V..... x0.1
E Temperature of the charger in C deg.
D Temperature TX 29 MHz in C deg.
C Temperature TX 435 MHz in C deg.
B Temperature RX 145 MHz in C deg.
A Temperature of the stabilizer in C deg.
Parameters M, L, J, I are valid in FM mode only!

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.

This information can be found at www.umbra.com
AO-27 TEPR (Timed Eclipse Power Regulation) States are as follows
As of July 6, 1997

TEPR STATE	Time	TX Status
1	n/a	OFF
2	n/a	OFF
3	---	OFF
4	21	OFF
5	17	ON at Med Power
6	---	OFF

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time) ...

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5) ...

You should note that TEPR states 1,2 and 3 happen during the Night Time passes and TEPR states 4,5 and 6 happen during the Day time passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

Users are reminded that as an FM-mode repeater, AO-27 is subject to FM "capture effect" and can only transmit one signal at a time. Users are asked to cooperate, keep calls short, give breaks so as many stations as possible can work a pass, and above all, listen before and while transmitting. The satellite has a very sensitive receiver, and stations running approximately 25 watts power to moderate-gain omnidirectional antenna can get a good uplink signal into the satellite. A sensitive UHF FM receiver with a preamplifier and an omnidirectional antenna can receive AO-27's downlink with some fading; moderate-gain directional arrays should provide a solid receive signal. Remember to correct for the +/- 9 KHz of Doppler shift on the 436 MHz downlink signal during a pass.
No Doppler correction is needed for the 145.850 MHz uplink signal.

Users are asked not to transmit on 145.85 MHz if they do not hear the satellite's downlink so as to avoid possible interference to other satellite uplinks and downlinks on adjacent frequencies.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW Mode JA

(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud
BPSK)
Operational.
The latest FO-29 Schedule.
July 11 (Fri) 09:51z JD1200
July 18 (Fri) 00:20z JD9600
July 25 (Fri) 09:23z JA
Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-194.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 194.06 FROM AMSAT HQ
SILVER SPRING, MD, JULY 13, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-194.06

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.
AO-10 was at 39,767 plus kilometers on July 13th
when BJ Arts, WT0N, had a very good QSO with Chris,
N0JCF. Strong downlink signals from the bird, 5-5 to 5-9, with some QSB. No
FM'ing heard. It sure is nice to have the bird back and running nicely. It
was a pleasure to have such a nice QSO again and not have to use every
filter I have to pull the downlink out of the noise.
[ANS thanks BJ Arts, WT0N, for this report.]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
The beacon on 2401.500 heard over Spain on 23rd of June and also on
24th, but with weak signals.
[ANS thanks Saludos de Antonio, EA1IW/EA4, for this report.]

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)

BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operational.
State of the batteries at the end of a nocturnal orbit.
uptime is 1027/17:34:14. Time is Fri Jul 11 22:59:24 1997
Bat 1 V=1.267V Bat 2 V=1.309V Bat 3 V=1.295V Bat 4 V=1.296V
Bat 5 V=1.276V Bat 6 V=1.265V Bat 7 V=1.303V Bat 8 V=1.296V

State of the batteries changing to light zone in the same orbit
Bat 1 V=1.400V Bat 2 V=1.421V Bat 3 V=1.337V Bat 4 V=1.342V
Bat 5 V=1.382V Bat 6 V=1.379V Bat 7 V=1.403V Bat 8 V=1.372V
Total Array C= 0.221 Bat Ch Cur=-0.030 Ifb= 0.025 I+10V= 0.295
TX:010B BCR:77 PWRC:59E BT:3C WC:25 EDAC:9E

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
No report available.

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operational.
State of the batteries at the end of a nocturnal orbit.
uptime is 752/07:31:07. Time is Fri Jul 11 21:36:17 1997
Bat 1 V=1.306V Bat 2 V=1.298V Bat 3 V=1.313V Bat 4 V=1.305V
Bat 5 V=1.312V Bat 6 V=1.284V Bat 7 V=1.309V Bat 8 V=1.297V
State of the batteries changing to light zone in the same orbit
Bat 1 V=1.395V Bat 2 V=1.398V Bat 3 V=1.415V Bat 4 V=1.392V
Bat 5 V=1.423V Bat 6 V=1.496V Bat 7 V=1.402V Bat 8 V=1.394V
Total Array C= 0.459 Bat Ch Cur= 0.210 Ifb= 0.002 I+10V= 0.118
TX:016 BCR:7F PWRC:36E BT:3C WC: 0

Add 6.83 minutes to the clock of the satellite
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
UO-22 is operating normally. The Earth Imaging System (EIS) is being
scheduled to take images 2 or 3 times per week.
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
(Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
The satellite is in good shape.
Daniele Piercarlo, IK2XRO, will try to reload the BBS soon.
[ANS thanks Daniele Piercarlo, IK2XRO, ITMSAT Command Station for this
report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N,
via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2007. Re: UCLA Amateur Radio Club, W6YRA, 50 Year Anniversary

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: joel <unit77@concentric.net>
Message-ID: <33C94F12.DFA06FDF@concentric.net>
Source record: 18467
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.policy

David Ditlow, KC6LDO wrote:

> x-no-archive: yes
>
> UCLA Amateur Radio Club Alumni, Past Members, and Current Members:
>
> The UCLA Amateur Radio Club, W6YRA, is celebrating it's 50 year
> Anniversary this year.
> I am trying to locate any/all past members in order to schedule a
> Reunion at the UCLA Radio Room, sometime later this summer.
>
> If you were ever a member of the UCLA Amateur Radio Club, please send
> me
> your e-mail address, or other contact info so you can be invited!!
>
> David Ditlow, KC6LDO
> President, UCLA Amateur Radio Club
> My address in the Callbook is current since 1992.
> email: ditlow@pacbell.net
>
> 73,
>
> Dave

CONGRATULATIONS!!!!

2008. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: Phil Karn <karn@ka9q.ampr.org>
Message-ID: <33C951D2.167EB0E7@ka9q.ampr.org>
Source record: 18468

Dale (Squeak) Porray, AD7K wrote:

> On his website, located at
> http://people.qualcomm.com/karn/mpf_budget.html
> Phil Karn, KA9Q, states that the transmit frequency from
> Mars to Earth is 8420 MHz, with transmitter power of 35
> Watts.

Note I give sources (mostly web links) for each of the items on my link budget. I'm now citing Steve Schindler's article here for the exact MPF downlink frequencies. I had known they were in the X-band deep space allocation, but I didn't know the exact values. They don't really affect the budget figures that much anyway.

I'm still looking for an authoritative source for the downlink antenna gain. A more authoritative figure for the downlink power than "35w nominal" would also be nice.

Phil

2009. Re: radio waves in space

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: Phil Karn <karn@ka9q.ampr.org>
Message-ID: <33C9534B.2781E494@ka9q.ampr.org>
Source record: 18469

The speed of light in a vacuum is *exactly*

2.99792458 x 10^8 meters/sec

I said "exactly" because the meter is now formally defined in terms
of the speed of light and the second. I.e., if a more precise
measurement of the speed of light and/or the second is made, the
length of the meter will change to fit it.

This change was made some years ago because the speed of light
and the length of the second are among the most accurately known
of all physical constants, thanks to radio/optical measurement
equipment and atomic clocks, respectively.

Phil

2010. +++ Pathfinder Freqs +++

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33c95771.3352567@news.bctel.ca>
Source record: 18470
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur,rec.radio.amateur.misc,alt.radio.scanner,rec.radio.scanner

Unfortunately, 99.9% of the time, you will not be able to receive the
signals from Pathfinder. You will have to have a large antenna +.

Yes, you are able to receive the signals from NASA if you are lucky...

There are some rumors for the Pathfinder's frequency.

Here are some info that you also see on Usenet:

1. 1.9 GHz rannge
2. 12W 8427.22222 MHz (I doubt...)
3. 12W 8429.938271 MHz (I doubt...)
4. 1W 459.7 from Rover
5. 70m and 12m band
6. http://people.qualcomm.com/karn/

GOOD LUCK
!!!

2011. varecs

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: Dick <ke4ztp@n-jcenter.com>
Message-ID: <33C94E9C.11E1@n-jcenter.com>
Source record: 18471

The Volusia County ARES/RACES Page is back up and operational!

The New Address is:
http://www.netpass.com/varecs

This page was down for awhile at an older address. The old address is not operational. If you currently have a link to VARECS at the former address (dbeach.com) please change it to the above (netpass.com). If you have taken down the link please put the new one up at your earliest convience.

Some new features include:
+ Frames
+ Image Maps
+ Music
+ Updated Links
+ The Amateur Radio Ring
+ And Many More Great Improvements

I invite everyone to check out our new page. Please spread this message to any newsgroups, mailing lists, packet BBS or any other meathod you see fit. If you have a or know of any ham radio pages, newsgroups, or any other information, that isn't on our link list please send them to kf4bia@n-jcenter.com. Personal pages are welcome along with skywarn, ares, races, civil defence, and any other ham radio related pages.

Thanks,

73

Richard Paczkowski Jr.
KF4BIA
Assistant EC
Volusia County

2012. Contacting the Mir and Space Shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-07-13 00:00:00 UTC
From: niel brieger <nbrieger@ix.netcom.com>
Message-ID: <33C98F0A.16C9@ix.netcom.com>
Source record: 18472

I was wondering if anyone could recommend a setup for contacting the Mir, Space Shuttle, and other amateur satellites and entities. I'm currently set up here with a Yaesu that can output 5/20/50 watts on 2m and have a cushcraft ringo in the attic. I'm pretty sure the antenna isn't going to cut it, and a ground plane antenna has been recommended. Is 50 watts going to be enough to contact those sites in space with the correct type of antenna? If anyone has any suggestions or could recommend what works good for them, I'd love to hear what you've done!

73,
Niel Brieger, KC5ZJR

2013. $ LOAN BUSINESS, EASY MONTHLY INCOME, NO BRAINER $

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: a19@a.a
Message-ID: <33c97be0.0@news.unibe.ch>
Source record: 18377

I have participated in the standard "Please put me on your mailing list" letter and found it to be worth
my time (I get 1 or 2 handfulls or letters every day) but I also found that it's results were nowhere
near what I expected due mainly to people not sending in the money but rather spreading the letter
without paying for it. I participated in that mainly as an experiment and found that there are a
tremendous amount of people willing to do it. I thought about how to, first, eliminate the "non-pay"
problem and, second, to create a monthly income. I came upon the solution and decided to start a new
program. I decided that there were 3 things that this new program needed in order to work for everyone
and they were: 1.) It needed to be very simple and easy for anyone to do, and, 2.) It needed to be
inexpensive enough for even the poorest of people, and, 3.) It needs to be DUPLICATABLE. I think you
will find this program to meet those requirements. I have put lots of thought into it and I ask that you
PLEASE do NOT modify it. This WILL WORK if you follow it. This system is based on the unconditional
"loaning" of money to people. Simply say, "I am loaning you this $2 as an act of goodwill to help you in
your financial need, you may pay me back if and when you can." You should find 5 or more people who will
send $2 to the 5 needy people on this list AND MAINTAIN 5 or more people who will do the same. You
should put your name on postition number 5 and move each of the other names up one position. The name
originally on position number 1 gets removed. You should be able to contact each of your 5 or more
people to see if they are going to be active this month. If not then you need to find one or more people
to be active in order to maintain at least 5. I am not speaking about the 5 people on the list but
rather the 5 new people you have found. I would highly suggest having more than 5 in any given month.
Now I know that this would be extremely easy to do since I can think of at least 20 people myself who
will do this consistently. The key is to maintain at LEAST 5 active people. If you don't then you can't
expect for the rest of the people to do it either and you can't expect for this system to work. This

system is a no-brainer, and if someone can't afford the $10 + stamps for this then they truly ARE in
need! It is OK to use the internet to find people but I think it would be easier to find them through
people that you know. This way it will be easier for you to contact them every month to ask about their
being active, unless someone is willing to give you their e-mail address. Here are some numbers:

Monthly income model per level and total for maintaining 4 active members @ $2 each:

Level 1: $2 x 4 people = $8, Total now $8
Level 2: $2 x 16 people = $32, Total now $8 + $32 = $40
Level 3: $2 x 64 people = $128, Total now $8 + $32 + $128 = $168
Level 4: $2 x 256 people = $512, Total now $8 + $32 + $128 + $512 = $680
Level 5: $2 x 1024 people = $2048, Total now $8 + $32 + $128 + $512 + $2048 = *** $2728 ***

Yearly income: $2728 x 12 months = $32,736

Monthly income model per level and total for maintaining 5 active members @ $2 each:

Level 1: $2 x 5 people = $10, Total now $10
Level 2: $2 x 25 people = $50, Total now $10 + $50 = $60
Level 3: $2 x 125 people = $250, Total now $10 + $50 + $250 = $310
Level 4: $2 x 500 people = $1000, Total now $10 + $50 + $250 + $1000 = $1310
Level 5: $2 x 2500 people = $5000, Total now $10 + $50 + $250 + $1000 + $5000 = *** $6310 ***

Yearly income: $6310 x 12 months = $75,720

Monthly income model per level and total for maintaining 6 active members @ $2 each:

Level 1: $2 x 6 people = $12, Total now $12
Level 2: $2 x 36 people = $72, Total now $12 + $72 = $84
Level 3: $2 x 216 people = $432, Total now $12 + $72 + $432 = $516
Level 4: $2 x 1296 people = $2592, Total now $12 + $72 + $432 + $2592 = $3108
Level 5: $2 x 7776 people = $15552, Total now $12 + $72 + $432 + $2592 + $15552 = *** $18660 ***

Yearly income: $18660 x 12 months = $223,920

Monthly income model per level and total for maintaining 7 active members @ $2 each:

Level 1: $2 x 7 people = $14, Total now $14
Level 2: $2 x 49 people = $98, Total now $14 + $98 = $112
Level 3: $2 x 343 people = $686, Total now $14 + $98 + $686 = $798
Level 4: $2 x 2401 people = $4802, Total now $14 + $98 + $686 + $4802 = $5600
Level 5: $2 x 16807 people = $33614, Total now $14 + $98 + $686 + $4802 + $33614 = ***

$39214 ***

Yearly income: $39214 x 12 months = $470,568

Keep in mind that it does not matter what day of the month that someone chooses to be active. It DOES
matter that they are active on that day EVERY month. The key to this is DUPLICATION! You must treat this
as a business. If you treat it like a hobby that is how it will treat you. You could even organize small
meetings with your people and their prospects and work with your leaders.
Think of how easy this would be for you, how reasonable this is, and of how good the chances are of it
working for you. You may need to hire someone to open all the envelopes.

NOTE: I decided on $2 instead of $1 because it is more feasible and it won't matter much for someone to
send $2 as opposed to $1. Also I was against $5 as that becomes too expensive to duplicate.

Mail $2 every month with a piece of paper saying "I am loaning you this $2 as an act of goodwill to help
you in your financial need, you may pay me back if and when you can" to the following needy people:

#1 Robert Jezil
114 Jefferson Ave.
Slidell, LA 70460

#2 Phil Walther Jr.
9495 Annapolis Lane North
Maple Grove, MN 55369

#3 C. E. Burkman
170 University Ave. W
Suite 12-129
Waterloo, Ontario
N2L 3E9

#4 A. Bailey
1207 Reeves Road
Plainfield, IN 46168

#5 J. Martin
P.O. Box 2292
Reston, Va. 20195

2014. Re: Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33c9ab4c.998812@news.bctel.ca>
Source record: 18378
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On 13 Jul 1997 19:49:29 GMT, jacob<jacob@friesl.net> wrote:

>I've found the pefect site with nude Asian ladies.
>Much more than you can find in any newsgroup.
>
>http://home.pi.net/~sappie/playboy.htm

and no sites show Asian males.... I don't know why there are so many
white males who wish to see asian females, but no white females for
the asian males... never mind...

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

2015. Re: Pathfinder freqs ???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33c9ab05.927707@news.bctel.ca>
Source record: 18379
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur

On Mon, 14 Jul 1997 13:12:23 +1100, Colin Frost
<s334832@student.uq.edu.au> wrote:

>> 8427.22222 MHz and 8429.938271 MHz

>Isn't it a little strange to give out that info as some "lunie" may jam?

8.4 GHz ?? unrealistic. ignore it.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

2016. $$$ NEW SYSTEM, BETTER THAN "ADD ME TO YOUR MAILING LIST" $$

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: a4@a.a
Message-ID: <33c9aa4b.0@news.unibe.ch>
Source record: 18380

I have participated in the standard "Please put me on your mailing list" letter and found it to be worth
my time (I get 1 or 2 handfulls or letters every day) but I also found that it's results were nowhere
near what I expected due mainly to people not sending in the money but rather spreading the letter
without paying for it. I participated in that mainly as an experiment and found that there are a
tremendous amount of people willing to do it. I thought about how to, first, eliminate the "non-pay"
problem and, second, to create a monthly income. I came upon the solution and decided to start a new
program. I decided that there were 3 things that this new program needed in order to work for everyone
and they were: 1.) It needed to be very simple and easy for anyone to do, and, 2.) It needed to be
inexpensive enough for even the poorest of people, and, 3.) It needs to be DUPLICATABLE. I think you
will find this program to meet those requirements. I have put lots of thought into it and I ask that you
PLEASE do NOT modify it. This WILL WORK if you follow it. This system is based on the unconditional
"loaning" of money to people. Simply say, "I am loaning you this $2 as an act of goodwill to help you in
your financial need, you may pay me back if and when you can." You should find 5 or more people who will
send $2 to the 5 needy people on this list AND MAINTAIN 5 or more people who will do the same. You
should put your name on postition number 5 and move each of the other names up one position. The name
originally on position number 1 gets removed. You should be able to contact each of your 5 or more
people to see if they are going to be active this month. If not then you need to find one or more people
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Yearly income: $2728 x 12 months = $32,736

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Level 2: $2 x 25 people = $50, Total now $10 + $50 = $60
Level 3: $2 x 125 people = $250, Total now $10 + $50 + $250 = $310
Level 4: $2 x 500 people = $1000, Total now $10 + $50 + $250 + $1000 = $1310
Level 5: $2 x 2500 people = $5000, Total now $10 + $50 + $250 + $1000 + $5000 = *** $6310 ***

Yearly income: $6310 x 12 months = $75,720

Monthly income model per level and total for maintaining 6 active members @ $2 each:

Level 1: $2 x 6 people = $12, Total now $12
Level 2: $2 x 36 people = $72, Total now $12 + $72 = $84
Level 3: $2 x 216 people = $432, Total now $12 + $72 + $432 = $516
Level 4: $2 x 1296 people = $2592, Total now $12 + $72 + $432 + $2592 = $3108
Level 5: $2 x 7776 people = $15552, Total now $12 + $72 + $432 + $2592 + $15552 = *** $18660 ***

Yearly income: $18660 x 12 months = $223,920

Monthly income model per level and total for maintaining 7 active members @ $2 each:

Level 1: $2 x 7 people = $14, Total now $14
Level 2: $2 x 49 people = $98, Total now $14 + $98 = $112
Level 3: $2 x 343 people = $686, Total now $14 + $98 + $686 = $798
Level 4: $2 x 2401 people = $4802, Total now $14 + $98 + $686 + $4802 = $5600
Level 5: $2 x 16807 people = $33614, Total now $14 + $98 + $686 + $4802 + $33614 = ***

$39214 ***

Yearly income: $39214 x 12 months = $470,568

Keep in mind that it does not matter what day of the month that someone chooses to be active. It DOES
matter that they are active on that day EVERY month. The key to this is DUPLICATION! You must treat this
as a business. If you treat it like a hobby that is how it will treat you. You could even organize small
meetings with your people and their prospects and work with your leaders.
Think of how easy this would be for you, how reasonable this is, and of how good the chances are of it
working for you. You may need to hire someone to open all the envelopes.

NOTE: I decided on $2 instead of $1 because it is more feasible and it won't matter much for someone to
send $2 as opposed to $1. Also I was against $5 as that becomes too expensive to duplicate.

Mail $2 every month with a piece of paper saying "I am loaning you this $2 as an act of goodwill to help
you in your financial need, you may pay me back if and when you can" to the following needy people:

#1 Robert Jezil
114 Jefferson Ave.
Slidell, LA 70460

#2 Phil Walther Jr.
9495 Annapolis Lane North
Maple Grove, MN 55369

#3 C. E. Burkman
170 University Ave. W
Suite 12-129
Waterloo, Ontario
N2L 3E9

#4 A. Bailey
1207 Reeves Road
Plainfield, IN 46168

#5 J. Martin
P.O. Box 2292
Reston, Va. 20195

2017. Re: Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: Brian Gibbs <Brian@brimar.demon.co.uk>
Message-ID: <MhH0YJA2FcyzEwHy@brimar.demon.co.uk>
Source record: 18381

In article <5qbbg9$rtk@halley.pi.net>, jacob <jacob@friesl.net> writes
>I've found the pefect site with nude Asian ladies.
>Much more than you can find in any newsgroup.
>
>http://home.pi.net/~sappie/playboy.htm
>
>
>
>
>
>
Is this a tad off-topic, or has rec.radio.amateur.space changed this
much while I was looking the other way?

It's a funny old world!

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

2018. Decode and plot TLM from Rover MPF

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: maury <i862@rocketmail.com>
Message-ID: <5qd73ipvu1@menelao.polito.it>
Source record: 18382
Cross-posted to: it.hobby.radioamatori,rec.radio.amateur,rec.radio.amateur.space,uk.radio.amateur

```
Download ver 1.4 of ROVTLM to decode and
plot telemetry from Rover Mars Pathfinder.
http://www-dx.deis.unibo.it/htdx/
Freeware, comments and suggestions welcome.
73, Maury
```

2019. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: "George S. MacLauchlan" <geomac@tiac.net>
Message-ID: <33CA3447.6D2F@tiac.net>
Source record: 18383

Phil Karn wrote:
>
> Dale (Squeak) Porray, AD7K wrote:
>
> > On his website, located at
> > http://people.qualcomm.com/karn/mpf_budget.html
> > Phil Karn, KA9Q, states that the transmit frequency from
> > Mars to Earth is 8420 MHz, with transmitter power of 35
> > Watts.
>
> Note I give sources (mostly web links) for each of the items on
> my link budget. I'm now citing Steve Schindler's article here
> for the exact MPF downlink frequencies. I had known they were in
> the X-band deep space allocation, but I didn't know the exact
> values. They don't really affect the budget figures that much anyway.
>
> I'm still looking for an authoritative source for the downlink
> antenna gain. A more authoritative figure for the downlink power
> than "35w nominal" would also be nice.
>
> Phil
I believe I read somewhere? that the link from mars to earth
is somewhere around -247db.
73, George K1IFV in NH

2020. Subject: Amateur Radio Mailing Lists (partial summary, long)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33CA508B.73A5@primenet.com>
Source record: 18384

```
Subject: Amateur Radio Mailing Lists (partial summary, long)

Below is a list of mailing lists at QSL.Net and Contesting.Com

TO: majordomo@qsl.net >or< majordomo@contesting.com
SUBJECT:
BODY: subscribe listname

Mailing Lists (Reflectors) At QSL.Net

50mhz 6 Meters only
50mhz-digest
alinco Alinco
alinco-digest
aprs APRS
aprs-digest
ares-races ARES-RACES
ares-races-digest
bcvhfa Butler County VHF Assn.
bcvhfa-digest
bitbucket The BitBucket
bitbucket-digest
bpsk BPSK/DSP Weak-Signal Detection
bpsk-digest
cw CW Amateur Radio List-Server
cw-digest
emwin Emergency Manager's Weather Information Net
emwin-digest
flares Florida ARES
flares-digest
forsale-swap ForSale/Swap/Wanted
forsale-swap-digest
fox_tango Fox-Tango
fox_tango-digest
georgia-skywarn Georgia Skywarn
georgia-skywarn-digest
greenland-97 **1997 NASA mission to Iceland/Greenland**
PRIVATE
greenland-97-digest
ham-books HAM-BOOKS Amateur Radio List-Server
ham-books-digest
ham-software HAM-SOFTWARE Amateur Radio List-Server
ham-software-digest
handi-hams Handicapped Hams
handi-hams-digest
```

homebrew Homebrew Amateur Radio List-Server
homebrew-digest
icom Icom User's Amateur Radio List-Server
icom-digest
kenwood Kenwood Amateur Radio List-Server
kenwood-digest
laser Free Space Laser Communications List-Server
laser-digest
list-owner-info
marcnet Marin Amateur Radio Club
marcnet-digest
marrn MARRN Amateur Radio
marrn-digest
meteor-scatter Meteor Scatter Amateur Radio
meteor-scatter-digest
mnqrp MNQRP Amateur Radio
mnqrp-digest
mobile-portable MOBILE-PORTABLE Amateur Radio
mobile-portable-digest
newsvhf North East Weak-Signal VHF
newsvhf-digest
nlrs Northern Lights Radio Society
nlrs-digest
packet-pbbs Packet and PBBS Amateur Radio
packet-pbbs-digest
park PARK Amateur Radio List-Server
park-digest
ppares Pikes Peak ARES Amateur Radio
ppares-digest
ppraanet Pikes Peak Radio Amateur Assn.
ppraanet-digest
programit PROgramit Amateur Radio
programit-digest
qsl-net Private Amateur Radio
qsl-net-digest
serc Sarasota Emergency Radio Club
serc-digest
skywarn SkyWarn Amateur Radio
skywarn-digest
smirk SMIRK Amateur Radio
smirk-digest
srqares SRQARES Amateur Radio
srqares-digest
sstv-atv SSTV and ATV Amateur Radio
sstv-atv-digest
vaafmars Virginia AFMARS Amateur Radio
vaafmars-digest
vintage-radio Vintage Radio and AM
vintage-radio-digest
wsvhf International Weak-Signal VHF

wsvhf-digest
wswss Western States Weak-Signal Society
wswss-digest

Mailing Lists (Reflectors) At Contesting.Com

3830 3830 Score Reporting Reflector
3830-digest
amps RF Amplifier Discussion List
amps-digest
cq-contest CQ Contest Mailing List
cq-contest-digest
kids Kid's Day Operating Event Reflector
kids-digest
stewperry Stu Perry TopBand Distance Contest Reflector
stewperry-digest
svhfs SE VHF Society Mailing List
svhfs-digest
tentec TenTec Amateur Radio Mailing List
tentec-digest
topband Top Band Reflector
topband-digest
towertalk Tower Talk Reflector
towertalk-digest
trlog TRLog Mail Reflector
trlog-digest
yaesu Yaesu Amateur Radio Mailing List
yaesu-digest
yccc Yankee Clipper Contest Club Reflector
yccc-digest

2021. Re: Dove

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: Mike C <anti@spam.net>
Message-ID: <33CA6962.5AFF@spam.net>
Source record: 18385

Geoff Clark wrote:

> Has anyone heard from Dove recently? I have heard nothing for the last
> couple of weekends. Amy clues?

The ANS-31 WEEKLY BULLETIN from back on May 11, 1997 stated:

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE apparently crashed late last week (about April 24). Cause of crash
is
unknown at this time. WJ9F turned on the S-band transmitter about May 1
0500U and has started the reload process.
.[ANS thanks Jim white, WD0E, DO-17 Command Team, for this news.]

The latest BULLETIN (number 194) states that no DOVE report is
available.

Anyone have more clues?

Thanks,
Mike
catman@codem.com
http://www.codem.com

2022. Re: Contacting the Mir and Space Shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5qdjs9$k5b$1@news.mhv.net>
Source record: 18386

Your set-up is just fine. Patients is the key here. After 2 years of
trying to make a voice contact with Mir this past January I had a QSO with
John Blaha on Mir. Thrilled doesn't even describe how great it was! With the
Ringo (that's what I have) you basically have 2 chances during a pass, from
the horizon to about 35-40 degrees up. So at the beginning of the pass and at
the end of a pass are your best chances. About 40 degrees they won't hear you.
My contact was about 15 degrees at the time. Just keep trying and don't give
up or get discouraged! you'll do it eventually!

Good luck,

Tom

In article <33C98F0A.16C9@ix.netcom.com>, nbrieger@ix.netcom.com wrote:
>
>I was wondering if anyone could recommend a setup for contacting the
>Mir, Space Shuttle, and other amateur satellites and entities. I'm
>currently set up here with a Yaesu that can output 5/20/50 watts on
>2m and have a cushcraft ringo in the attic. I'm pretty sure the
>antenna isn't going to cut it, and a ground plane antenna has been
>recommended. Is 50 watts going to be enough to contact those sites
>in space with the correct type of antenna? If anyone has any
>suggestions or could recommend what works good for them, I'd love
>to hear what you've done!
>
>73,
>Niel Brieger, KC5ZJR

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

2023. Re: newbie

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5qdjus$k5b$2@news.mhv.net>
Source record: 18387

In article <01bc9002$88409740$17c174cf@default>, "John Griffin" <jpgriff@worldnet.att.net> wrote:
>hello:
>I'm new to packet and I'd like to get into MIR comms and I have a few
>questions.
>#1- Previous info I have indicates that MIR operates simplex on 145.55.
> Is it still an active freq?

Yes.

>#2- Is there a new packet (simplex?) channel on 145.985?

Yes. Thye have the choice of using this or .550 over the U.S.

>#3- What is the MIR callsign?

The PBBS is R0MIR-1

>thanx and 73 de KB2SGJ

Your welcome!

>John Griffin
>JPGRIFF@NOSPAMworldnet.att.net
>please remove "NOSPAM" to reply

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

2024. STSPlus

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: cyber357 <cyber357@nwol.net>
Message-ID: <33CAE103.5554@nwol.net>
Source record: 18388

I'm having a hard time trying to program STSPlus to track
only the Shuttle and MIR. Can someone help.

Steven Baker

2025. *Amateur CW/Voice Satellite Frequencies FAQ 07.14.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1407972020280001@0.0.0.0>
Source record: 18389
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ07.14
Amateur CW/Voice Satellite Frequencies for July 14, 1997.

BID: $FREQ0708
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
```

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse.

* Radio Sport-10's beacon, ROBOT and transponder remain silent. Bad news to report regarding the satellite:

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

Still no firm information as to what is wrong with the bird and why the problem occured. Let's pray that this report was a 'bad translation' from Russian to English.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

The latest FO-29 Schedule.
July 11 (Fri) 09:51z JD1200
July 18 (Fri) 00:20z JD9600
July 25 (Fri) 09:23z JA
Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA

* Mir Simplex - Astronaut Mike Foale has been making the odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and the 145.985 simplex have been used.

* Mir SAFEX Repeater - Not operational at this time.

* SAREX Mission STS-94 Nominal orbital data is now available on the AMSAT Web Page. The time-independent State Vector and the Keplerian elements corresponding to the scheduled launch time of 01-JUL-97 / 18:37 UTC are available at:

http://www.amsat.org/amsat/sarex/orbit.html

CREW MEMBERS with Amateur Radio call signs:
James D. Halsell, Commander, KC5RNI
Janice E. Voss, Payload Commander, KC5BTK
Donald A. Thomas, Mission Specialist, KC5FVF

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

The following STS-94 SAREX summary information was obtained from several sources at NASA, the ARRL, and AMSAT including portions of AMSAT News Service bulletin numbers $ANS-166.02 and $ANS-159.02.

During SAREX missions, the astronauts will typically make scheduled radio contacts with schools, random radio contacts with the Amateur Radio community and personal contacts with their families.

Seventeen schools, including one in the People's Republic of China, are scheduled to talk with the astronauts. During the earlier mission, Columbia's premature return to Earth on April 8 posponed all scheduled SAREX QSOs. Most of the schools on the earlier schedule remain on tap for the July mission, which will again carry the microgravity science lab. Three hams are among the STS-94 crew members.

Under the SAREX program, students at each of the selected schools ask questions of the astronauts during the contact. The primary goal of SAREX is to excite students' interest in science, math, technology and the U.S. space program.

STS-94 is a long duration shuttle flight where crew members will work in shifts around the clock. Shift team members are as follows:

RED TEAM
Commander (CDR): Jim Halsell, KC5RNI
Pilot (PLT): Susan Still
Mission Specialist (MS3): Donald Thomas, KC5FVF
Payload Specialist (PS2): Greg Linteris

BLUE TEAM
Mission Specialist (MS1): Janice Voss, KC5BTK
Mission Specialist (MS2): Michael Gernhardt
Payload Specialist (PS1): Roger Crouch

The SAREX Working Group has designated the following frequencies during the STS-94 mission.

FM Voice Downlink: (Worldwide) 145.55 MHz FM
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz***
FM Packet Uplink: 144.49 MHz***

***If packet is on the air.

CONFIGURATION: Officially, the SAREX hardware is flying in Configuration B. SAREX Configuration B is voice only, battery operation. The SAREX equipment on-board STS-94 includes the Motorola 2-meter FM hand-held transceiver, 15 spare batteries, the window antenna, SAREX headset assembly, personal recorder and the required interconnecting cables. Since STS-94 is an extended duration flight with power hungry primary experiments, the power allocated for SAREX is zero watts. The SAREX team is also flying the Heathkit Packet Radio TNC for potential use later in the flight. In the event that power conservation measures are successful, the mission control team will advise SAREX and the astronauts to initiate use of the Packet Radio system which also includes one of the shuttle laptop computers or PGSCs.

Please stay tuned to these SAREX Working Group bulletins and
sarex@amsat.org during the mission for late breaking news regarding
packet operation.

CALL SIGNS:
FM voice call signs: KC5RNI, KC5BTK and KC5FVF
FM packet call sign: W5RRR-1 (If turned on during the flight)

Hams should avoid transmitting on the shuttle's downlink frequencies.
The crew will not favor any uplink frequency, so your ability to
communicate with SAREX will be the "luck of the draw." Transmit only
when the shuttle is within range of your station, and when the shuttle
station is on-the-air.

The crew is using separate receive and transmit frequencies. PLEASE do
not transmit on the shuttle's DOWNLINK frequency. The DOWNLINK is your
receiving frequency. The UPLINK is your transmitting frequency.

QSL VIA: Send reports and QSLs to ARRL EAD, STS-94 QSL, 225 Main Street,
Newington, CT 06111-1494, USA. Include the following information in
your QSL or report: STS-94, date and time in UTC, frequency and mode
(FM; voice or packet). In addition, you must also include a SASE using
a large, business-sized envelope if you wish to receive a card.

STS-94 is the 23rd flight of Columbia and the 85th mission
flown since the start of the Space Shuttle program in April 1981.

[Radio amateurs are encouraged to relay these SAREX bulletins to
their local packet BBS as long as the Bulletin IDentification (BID)
is preserved. The BID is the character string beginning with the
dollar sign ($), for example as in "SB SAREX @ AMSAT $STS-94.001"
without the quotation marks.]

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

2026. DoYouKnow?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: button@jims.com
Message-ID: <5qdvrl$86p$19@charlotte.aracnet.net>
Source record: 18390

Angered Research Expert, Legal Asst. Tells "The rest of
The Story" - Declares WAR ON THE NET!!! -- Demands to
know why WIRED failed to tell *The Full Story* About the
"Flying Saucier"... Freaks vs. Enlow?

THERE WAS SO MUCH MORE TO TELL...

http://163.125.3.231/spamwar.html

2027. newbie

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: John Griffin <jpgriff@worldnet.att.net>
Message-ID: <01bc9002$88409740$17c174cf@default>
Source record: 18473

hello:
I'm new to packet and I'd like to get into MIR comms and I have a few
questions.
#1- Previous info I have indicates that MIR operates simplex on 145.55.
Is it still an active freq?

#2- Is there a new packet (simplex?) channel on 145.985?

#3- What is the MIR callsign?

thanx and 73 de KB2SGJ
--
John Griffin
JPGRIFF@NOSPAMworldnet.att.net
please remove "NOSPAM" to reply

2028. Re: Pathfinder freqs ???

Newsgroup: rec.radio.amateur.space
Date: 1997-07-14 00:00:00 UTC
From: Colin Frost <s334832@student.uq.edu.au>
Message-ID: <33C98B07.981@student.uq.edu.au>
Source record: 18474

Steve Schindler wrote:
>
> radio@alaska.net wrote:
> >
> > Anyone know the frequencies that Pathfinder is using to transmit back
> > to Earth?? Steve
>
> 8427.22222 MHz and 8429.938271 MHz
Isn't it a little strange to give out that info as some "lunie" may jam?
--
Colin Frost
Electrical Engineering Undergraduate
University of Queensland, Australia.
Amateur Radio Operator VK4TCF
Email <s334832@student.uq.edu.au>
Phone (015 77 1019)

2029. Re: Other Pathfinder questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: todd@tj.org
Message-ID: <5qf2tk$c2m@news.scruz.net>
Source record: 18391

pwinter@best.com (Patty Winter) writes:

> I also recommend that people go to Phil's main page
> first and then follow the link to his Pathfinder data
> calculations page. That way you can see his photo of
> John De Lancie and Brent Spiner. :-)

The new photo is nice, but I miss the one of the NSA guy. ;-)

Todd, KB6JXT

2030. Re: Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: seymourusm@aol.com
Message-ID: <19970715064501.CAA22527@ladder02.news.aol.com>
Source record: 18392

>>I've found the pefect site with nude Asian ladies.
>>Much more than you can find in any newsgroup.
>>
>>http:// (snip)
>>

>Is this a tad off-topic, or has rec.radio.amateur.space changed this
>much while I was looking the other way?
>
>It's a funny old world!
>
>Brian Gibbs EMail brian@brimar.demon.co.uk

>Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

No, just a reminder that the Internet is going straight down the friggin'
toilet. That's what happens when a technology goes commercial.

Call me an old fashioned 23 year old but I don't remember anything like
this junk on FidoNet or the good old BBS'es. Also, the boys at CERN are
certainly happy about which direction their "world wide web" is heading.

Cheers,
KF4PTH
Sean
stbowers@juno.com

2031. Re: STSPlus

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5qgnu8ahe1@news.mhv.net>
Source record: 18393

In article <33CAE103.5554@nwol.net>, cyber357 <cyber357@nwol.net> wrote:
>I'm having a hard time trying to program STSPlus to track
>only the Shuttle and MIR. Can someone help.
>
>Steven Baker

At the main menu go to F6 and you can change things how many and which
sats you want it to track from there. The documentation is pretty well done,
you may want to consult it.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

2032. ARLS025 Shuttle contacts PRC

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls025.1997@arrl.org>
Source record: 18394
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS025
ARLS025 Shuttle contacts PRC

ZCZC AS25
QST de W1AW
Space Bulletin 025 ARLS025
From ARRL Headquarters
Newington, CT July 15, 1997
To all radio amateurs

SB SPACE ARL ARLS025
ARLS025 Shuttle contacts PRC

It didn't come off without a hitch, but the crew aboard the shuttle Columbia during mission STS-94 in July nonetheless managed a first for the Shuttle Amateur Radio EXperiment (SAREX) program. On Monday, July 14, the shuttle crew spoke with students at Tsinghua University. The contact was via a telebridge link with Gordon Williams, VK6IU, in Western Australia. The successful QSO marked the first SAREX contact with a school in the People's Republic of China.

On the first scheduled orbit for the Tsinghua University contact, the designated crew member, Payload Specialist Roger Crouch, was busy with primary mission duties. The SAREX ground team stayed up late and managed a successful QSO on the following orbit. There were 30 people in the Tsinghua University audience, along with Chinese television, Chinese government officials, and some Chinese IARU representatives. David Chang, BY1QH, coordinated the contact at the university's end. Despite some rough copy, the contact went ''very well'' with 10 questions asked and answered, according to SAREX Principal Investigator Matt Bordelon, KC5BTL.

The Chinese contact was one of 17 scheduled SAREX QSOs the STS-94 crew members completed during their 16-day mission. Overall, ham radio had a very prominent role in the mission, which not only completed all of the scheduled SAREX contacts with school groups but made numerous random QSOs with earthbound hams. Aboard the shuttle were Jim Halsell, KC5RNI, the mission commander; Janice Voss, KC5BTK; and Donald Thomas, KC5FVF, who set up the orbiting ham shack and completed 19 random contacts before the ''official'' scheduled test pass. Toward the end of the mission, the Columbia crew averaged three dozen or so random voice contacts per day during the 16-day mission. The packet robot was activated nine days into the mission.

The other SAREX schools on mission STS-94 were: Alvin C. York Agricultural Institute, Jamestown, Tennessee; Center Street School, El Segundo, California; Crittenden Middle School, Mountain View, California; Discovery Place Inc, Charlotte, North Carolina; Du Bois Middle School, Du Bois, Pennsylvania; Dunn's Corners Elementary School, Westerly, Rhode Island; Edgewater High School, Orlando, Florida; Foursquare Radio Amateur Youth, Oxnard, California; Ione Junior High School, Jackson, California; Lawrence Intermediate School, Lawrenceville, New Jersey; Lexington Traditional Magnet School, Lexington, Kentucky; Mountain View Elementary School, Prescott Valley, Arizona; Public School No 9, New York, New York; Robert J. Burch Elementary School, Tyrone, Georgia; S.J. Davis Middle School, San Antonio, Texas; and Yeso Elementary School, Artesia, New Mexico.

STS-94 marked the 24th SAREX mission. The mission--a ''refly'' of the aborted STS-83 mission in April--carried the same crew members and the microgravity science lab payload. The Columbia crew will stow the SAREX equipment on July 16.
NNNN
/EX

2033. ARLK054 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk054.1997@arrl.org>
Source record: 18395
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK054
ARLK054 Keplerian data

ZCZC SK54
QST de W1AW
Keplerian Bulletin 54 ARLK054
From ARRL Headquarters
Newington, CT July 15, 1997
To all radio amateurs

SB KEP ARL ARLK054
ARLK054 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-94
1 24849U 97032A 97196.58333333 .00001665 00000-0 33735-5 0 435
2 24849 28.4727 277.4505 0003834 122.5033 121.9158 15.91397547 2193
AO-10
1 14129U 83058B 97189.02219955 .00000048 00000-0 10000-3 0 04955
2 14129 26.0158 138.4185 6060909 132.4033 297.8873 2.05880396077815
RS-10/11
1 18129U 87054A 97196.09475239 .00000020 00000-0 48149-5 0 04017
2 18129 82.9250 218.1007 0012543 137.4248 222.7882 13.72380094504065
UO-11
1 14781U 84021B 97195.94974249 .00000065 00000-0 18917-4 0 09930
2 14781 97.8368 176.0732 0010648 278.5226 81.4769 14.69565620715339
RS-12/13
1 21089U 91007A 97196.18026827 .00000060 00000-0 47837-4 0 09969
2 21089 82.9216 257.8795 0027900 218.2422 141.6744 13.74083823323006
UO-14
1 20437U 90005B 97196.15719655 .00000007 00000-0 19506-4 0 02985
2 20437 98.5176 277.2210 0011545 122.4609 237.7693 14.29965526390216
RS-15
1 23439U 94085A 97196.10052349 -.00000039 00000-0 10000-3 0 02342
2 23439 64.8151 107.7009 0148146 127.1635 234.2921 11.27527947105083
AO-16
1 20439U 90005D 97196.17098976 .00000015 00000-0 22564-4 0 00890
2 20439 98.5349 280.2229 0011674 123.6505 236.5793 14.30013001390239
```

```
RS-16
1 24744U 97010A 97196.12798169 .00001672 00000-0 57322-4 0 00768
2 24744 97.2732 100.6621 0007752 5.0773 355.0542 15.31546677020362
DO-17
1 20440U 90005E 97195.31457186 -.00000043 00000-0 80310-7 0 819
2 20440 98.5385 280.2609 0011748 124.8125 235.4165 14.30154853390148
WO-18
1 20441U 90005F 97196.15263661 .00000024 00000-0 25886-4 0 00920
2 20441 98.5350 280.9764 0012403 123.0028 237.2349 14.30123173390260
LO-19
1 20442U 90005G 97196.18764097 .00000028 00000-0 27396-4 0 00879
2 20442 98.5428 281.7011 0012591 122.0170 238.2236 14.30238565390297
FO-20
1 20480U 90013C 97196.17705886 -.00000077 00000-0 -93727-4 0 09988
2 20480 99.0450 152.5032 0540072 314.0519 41.7291 12.83237670348291
AO-21
1 21087U 91006A 97196.07896776 .00000094 00000-0 82657-4 0 08428
2 21087 82.9396 30.9350 0033928 189.3085 170.7446 13.74583977323984
UO-22
1 21575U 91050B 97196.16587833 -.00000022 00000-0 67846-5 0 07896
2 21575 98.2989 255.7185 0007710 162.8585 197.2869 14.37076275314507
KO-23
1 22077U 92052B 97196.12333287 -.00000037 00000-0 10000-3 0 06843
2 22077 66.0754 86.7435 0007814 205.4954 154.5680 12.86302302231349
KO-25
1 22828U 93061F 97196.16031224 .00000045 00000-0 35408-4 0 05508
2 22828 98.5394 270.0942 0010326 139.2558 220.9393 14.28184731166203
IO-26
1 22826U 93061D 97196.13272037 .00000016 00000-0 23804-4 0 05710
2 22826 98.5428 269.9836 0009186 155.3653 204.7969 14.27840941198075
AO-27
1 22825U 93061C 97196.16642490 -.00000007 00000-0 14440-4 0 05724
2 22825 98.5432 269.7637 0008321 153.8369 206.3235 14.27730944198067
FO-29
1 24278U 96046B 97196.10197814 -.00000020 00000-0 12924-4 0 01011
2 24278 98.5374 233.5236 0352314 113.8268 250.0219 13.52631982044896
MO-30
1 24305U 96052B 97195.83852326 .00000204 00000-0 20364-3 0 01226
2 24305 82.9384 334.1481 0031377 127.4242 232.9764 13.73094159042851
Mir
1 16609U 86017A 97196.69180741 .00001825 00000-0 28872-4 0 4624
2 16609 51.6539 302.6716 0003863 266.5523 93.5048 15.59549168651472

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
July 19, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2034. Web Page Updates

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33CC29DE.7B8D@primenet.com>
Source record: 18396

Web Page Updates

Many, many amateur radio topics...

http://www.qsl.net/k7on

2035. Oscar Antennas + Roof Tower?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-15 00:00:00 UTC
From: Mike Blanchard <mblancha@spd.dsccc.com>
Message-ID: <33CC31CE.1951470D@spd.dsccc.com>
Source record: 18397

I plan to mount two M2 Oscar Antennas on a 4' Glen Martin Roof Tower.

The tower is 4' high and I plan to use a split Yeasu G5400B Az/El rotor. How tall should the mast be? The turing radius of the antennas is 6'. If the mask extends 5' above the tower will the metal in the tower affect the antenna pattern? Should the mask be taller?

73,
N5KDY

2036. *** Dear Sir / Madam ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33cc1858.1292784@news.bctel.ca>
Source record: 18398
Cross-posted to: van.general,bc.general,can.general,bc.politics,can.politics,rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.scanner,rec.radio.scanner

I will be absent for a month or so.

Thank you.

Masa
Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info, AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

2037. Re: Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9707152011232440@atdbbs.com>
Source record: 18399

>>That's what happens when a technology goes commercial.

Not at all..it's what occurs when we don't require an IQ test
for access...

<g>

Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com

2038. Minimum uplink ERP for working AO10, FO20, FO29

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <5qhkms$mf5@server.cntfl.com>
Source record: 18400

I am in process of making many changes to my station antenna system and am interested in comments regarding the minimum ERP required to work these birds reliably. I have heard comments from 5 watts to 500 watts.

Thanks

2039. Don't U pay 4 sex site password$

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: 986905555545@compuserve.com
Message-ID: <5qid7v$emg@news1-alterdial.uu.net>
Source record: 18401

```
This is a multi-part message in MIME format.

--_-=314
Content-type: text/html; name="Sex~1.htm"
Content-transfer-encoding: base64

<encoded_portion_removed>
b25nPjwvZm9udD48L2ZvbnQ+PC9hPjwvcD4NCjwvYm9keT4NCg0KPC9odG1sPg0K

--_-=314
```

2040. No bogus, no smallprint, Start earning today !

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: ICTC <ITCT@nhi.no>
Message-ID: <5qiid6$160$606@due.unit.no>
Source record: 18402

Introducing the Hottest Breakthrough in Network Marketing History!

Bottom line/smallprint: NO minimum purchase required . Zero.
Only an annual fee of $29.95 and your chance to save and earn BIG money.

We are the first company to combine the Hottest Products of the 20th Century, the Hottest Telecommunication Services available, 1000's of Name Brand Products you buy everyday, and the Best Pay-Plan in the Industry!

Products will be presented in 3 formats:

1. In a state-of-the-art Internet Mall
2. In printed catalogs that you can hand out or mail out
3. In a beautiful CD-ROM that you can hand out or mail out

If you want you may go directly to this web page :

http://www.romegeorgia.com/cgi-bin/mfgdir/index.cgi?CH0667

Or,

For all the hottest details on this once in a lifetime opportunity, reply to ICTC@nhi.no with "More Info" in the subject field, and the information will be sent to you ASAP!

Or read on here :

Does this sound too good to be true??? Well, it's true, and here's why:

We are working closely with the following businesses to bring you all the greatest products of the nation through the convenience of Home Shopping!

1. One of the Largest Wholesale Clubs in the Nation, bringing you 1000's of products you are currently buying and using every day!

2. Sysco Foods, the Nation's Largest Food/Household products supplier for Supermarkets, Grocery Stores, Hotels/Motels, and Restaurants!

3. Suppliers of "As Seen On TV" products, 25,000+ Name Brand Foods Items, Nutritionals, Weight Loss products, 175,000 Music CDs, Sharp, Panasonic, Southwestern Bell, Quasar, Timex, Seiko, Black & Decker, KTool, Sunbeam, Mikasa, Corning, Char-Broil, Bush Furniture, Braun, Vidal Sassoon, Gifts, Jewelry, Fragrances, and the list keeps growing!

4. A $100 Million Telecommunications company bringing you the
HOTTEST High-Tech products available ANYWHERE! Plus all the services
you use everyday at prices that will save you money just by using
them!

9.9 cpm Long Distance Service
$9.95 Unlimited Internet Service
Virtual Home/Office System
Free Calling Cards

Combined all this with the Hottest Sponsoring System available online
and your success is bound to be unbelievable! FREE Webpages to use
when sponsoring others, Weekly Updates to keep you informed, Rep
Support Center to have all your questions answered DAILY, and much,
much more!

See this webpage for more info :

http://www.romegeorgia.com/cgi-bin/mfgdir/index.cgi?CH0667

For all the hottest details on this once in a lifetime opportunity,
reply to ICTC@nhi.no with "More Info" in the subject field,
and the information will be sent to you ASAP!

As an added bonus, just for reading this advertisement, reply to
ICTC@nhi.no with "Newsletters" in the subject field and I
will send you 2 POWERFUL Newsletters just for replying to this
message!

2041. *** Dear Sir / Madam ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9707161159442445@atdbbs.com>
Source record: 18403

MASA>> I will be absent for a month or so.

Hmmm...that coincides with MY parole officer's demands, also...

JUST A JOKE, FOLKS.

- Clint Bradford

2042. Satellite Info

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: niel brieger <nbrieger@ix.netcom.com>
Message-ID: <33CD8514.7657@ix.netcom.com>
Source record: 18404

Has anyone heard from the Dove (OSCAR-17) satellite lately? There was a post here the other day of someone trying to hear it, but I am having problems finding it also. Does anyone have current info on if it is down or is operating properly?

Thanks!

2043. Re: Oscar Antennas + Roof Tower?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: jcw@frontiernet.net
Message-ID: <5qk58f$ge4$1@node17.cwnet.frontiernet.net>
Source record: 18405

In article <33CC31CE.1951470D@spd.dsccc.com>, Mike Blanchard
<mblancha@spd.dsccc.com> wrote:

> I plan to mount two M2 Oscar Antennas on a 4' Glen Martin Roof Tower.
>
> The tower is 4' high and I plan to use a split Yeasu G5400B Az/El rotor.
> How tall should the mast be? The turing radius of the antennas is 6'. If
> the mask extends 5' above the tower will the metal in the tower affect
> the antenna pattern? Should the mask be taller?
>
> 73,
> N5KDY

My guess is that ke4zv@bellsouth.net - AKA Gary Coffman or the folks at
w1aw@arrl.org can provide or more detailed answer, so please repost or
e-mail if this doesn't answer properly.

First things first, and those things would be that you cannot deal with support
effects totally in an az/el environment, unless you use very strong,
non-conductive support elements.

The second thing would be that most antennas don't have sufficiently narrow
forward lobes that an out of plane support structure effects the ability
to make satellite contact.

The third thing would be the practical advice, and that is that you really,
really need to make sure that however you position your antennas, that you
get good balance (meaning that with clamps loose, both elevation and
azimuth) so that it takes no more than a slight finger press to move the
array in any direction.

The last, which should be obvious, is make absolutely sure that no
combination of elevation or rotation will foul any part of your installation
or any other current or growing object.

Summary is that anything that can be pointed effectively by the Yeasu
5400 should focus on non-fouling installation, good balance in both planes,
and a reasonable idea of which way is 0 degrees North. Good downlink
pre-amps is a strong recommendation. Big ears will get you places faster
than a big mouth will.

Regards
John Wise jcw@frontiernet.net

2044. Info on satillites..

Newsgroup: rec.radio.amateur.space
Date: 1997-07-16 00:00:00 UTC
From: KROSNO <KROSNO@prodigy.net>
Message-ID: <01bc91fd$af8df200$6c382581@default>
Source record: 18406

Does anyone have any info on what's up with RS-10/11!!!! I've been hearing
that it should have been back up last moth but i can't seem to fine it!
Also i have heard that RS-16 is now up. Anyone have info on when it's
beacon might be up? Thanks Devin KD6GHZ

2045. Re: *** Dear Sir / Madam ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33cd9a2b.46792978@news.capital.net>
Source record: 18407
Cross-posted to: van.general,bc.general,can.general,bc.politics,can.politics,rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.scanner,rec.radio.scanner

On Wed, 16 Jul 1997 05:57:47 GMT, kpollak@nospam.com (Karl Pollak)
wrote:

>masa@writemeNOSPAM.com (M@s@) wrote:
>
>>I will be absent for a month or so.
>>
>>Thank you.
>>
>Not at all. On the contrary, thank YOU.
>
>
>Karl Pollak <kpollak@portal.ca>
>Richmond, British Columbia

What the Hell are we going to do without the Great Masa's wisdom and
guidance for a whole month! Oh, the horror!!

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

2046. Re: Info on satillites..

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: jcw@frontiernet.net
Message-ID: <5qk62n$su4$1@node17.cwnet.frontiernet.net>
Source record: 18408

In article <01bc91fd$af8df200$6c382581@default>, "KROSNO"
<KROSNO@prodigy.net> wrote:

> Does anyone have any info on what's up with RS-10/11!!!! I've been hearing
> that it should have been back up last moth but i can't seem to fine it!
> Also i have heard that RS-16 is now up. Anyone have info on when it's
> beacon might be up? Thanks Devin KD6GHZ

I've seen reports this week that RS10 may be recoverable, but the estimate
for recovery was fairly small. Let's hope the estimate was wrong; it would
be great to have it back.

As far as RS16 goes, I've read that the beacon is on, but operation hasn't
started yet. Fingers crossed there too.

Just in case you don't know, AMSAT has a site that gives reasonably up
to date info. http://www.amsat.org to see the big picture. For recent news
try http://www.amsat.org/amsat/news.html

Regards,
John Wise jcw@frontiernet.net

2047. Re: *** Dear Sir / Madam ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: kbaskett@rogers.wave.ca
Message-ID: <33cec30d.15133081@snews.zippo.com>
Source record: 18409
Cross-posted to: van.general,bc.general,can.general,bc.politics,can.politics,rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.scanner,rec.radio.scanner

On Thu, 17 Jul 1997 04:07:56 GMT, orion@xyzcapital.net wrote:

>On Wed, 16 Jul 1997 05:57:47 GMT, kpollak@nospam.com (Karl Pollak)
>wrote:
>
>>masa@writemeNOSPAM.com (M@s@) wrote:
>>
>>>I will be absent for a month or so.
>>
>>Karl Pollak <kpollak@portal.ca>
>>Richmond, British Columbia
>
>What the Hell are we going to do without the Great Masa's wisdom and
>guidance for a whole month! Oh, the horror!!

I know! The carnage! It'll be pure anarchy without Masa
setting us straight in our bad helmet wearing, mosquito squishing,
hair salon avoiding ways!

>--
>Butch N2YMJ
>
>To reply,
>delete the xyz
>from my address.

Kurt.

2048. FREE SEX SITE..password is...

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: 1877347577@compuserve.com
Message-ID: <5qktr0$ln6@news1-alterdial.uu.net>
Source record: 18410

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
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Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL above.

2049. 2000 $ex-WebSites FREE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: gary099g@erols.com
Message-ID: <5qku28$kod@news1-alterdial.uu.net>
Source record: 18411

```
This is a multi-part message in MIME format.

--_-=599
Content-type: text/html; name="Sex~1.htm"
Content-transfer-encoding: base64

<encoded_portion_removed>
b25nPjwvZm9udD48L2ZvbnQ+PC9hPjwvcD4NCjwvYm9keT4NCg0KPC9odG1sPg0K

--_-=599
```

2050. State-of-the-Art In-House Active Filter Capability

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: "Kathryn J. Goerg" <kgoerg@webblabs.com>
Message-ID: <33CE770C.385F@webblabs.com>
Source record: 18412
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radioamateur..misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf

YOUR COMPETITORS HAVE IN-HOUSE ACTIVE FILTER CAPABILITY. DO YOU?

Active filters are more important than ever before, particularly in high speed signal processing applications! Can you design to an arbitrary frequency response in any circuit realization of your choosing? The experts can! They rely on AFDPLUS...

http://www.webblabs.com/afd.htm

2051. Re: *** Dear Sir / Madam ***

Newsgroup: rec.radio.amateur.space
Date: 1997-07-17 00:00:00 UTC
From: n3ab@ptdprolog.net
Message-ID: <33d4981d.1771326@news.ptdprolog.net>
Source record: 18413
Cross-posted to: van.general,bc.general,can.general,bc.politics,can.politics,rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.scanner,rec.radio.scanner

>>>masa@writemeNOSPAM.com (M@s@) wrote:
>>>
>>>>I will be absent for a month or so.
>>>

>>
>>What the Hell are we going to do without the Great Masa's wisdom and
>>guidance for a whole month! Oh, the horror!!
>
> I know! The carnage! It'll be pure anarchy without Masa
>setting us straight in our bad helmet wearing, mosquito squishing,
>hair salon avoiding ways!
>
>>--
>

Oh no! Who is going to advise us when we want to say "hi" to our local
cops? At least he won't be around to "miss" us off.

2052. hey, i'm a beginnner

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: Thathinker@geocities.com
Message-ID: <5qmghk$b45$2@slate.sover.net>
Source record: 18414

hey, I'm an aspiraring Radio astronomer. Is this the right place, or is there another newsgroup I should be visiting? oh well, if this is the right place, is there anyone here who can give me a link to a good page about setting up a radio telescope? that would be a big help, thanks!!

2053. Want to Buy: Yaesu 5400B or 5600 Azimuth-Elevation rotor.

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: sandy@sandy.com
Message-ID: <5qmjbv$f8l@surf.com>
Source record: 18415

I'm posting this for a friend...please respond directly to him:

Want to Buy: Yaesu 5400B or 5600 Azimuth-Elevation rotor.
Please email condition and price.

Send email to: doc@volcano.net

Thank you.

Dr. Dave Larsen
N6CO

2054. Re: newbie

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19970718034001.XAA20260@ladder02.news.aol.com>
Source record: 18416

In article <01bc9002$88409740$17c174cf@default>, "John Griffin"
<jpgriff@worldnet.att.net> writes:

>hello:
>I'm new to packet and I'd like to get into MIR comms and I have a few
>questions.
>#1- Previous info I have indicates that MIR operates simplex on 145.55.
> Is it still an active freq?

No. Mir now operates on a split frequency of 145.200 downlink, 145.800
uplink.

>#2- Is there a new packet (simplex?) channel on 145.985?

This was an experimental frequency at the end of June, but they still have
the option of using it over the US

>#3- What is the MIR callsign?

Call is R0MIR-1

Remeber to disconnect before they go over the horizon! If you don't, it
ties up the packet system until it retries out, preventing others from
being able to connect. You only have about 9-12 minutes.....

73 de KA3HSW

2055. Re: Contacting the Mir and Space Shuttle

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19970718034001.XAA23865@ladder01.news.aol.com>
Source record: 18417

In article <33C98F0A.16C9@ix.netcom.com>, niel brieger
<nbrieger@ix.netcom.com> writes:

>I was wondering if anyone could recommend a setup for contacting the
>Mir, Space Shuttle, and other amateur satellites and entities. I'm
>currently set up here with a Yaesu that can output 5/20/50 watts on
>2m and have a cushcraft ringo in the attic. I'm pretty sure the
>antenna isn't going to cut it, and a ground plane antenna has been
>recommended. Is 50 watts going to be enough to contact those sites
>in space with the correct type of antenna? If anyone has any
>suggestions or could recommend what works good for them, I'd love
>to hear what you've done!
>
>

I have successfully contacted Mir with 100 watts and a 1/4 mag mount on my car, so 50 watts into a Ringo Ranger should be plenty. Remember that you have a lot of competition, though, so any edge you can give yourself, you should. An overhead-pattern antenna such as a turnstile or M2 Eggbeater would help (I've also used both of these), and of course, a computer-aimed beam with azimuth and elevation would be best. Turnstiles are cheap and fairly easy to build. Check the ARRL handbook for plans, or get a copy of The Satellite Experimenter's Handbook thru inter-library loan.

TIP: Remember that Mir operates on Moscow time, so the best times to catch them are passes between about 0100 and 1300 UTC or so.......

Finally, I have heard of people successfully working Mir and the shuttle with HT's and 5/8 wave mag mounts, just when there was no one else on the air.

Go for it!!!

73 de KA3HSW

2056. Re: hey, i'm a beginnner

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: Jeff Cook <jcook@his.com>
Message-ID: <33CFA193.A31E432A@his.com>
Source record: 18418

Chris Duston wrote:
> hey, I'm an aspiraring Radio astronomer. Is this the right place, or
> is there another newsgroup I should be visiting? oh well, if this is
> the right place, is there anyone here who can give me a link to a good
> page about setting up a radio telescope? that would be a big help,
> thanks!!

http://wbs.net/sara.html
http://wbs.net/sara/sites.html

--

Jeff Cook
jcook@his.com
Washington, DC area

2057. Re: How do radio waves travel through intersellar space?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <33D010B2.4809@phoenix.net>
Source record: 18419

crzzy1@erols.com wrote:
>
> What is a radio wave and how can it travel through nothing? A wave
> like sound needs air. Light I don't understand what it's medium is.
> I guess it's the same stuff.
> Thanks in advance
> Chris
> (in Virginia)
You know Chris this is as puzzling as a married jew virgin giving birth.
You just goda trvst in th unknown till man proves it can't be done.
If you want to really want to know how it works read the koran.

2058. How do radio waves travel through intersellar space?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-18 00:00:00 UTC
From: crzzy1@erols.com
Message-ID: <33CFDD99.2A30@erols.com>
Source record: 18420

What is a radio wave and how can it travel through nothing? A wave
like sound needs air. Light I don't understand what it's medium is.
I guess it's the same stuff.
Thanks in advance
Chris
(in Virginia)

2059. LogSat Professional - new demo

Newsgroup: rec.radio.amateur.space
Date: 1997-07-19 00:00:00 UTC
From: Roberto Franceschetti <roberto@logsat.com>
Message-ID: <33d13628.0@208.212.139.3>
Source record: 18327
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0006_01BC946C.87EF0A60

charset="iso-8859-1"

Just a quick note to let everyone interested in satellite tracking that =
a new demo version of LogSat Professional v5.2 for Windows is now =
available for download at http://www.logsat.com. This release=20
features new, strikingly beautiful, topographical maps.

--=20
Roberto Franceschetti

http://www.logsat.com
roberto@logsat.com=20

------=_NextPart_000_0006_01BC946C.87EF0A60

charset="iso-8859-1"

Just a quick =
note to let=20
everyone interested in satellite tracking that a new demo version of =
LogSat=20
Professional v5.2 for Windows is now available for download at http://www.logsat.com. This
release =
features=20
new, strikingly beautiful, topographical maps.

-- =

Roberto=20
Franceschetti

http://www.logsat.com
roberto@logsat.com=20

------=_NextPart_000_0006_01BC946C.87EF0A60--
```

2060. i know.....i'm getting a little annoying....

Newsgroup: rec.radio.amateur.space
Date: 1997-07-19 00:00:00 UTC
From: Thathinker@geocities.com
Message-ID: <5qp0gd$t5m$1@slate.sover.net>
Source record: 18421

Still having trouble getting good info in the net. could someone
please tell me what the different kinds of antenna are there and what
are they useful for.
Speak to me like I am a decently-read person who just needs to know
about hardware because he knows about the science itself....

Thanks for putting up with me........

the Thinker

2061. Re: How do radio waves travel through intersellar space?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-19 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <33d02fe0.2329259@news.erols.com>
Source record: 18422

On Fri, 18 Jul 1997 18:18:17 -0300, crzzy1@erols.com wrote:

>What is a radio wave and how can it travel through nothing? A wave
>like sound needs air. Light I don't understand what it's medium is.
>I guess it's the same stuff.
>Thanks in advance
>Chris
>(in Virginia)

Chris there is no comparision between sound and radio/light waves.

Sound is a a compaction and rarifacation of air at a discrete number of times per second. This is termed the frequency of the audio wave we hear. And so what we are hearing is a movement of air.

Radio waves termed "electromagnetic waves" are discrete physical "things" that do not depend upon any medium for transmission.

In simple terms a radio wave is made up of electromagnetic and electrostatic fields that are generated by the flow of current along an antenna. And as such - as mentioned above - does not require anything like air for transmission from one place to another. Plain old empty space works just fine.

Light waves travel in a similar way. The are however at a much higher frequency than "Radio Waves". Light waves (wave length) that can affect the sense of sight lie between .000004 cm and .000007 cm. Compare this wavelength to 160 or the 89 meter band.

Light is produced by heat - the heating of a body until it emits light waves. The temperature and surface of the body dictate the frequency or color of the light.

Hope this helps.

Jim/AC4CZ

2062. Re: i know.....i'm getting a little annoying....

Newsgroup: rec.radio.amateur.space
Date: 1997-07-19 00:00:00 UTC
From: oddjob@cix.co.uk
Message-ID: <memo.19970719140730.29133B@oddjob.compulink.co.uk>
Source record: 18423

The net say...

Go find a LIBRARY....a building with books

and join a radio club.

In article <5qp0gd$t5m$1@slate.sover.net>,
Thathinker@geocities.com (The Thinker) wrote:

> Still having trouble getting good info in the net. could
someone
> please tell me what the different kinds of antenna are
there and what
> are they useful for.
> Speak to me like I am a decently-read person who
just needs to know
> about hardware because he knows about the science
itself....
>
> Thanks for putting up with me........
>
> the Thinker
>
>
>

2063. ARLK055 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-19 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk055.1997@arrl.org>
Source record: 18424
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK055
ARLK055 Keplerian data

ZCZC SK55
QST de W1AW
Keplerian Bulletin 55 ARLK055
From ARRL Headquarters
Newington, CT July 19, 1997
To all radio amateurs

SB KEP ARL ARLK055
ARLK055 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97189.02219955 .00000048 00000-0 10000-3 0 04955
2 14129 26.0158 138.4185 6060909 132.4033 297.8873 2.05880396077815
RS-10/11
1 18129U 87054A 97199.08394458 .00000039 00000-0 26466-4 0 03940
2 18129 82.9222 215.8876 0012588 129.1127 231.1144 13.72380385504478
UO-11
1 14781U 84021B 97199.49034253 .00000021 00000-0 11444-4 0 9879
2 14781 97.8374 179.4735 0010545 266.0841 93.9158 14.69565820715856
RS-12/13
1 21089U 91007A 97199.23857913 .00000036 00000-0 22728-4 0 9938
2 21089 82.9217 255.6114 0028068 209.2521 150.7012 13.74083797323429
UO-14
1 20437U 90005B 97199.16598514 -.00000008 00000-0 13748-4 0 02904
2 20437 98.5174 280.1641 0011563 113.4844 246.7557 14.29965609390644
RS-15
1 23439U 94085A 97199.11610634 -.00000039 00000-0 10000-3 0 02499
2 23439 64.8180 102.8256 0148299 126.6617 234.8044 11.27528149105423
AO-16
1 20439U 90005D 97199.17967724 .00000016 00000-0 22995-4 0 00821
2 20439 98.5354 283.1744 0011780 114.9208 245.3199 14.30013243390663
RS-16
1 24744U 97010A 97199.19875482 .00001459 00000-0 50316-4 0 00727
2 24744 97.2733 103.6751 0007356 356.2732 3.8453 15.31554473020830
```

```
DO-17
1 20440U 90005E 97195.31457186 -.00000043 00000-0 80310-7 0 819
2 20440 98.5385 280.2609 0011748 124.8125 235.4165 14.30154853390148
WO-18
1 20441U 90005F 97199.16109283 -.00000029 00000-0 55820-5 0 00853
2 20441 98.5358 283.9285 0012348 114.3848 245.8626 14.30123046390699
LO-19
1 20442U 90005G 97199.19585554 -.00000020 00000-0 88457-5 0 00859
2 20442 98.5428 284.6541 0012856 114.0278 246.2253 14.30238256390724
FO-20
1 20480U 90013C 97198.90577371 .00000011 00000-0 10588-3 0 09874
2 20480 99.0467 154.7204 0540243 307.8676 47.4727 12.83238589348644
AO-21
1 21087U 91006A 97199.06338432 .00000094 00000-0 82657-4 0 08374
2 21087 82.9390 28.7240 0034206 180.5759 179.5363 13.74583995324393
UO-22
1 21575U 91050B 97199.57755675 .00000033 00000-0 25290-4 0 7869
2 21575 98.2985 259.0083 0007813 152.0178 208.1458 14.37077146314997
KO-23
1 22077U 92052B 97199.15558436 -.00000037 00000-0 10000-3 0 06787
2 22077 66.0753 80.3949 0007768 203.6995 156.3665 12.86302276231737
KO-25
1 22828U 93061F 97199.73332182 .00000005 00000-0 19386-4 0 5481
2 22828 98.5397 273.5896 0010620 129.1690 231.0434 14.28184633166710
IO-26
1 22826U 93061D 97199.77666529 -.00000052 00000-0 -35249-5 0 5692
2 22826 98.5427 273.5471 0009445 145.0840 215.0917 14.27840463198596
AO-27
1 22825U 93061C 97199.17991841 -.00000022 00000-0 84324-5 0 05855
2 22825 98.5432 272.7099 0008587 144.8065 215.3686 14.27730928198499
FO-29
1 24278U 96046B 97199.50460398 -.00000020 00000-0 12274-4 0 936
2 24278 98.5368 236.4602 0352183 105.0167 259.0206 13.52632253 45352
Mir
1 16609U 86017A 97199.76757194 -.00000087 00000-0 52867-5 0 4696
2 16609 51.6551 287.2197 0003857 276.2210 83.8366 15.59550949651958

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
July 22, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2064. Re: i know.....i'm getting a little annoying....

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <33d16dbd.45762301@news.erols.com>
Source record: 18328

On Sat, 19 Jul 1997 00:09:56 GMT, Thathinker@geocities.com (The
Thinker) wrote:

Dear Thinker,

I would have to question your name. I see no thinking so far.

Do you suppose that the reason you are not receiving the information
you ask for is because of the question you asked?

There are many books written on antennas describing in great detail
the various kinds of antennas and their particular uses.

Why haven't you read any?

If you had taken the time to read a little you would not be asking
such childish quesstions.

Jim/AC4CZ

>Still having trouble getting good info in the net. could someone
>please tell me what the different kinds of antenna are there and what
>are they useful for.
> Speak to me like I am a decently-read person who just needs to know
>about hardware because he knows about the science itself....
>
>Thanks for putting up with me........
>
>the Thinker
>
>

2065. New Web Site

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: ?ISA-2922-JP?B?GyRCQmcySBsoSg==?= <shortckt@primenet.com>
Message-ID: <33D2614C.4CCA@primenet.com>
Source record: 18329

New Web Site
http://www.primenet.com/~shortckt

2066. Mailing Lists Frequently Asked Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: ?ISA-2922-JP?B?GyRCQmcySBsoSg==?= <shortckt@primenet.com>
Message-ID: <33D27DF8.7CD6@primenet.com>
Source record: 18330

```
Mailing Lists Frequently Asked Questions

There are too many questions to answer individually, but
the answers are online: http://www.qsl.net/k7on/qslfaq.htm
```

2067. WTD: Schematic for 17m vertical

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: ANDRE ANTUNES <aantunes@individual.eunet.pt>
Message-ID: <01bc954b$f1cf1ee0$LocalHost@cha-o>
Source record: 18331
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap,uk.radio.amateur

Hello everybody.
My name is Andre, and my call is CT2GEU. I would like to make an antenna to work the 17 meters band, because my working conditions are only a rusty dipole. I have some material from an old 10m vertical. Please, if you can, send me all the information about sizes, traps, and radials, or even better, a draw of scheme.
Thanks very much, everybody.
73's

--
Andr&#65533; Antunes ANDRE.ANTUNES@INDIVIDUAL.EUNET.PT

2068. Re: Nova vs Logsat

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: Jim Garver <k7@teleport.com>
Message-ID: <33D2C85F.7333@teleport.com>
Source record: 18332

Use PGP Public Key wrote:
>
> I am having a tough time deciding whether to invest in Nova or Logsat.
> I would like to read other people's comparisons of the two programs.
> They both look like good programs to me.

The main beef I have with Logsat (V. 5.1.15) is that it gives me the hourglass periodically while it updates. It does this while minimized as well as in foreground. That means that it interrupts other programs while updating. Not a well behaved Windows program. I'm running a 166 Mhz P6.0 with all fast peripherals. I keep 6 or more ortho maps up on the Logsat screen. I do appreciate the time-to-aquire and visible time info.

Jim, K7YO

2069. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: intellinews@hotmail.com
Message-ID: <intellinews-2007972354240001@host09.clr.cyberg8t.com>
Source record: 18333

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

2070. Writers Needed

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: David Hamilton <bdx@magi.com>
Message-ID: <33D25215.4A9E@magi.com>
Source record: 18334

Greetings! I need writers to contribute fun, interesting, cool and exciting articles for our new ham radio publication called "On The Air! excellent adventures in ham radio". If you enjoy writing about such topics as VHF, DX, building stuff, antennae, fox hunting, packet or atv, or any other related subject, please email me for our writers' guidelines. We want you to join in the fun!

On The Air! is a magazine that does not contain any stuffy, boring, pedantic, predictable, or gruesomely dull copy. Picture Wired magazine. Picture a ham radio version of it. That's On The AIr! If you like, you can send $4.00 for a sample copy. Mail to
On The Air!
c/o BDX Radio
17 Equestrian Drive
KANATA ON K2M 1B8
Canada

thanks and 73,
Dave VA3UE
bdx@magi.com

2071. moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-20 00:00:00 UTC
From: meckert@tir.com
Message-ID: <meckert-2007971555260001@ph72.tir.com>
Source record: 18335

Please don't think I'm a nut.

My brother-in-law, who professes alternately to be a libertarian or a flat-earther, saw some stupid video that has him convinced the moon landings didn't happen.

The problem with that particular conspiracy is that there are witnesses. Aren't there?

Are there any radio buffs who witnessed the moon landings? That is, anyone who listened in real-time to Houston and Tranquility Base talking back and forth?

And if there are, is it possible to spoof radio transmissions to and from the moon? Could NASA, for instance, bounce the audio and video off a satellite in such a manner that nobody on Earth would be the wiser? (Actually, in such a way that everybody on Earth wouldn't notice.)

TIA

2072. Re: i know.....i'm getting a little annoying....

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: "J. Young" <jtyoung@u.washington.edu>
Message-ID: <Pine.A41.3.95b.970721073551.96632A-100000@homer35.u.washington.edu>
Source record: 18336

If you're really looking for comprehensive antenna info get yourself one
of the latest copies of the ARRL Antenna Book. It is a terrific resource
for all types of antennas for all types of frequencies. You could probably
mail order one directly from them in Newington Connecticut. There are just
too many options to respond via e-mail (it's a huge manual!). Good luck.
John, K7JY.

.....

John T. Young
Professor of Sculpture and Public Art
School of Art
University of Washington
Seattle, Washington 98195
U.S.A.

On Sat, 19 Jul 1997, The Thinker wrote:

> Still having trouble getting good info in the net. could someone
> please tell me what the different kinds of antenna are there and what
> are they useful for.
> Speak to me like I am a decently-read person who just needs to know
> about hardware because he knows about the science itself....
>
> Thanks for putting up with me........
>
> the Thinker
>
>
>
>

2073. swap page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33D38450.310D@fishnet.net>
Source record: 18337

```
Huge Ham Radio Swap Page
All Ham Related Adds Posted Free
Click Here --------> http://www.fishnet.net/~ko6oy/swapage.htm
73 Danny KO6OY
```

2074. Re: i know.....i'm getting a little annoying....

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33D383CF.15E3@fishnet.net>
Source record: 18338

The Thinker wrote:
>
> Still having trouble getting good info in the net. could someone
> please tell me what the different kinds of antenna are there and what
> are they useful for.
> Speak to me like I am a decently-read person who just needs to know
> about hardware because he knows about the science itself....
>
> Thanks for putting up with me........
>
> the Thinker
Try This Link-------->http://www.qth.com/antenna/antenna.htm
they might be able to better answer your questions
73 Danny KO6OY http://www.fishnet.net/~ko6oy/ko6oy.html

2075. Invitation to Visit

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: KB8TNQ <kb8tnq@voyager.net>
Message-ID: <33D350DA.31B31E75@voyager.net>
Source record: 18339
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,uk.radio.amateur
Body handling: HTML body converted to readable text

Hi gang:

Great news! We have two new Web Sites for you to check out. The
first, The KB8TNQ Ultimate Amateur Radio Page! is a great source for
all kinds of information on the Amateur Radio hobby. It's been up since
11 May, 1997 and is generating some great feedback.

The other, The Central Michigan Amateur Radio Club Web Site is mainly
about our club and it's activities, but we have added a FREE "Trader's
Page". If you have some ham gear or computer items to sell, this is the
place to be. With posts all over the internet, this site will soon be
our most popular, so come on in and give us a look!

7-3,
Jim (KB8TNQ)

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The first, The KB8TNQ Ultimate
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to be. With posts all over the internet, this site will soon be our
most popular, so come on in and give us a look!

7-3,

Jim (KB8TNQ)

2076. Re: Nova vs Logsat

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Stephanie Steele <kc7dba@primenet.com>
Message-ID: <33D37EA7.7E15@primenet.com>
Source record: 18340

I have found Nova to be clumsy and non-intuitive in many aspects. It does offer planet tracking however but I just don't like it's interface. I am sorry I bought it.

I prefer LogSat and the current release is 5.2 which just went gold and is available on CD Rom. The other feature of LogSat is that if you write and tell the author of your suggestions and ideas he is very fast to integrate them into the product and very nice to work with. He does not work satellites himself so he is always anxious to hear what those of us who do want. I am sure he would welcome your feedback on his product as far as "behavior" goes also.

--
Stephanie Steele

e-mail address kc7dba@primenet.com

Thinking is the hardest work there is, which is
probably why so few engage in it.

-Henry Ford

2077. Re: Nova vs Logsat

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Matt <aikido@magicnet.net>
Message-ID: <33D3BA9E.1A69@magicnet.net>
Source record: 18341

I've tried quite a few programs, and the definite winner is LogSat Professional. The new version that was just released is awesome. The maps look great, you have to see them to believe them. It's filled with features, and is extremely easy to use. If you're interested in satellites, it's THE program to use.

Matt
aikido@magicnet.net

Use PGP Public Key wrote:
>
> I am having a tough time deciding whether to invest in Nova or Logsat.
> I would like to read other people's comparisons of the two programs.
> They both look like good programs to me.
> ---
>

2078. Re: WTD: Schematic for 17m vertical

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <33D3946A.68CF@crosslink.net>
Source record: 18342
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap,uk.radio.amateur

ANDRE ANTUNES wrote:
>
> Hello everybody.
> My name is Andre, and my call is CT2GEU. I would like to make an antenna to
> work the 17 meters band, because my working conditions are only a rusty
> dipole. I have some material from an old 10m vertical. Please, if you can,
> send me all the information about sizes, traps, and radials, or even
> better, a draw of scheme.
> Thanks very much, everybody.
> 73's
>
> --
> Andr&#65533; Antunes ANDRE.ANTUNES@INDIVIDUAL.EUNET.PT
Contact AA2LN via e-mail at aa2ln@juno.com and tell him you would like a
copy of the plans for the so-called "half square" antenna. Lots of
people have used it and swear by it. Basically, its a feed point as
high as you can get it with a 1/2 wave hanging straight down from it,
and another 1/4 wave going straight out horizonal and from the end of
that a 1/4 wave hanging straight down again. Sounds worse than it is.
Said to have good directivity and low angle of radiation.
73 & good luck
Bob

2079. * SpaceNews 21-Jul-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0721.1997@ampr.org>
Source record: 18343
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0721
* SpaceNews 21-Jul-97 *

BID: $SPC0721

=========
SpaceNews
=========

MONDAY JULY 21, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MARS PATHFINDER NEWS *
========================
The Orbital Report On-Line newsletter reports that NASA's $271-million
Mars Pathfinder mission is successful beyond expectations. The 325-kg JPL
built probe performed hard-landing in the Ares Vallis region, by 19.33 deg N
33.55 deg E, at 16:56 UTC on 04-Jul-97. The airbag-protected spacecraft
hit the ground at a velocity of some 18 m/s (62 g on impact). It bounced
some 15 times and rolled over about 1 km before stopping. The $25-million
Sojourner rover was deployed on ramps provided by Spar Aerospace on 06-Jul-97
and began exploring the neighborhood of the probe at a speed of about 1 cm/s.
Initially planned to perform for one week, the rover is now expected to be
operational for about one month. The 9-kg Sojourner rover was developed on
behalf of NASA's Office of Advanced Concepts & Technology as Microrover
Flight Experiment (MFEX) to test microrover performance on unknown planetary
surfaces. Similar rovers may fly on future US planetary missions as well
as on Japan's MUSES-C mission to asteroid 4660 Nereus.

* UoSAT-OSCAR-22 NEWS *
=======================
UO-22 (UoSAT-5) was scheduled to be reloaded last Wednesday morning during
the first few passes over Surrey. This reload was necessary to allow
incorporation of a number of new features into the spacecraft flight
software. While most amateur operators will probably not notice the
improvements in terms of the communication performance, there is a
performance gain for housekeeping systems. One area that may be
noticable is a small improvement in uplink speed (especially for
large files) as the checksum is now performed on the fly instead
of on completion of the upload.

A new attitude control task is also being tested and ADCS experiments
will continue for the next week or so. This will not effect the

spacecraft store and forward communications.

Chris Jackson
Groundstation and Operations Manager
Surrey Satellite Technology Ltd
University of Surrey
Guildford, Surrey GU2 5HX, UK
Ph: +44 1483 259-141
Fax: +44 1483 259-503
http://www.ee.surrey.ac.uk/EE/CSER/UOSAT/

* MIR NEWS *
============
For the 2nd weekend in a row, the MIREX team completed another successful family phone patch for Mike Foale on Mir to this parents in the UK. The first patch took place via Miles Mann, WF1F on Saturday July 5, and lasted for 9 minutes. The second patch took place on Saturday July 12 and lasted for over 15 minutes. Dave Larsen, N6CO started the patch from his QTH in California. That patch lasted for over 6 minutes. Then Mike was handed off to Miles in Boston, who continued the patch to the UK.

Mike got an additional 9 minutes of family time during the same pass. Signal quality from Mir was great. The phone audio patch quality was also good. Mike and his parents did not have any problems understanding each other. Mike Foale later thanked Dave Larsen for the phone patch by sending a packet radio message via the Mir personal message system:

Stat : PR
Posted : 07/12/97 19:52
To : N6CO
From : R0MIR
@ BBS :
BID :
Subject: yl

Dave, thanks for the sked. Great to talk so long with my parents.
You are spoiling me.

Mike

[Info via Miles Mann, WF1F]

* NEWS FROM INFOESPACE *
========================
The french translation of SpaceNews, InfoEspace, is now available over the World Wide Web. Mike, VE2TRV, the translator, and Pat VE2NEN have set up a substantial Web site for their club, Laval Laurentides ARC, and InfoEspace is included on one of its many pages. The URL is:

http://pages.infinit.net/ve2crl/

To access InfoEspace, click on the Radio Cafe icon in the main window (you may have to scroll down a bit), then look for and click on the InfoEspace/

SpaceNews icon (a picture of Mir). InfoEspace may either be read directly on-site, or may be downloaded by clicking on the indicated hyperlink. There are direct links to SpaceNews and to the WWW addresses featured in the latest edition of SpaceNews. InfoEspace may also be directly accessed at:

http://pages.infinit.net/ve2crl/space.htm

Mike encourages anyone who downloads InfoEspace and has access to the packet network to freely spread it around. The bulletin header, including BID, and the packet message terminator are included in the text.

[Info via Mike VE2TRV and Pat VE2NEN]

* OSCAR-11 NEWS *
==========
It has been an uneventful month for OSCAR-11. During the period 20-June to 17-July, excellent signals have once again been received from the 145.826 MHz beacon. The improved signals may be partly due to increased power output resulting from lower beacon temperatures. In the UK, the change to Summer time, and the lighter mornings make the early morning passes more socially acceptable. There is less electrical interference and splatter from mobile radios in the early mornings than in the afternoons.

The Mode-S beacon has been heard by Dean, AL7CR in Anchorage, Alaska, and by Joe K0VTY, located near Omaha, Nebraska. Joe used a 60 cm dish and a Down East Microwave converter working into a Kenwood TR-781 with a Time Wave DSP-9 filter. Thanks Dean & Joe.

Telemetry is reported to be nominal. The battery voltage is generally around 14 volts. The internal temperatures reached minumum values (battery -0.4C telemetry electronics -1.6 C), and have now started to rise. The minimum value of solar illumination was about 72% of full sunlight. Temperatures should now increase, as the solar illumination reaches a peak of about 97% in October.

Two WOD surveys of channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage) dated 07-June, and 25 June respectively, have been transmitted.

A single AMSAT-UK bulletin by Richard G3RWL has been uploaded. This featured Sputnik-1 40th anniversary, MIR frequencies, and RS-10 news. Bulletins always include current Keplerian elements for OSCAR-11, and often Keps for satellites featured in the bulletin.

Richard always welcomes short news items for inclusion in the OSCAR-11 bulletin. His e-mail address is g3rwl@amsat.org.

The operating schedule remains unchanged:

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)

ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted,
and between ASCII TLM and WOD.

The Mode-S beacon is ON transmitting an unmodulated carrier, but telemetry
indicates that it has partially failed, and delivering half power. Any
reports of reception on 2401 MHz would be most welcome, and should be
directed to Clive Wallis at: g3cwv@amsat.org.

The 435.025 MHz beacon is normally OFF. However it can sometimes be heard
when the satellite is being commanded by ground control, ie. within range
of Guildford, UK. When the 435 MHz beacon is transmitting, the 145 MHz
beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit Clive Wallis' OSCAR-11 Web site.
It contains some software for capturing data, and decoding ASCII telemetry
and WOD. There is an archive of raw data (mainly WOD) for analysis, which
is continually being expanded, as new data is captured. The URL is:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV (g3cwv@amsat.org)]

* AO-16 NEWS *
==============
AMSAT-OSCAR-16 is performing well in "Pacsat" duty. The following are
several packet frames captured from AO-16 indicating its status and uptime.
All binary telemetry information has been converted to ASCII.

PACSAT-12>TIME-1:
PHT: uptime is 1035/10:41:58. Time is Sat Jul 19 16:07:08 1997

PACSAT-1>TLM:
33D0E62C Sat Jul 19 16:07:08 1997
00:69 01:95 02:70 03:7B 04:72 05:98 06:72 07:6A 08:71 09:96 0A:A4
0B:B0 0C:E7 0D:DB 0E:3A 0F:30 10:E2 11:80 12:00 13:EB 14:A8 15:B4
16:6D 17:70 18:5F 19:70 1A:74 1B:5E 1C:70 1D:80 1E:DE 1F:5E 20:C8
21:A6 22:70 23:2D 24:1F 25:3C 26:24 27:01 28:01 29:02 2A:07 2B:4C
2C:00 2D:55 2E:64 2F:A6 30:A7 31:A7 32:00 33:34 34:A4 35:A3 36:A2
37:A5 38:A0 39:DB 3A:01

PACSAT-1>AMSAT:
July 1997
PACSAT AO-16
Owned and Operated by AMSAT-NA
Command Team WJ9F, WD0E, VK7ZBX, KB5MU
AO16 Command Team <WJ9F>

* LO-19 NEWS *
==============
LUSAT-OSCAR-19 is also performing well in "Pacsat" duty. The following are
several packet frames captured from LO-19 indicating its status and uptime.

All binary telemetry information has been converted to ASCII.

LUSAT-1>TIME-1:
PHT: uptime is 760/02:16:18. Time is Sat Jul 19 16:21:28 1997

LUSAT-1>TLM:
33D0E988 Sat Jul 19 16:21:28 1997
00:6A 01:84 02:78 03:68 04:6F 05:87 06:76 07:88 08:6C 09:7A 0A:A3
0B:B3 0C:E8 0D:DA 0E:32 0F:33 10:DC 11:83 12:00 13:E4 14:A8 15:AC
16:78 17:6D 18:6D 19:6D 1A:69 1B:4A 1C:65 1D:6A 1E:D6 1F:5F 20:B3
21:9E 22:76 23:1F 24:13 25:28 26:52 27:00 28:00 29:03 2A:1A 2B:15
2C:00 2D:6B 2E:45 2F:A8 30:A7 31:AA 32:00 33:57 34:AC 35:AC 36:A0
37:AE 38:A2 39:AC 3A:AB 3B:02 3C:FF

LUSAT-1>AMARG:
July 1 - 1997.

BBS is open.
Uplink qrg: 145.840, 860, 880, 900

Norberto - LU8DYF.

* PB/PG FOR LINUX RELEASED *
============================
Bent Bagger, OZ6BL, and Peter Scott Bentsen, OZ2ABA, have released version
1.0 of PB and PG for Linux. PB and PG for Linux are programs used for
uploading and downloading files to and from digital communication
satellites (Pacsats) that support the FTL0 communications protocol,
allowing users to directly communicate with the Microsat series of
satellites under Linux. PB and PG are based on earlier efforts by
John Melton and Jonathan Naylor who authored XPB and XPG for execution
under the X-Window System, but instead, provide a curses (ncurses)
based user interface, and feature automatic directory fill requests
along with simple, rules based file download requests. XPB and XPG
were, in turn, based on earlier work by Jeff Ward who authored the
original PB and PG programs for DOS.

The current versions of PB and PG for Linux function with Linux kernel
revisions 2.0.24 or higher, and utilize the AX.25 networking capabilities
contained within the Linux operating system kernel. Since Linux is a
multi-tasking operating system, it is possible to run both PB and PG
simultaneously on different virtual consoles to accomplish the tasks
of simultaneously uploading and downloading files to and from Microsat
satellites.

PB and PG for Linux are covered under the GPL (General Public License),
and are available free of charge. A single compressed archive of both
programs (pb-pg-1.0.oz6bl.tar.gz) may be downloaded via anonymous
FTP at sunsite.unc.edu from the /pub/Linux/apps/ham subdirectory.

* FEEDBACK/INPUT WELCOMED *
============================
Comments and input for SpaceNews should be directed to the editor (John,

KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

2080. Re: Nova vs Logsat

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: Roberto Franceschetti <roberto@logsat.com>
Message-ID: <33d3e3d2.0@208.212.139.3>
Source record: 18344
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0003_01BC9605.35306C20

charset="us-ascii"

The new release of LogSat Professional 5.2 (http://www.logsat.com) has
a much more functional multitasking support. Windows continues to =
operate
normally even while LogSat updates the maps.
=20
Roberto Franceschetti
LogSat Software Corp.
=20
=20
In article ,
k7@teleport.com wrote:
>
> Use PGP Public Key wrote:
> >
> > I am having a tough time deciding whether to invest in Nova or =
Logsat.
> > I would like to read other people's comparisons of the two =
programs.
> > They both look like good programs to me.
>
> The main beef I have with Logsat (V. 5.1.15) is that it gives me the
> hourglass periodically while it updates. It does this while =
minimized
> as well as in foreground. That means that it interrupts other =
programs
> while updating. Not a well behaved Windows program. I'm running a
> 166 Mhz P6.0 with all fast peripherals. I keep 6 or more ortho maps
> up on the Logsat screen. I do appreciate the time-to-aquire and =
visible
> time info.
>
> Jim, K7YO

--=20
Roberto Franceschetti=20

------=_NextPart_000_0003_01BC9605.35306C20

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screen. I do appreciate the time-to-aquire and visible

=
> time=20
info.
>
> Jim, K7YO

--
Roberto=20
Franceschetti

------=_NextPart_000_0003_01BC9605.35306C20--

2081. Re: Nova vs Logsat

Newsgroup: rec.radio.amateur.space
Date: 1997-07-21 00:00:00 UTC
From: roberto@netwide.net
Message-ID: <869503787.7762@dejanews.com>
Source record: 18345

The new release of LogSat Professional 5.2 (http://www.logsat.com) has
much more functional multitasking support. Windows continues to operate
normally even while LogSat updates the maps.

Roberto Franceschetti
LogSat Software Corp.

In article ,
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> time info.
>
> Jim, K7YO

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2082. Re: WTD: Schematic for 17m vertical

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <33D411CD.5E2C@crosslink.net>
Source record: 18346
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap,uk.radio.amateur

I think I goofed - the horizontal portion is 1/2 wave. I.e., the total length of wire needed is about a full wavelength. I'm told this design is very scalable - i.e., it can be built for almost any band.
Bob

2083. SASI Sat Tracker Web site??

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: sandy@sandy.com
Message-ID: <5r1835$3qj@surf.com>
Source record: 18347

Hello,

I'm considering the purchase of the SASI Sat Tracker, but
can't seem to find much info about it on the Internet. Is there
a Web site you can recommend where I could find specific
information about the SASI Sat Tracker hardware/software?

Thanks.

--sandy
sandy@sandy.com

2084. ICOM IC-970 vs FT-736R?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: sandy@sandy.com
Message-ID: <5r18dp$3qj@surf.com>
Source record: 18348

Hello all,

I'm in the process of setting up my satellite station and already
own an Yaesu FT-736R. I have an opportunity to buy an
ICOM IC-970A and was wondering if it offers any specific
advanatages over the FT-736R for satellite work? I'm
aware of the frequency capabilities of each radio and the extra
cost of the IC-970, but don't know which would be better for
LEO and OSCAR work.

Any comments would be appreciated. Thanks.

--sandy
sandy@sandy.com

2085. WTB: KLM Satellite Antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: RZVB03A@prodigy.com
Message-ID: <5r1cmsiba2@newsxfs02-int.news.prodigy.com>
Source record: 18349

Looking for a KLM 2M-22C

If you can help..... please contact me via email at RZVB03A@Prodigy.com

Thanks.....

Pat KA9LNP

2086. Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.280.00089C06@hugo.rz.fh-ulm.de>
Source record: 18350

Hi,
I need some info on AO-27

* WHEN is it working (only weekend ?)

* WHICH equipment is neccesary?

many thanks,
Roman (DL2SFE)

2087. Re: Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: Mike C <catalan@*codem.com>
Message-ID: <33D4B6D3.4C9D@NOSPAMcodem.com>
Source record: 18351

PE Roman Brunel wrote:
>
> Hi,
> I need some info on AO-27
>
> * WHEN is it working (only weekend ?)
>
> * WHICH equipment is neccesary?

Hello Roman,

I had my first QSO on AO-27 this past Saturday using an armstrong Az-El technique!

The bird is active whenever it is in sunlight, it is off when it is in darkness. Point your browser to:

http://www.umbra.com/sats/

It tells you all about the sat and it's schedule (thanks to Michael Wyrick, N4USI, the control operator of AO-27).

Have fun and 73,
Mike C
New Hampshire, USA
(SPAM Blocker: remove "NOSPAM" in header address to reply)

2088. Re: Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: Mike C <catalan@*codem.com>
Message-ID: <5r2crp$kk1$1@decius.ultra.net>
Source record: 18352

PE Roman Brunel wrote:
>
> Hi,
> I need some info on AO-27
>
> * WHEN is it working (only weekend ?)
>
> * WHICH equipment is neccesary?

Hello Roman,

I had my first QSO on AO-27 this past Saturday using an armstrong Az-El technique!

The bird is active whenever it is in sunlight, it is off when it is in darkness. Point your browser to:

http://www.umbra.com/sats/

It tells you all about the sat and it's schedule (thanks to Michael Wyrick, N4USI, the control operator of AO-27).

Have fun and 73,
Mike C
New Hampshire, USA
(SPAM Blocker: remove "*" in header address to reply)

2089. Re: Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: Mike C <catalan@*codem.com>
Message-ID: <5r2csd$kk1$2@decius.ultra.net>
Source record: 18353

PE Roman Brunel wrote:
>
> Hi,
> I need some info on AO-27
>
> * WHEN is it working (only weekend ?)
>
> * WHICH equipment is neccesary?

Hello Roman,

I had my first QSO on AO-27 this past Saturday using an armstrong Az-El technique!

The bird is active whenever it is in sunlight, it is off when it is in darkness. Point your browser to:

http://www.umbra.com/sats/

It tells you all about the sat and it's schedule (thanks to Michael Wyrick, N4USI, the control operator of AO-27).

Have fun and 73,
Mike C
New Hampshire, USA
(SPAM Blocker: remove "$" in header address to reply)

2090. Amateur Radio Astronomy email list

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: dtillman@palantir.cannonexpress.com
Message-ID: <m2204q94kl.fsf@palantir.cannonexpress.com>
Source record: 18354

A new mailing list dealing solely with amateur radio
astronomy is now available. I have attached the signon
message.

David Tillman
dtillman@cannonexpress.com

****
ara-list signon message:
****

Welcome to the Amateur Radio Astronomy mailing list.
You can unsubscribe from this list at any time by sending mail
to ara-list-request@cannonexpress.com with "unsubscribe" in the
body of the message (without the quotes). In case of trouble,
send mail to dtillman@cannonexpress.com detailing your problem.

1. Where do I send messages to post?

Send messages to the list to:

ara-list@cannonexpress.com.

2. Where do I send subscribe/unsubscribe messages.

Send subscribe/unsubscribe messages to:

ara-list-request@cannonexpress.com

with "subscribe" or "unsubscribe" in the message body.

3. What is the purpose of this list?

The purpose of this list is to share information
and ideas regarding amateur radio astronomy.

4. Who is welcome here?

Amateur and professional astronomers.

Who isn't welcome here? Flamers and those who take joy
in putting down other people. 99% of being a professional
is in your attitude. I will not hesitate to nuke from the
list those who consistently display an un-professional attitude.

5. What topics are welcome here?

If it pertains to radio astronomy it is welcome
here. A small sample of such topics would include:

Telescope construction methods.

Schematics for pre-amp and A/D circuits.

Exchange of observational data and collaborative observations.

You get the idea.

6. A final request.

As a favor to the other list subscribers, once you have subscribed, please send a short bio to the list detailing items such as your current radio telescope setup and special observing interests, if any.

That's all folks! Once again, if you have any trouble, send mail to dtillman@cannonexpress.com.

2091. ARLK056 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk056.1997@arrl.org>
Source record: 18355
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK056
ARLK056 Keplerian data

ZCZC SK56
QST de W1AW
Keplerian Bulletin 56 ARLK056
From ARRL Headquarters
Newington, CT July 22, 1997
To all radio amateurs

SB KEP ARL ARLK056
ARLK056 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97202.61446550 .00001418 00000-0 10000-3 0 4940
2 14129 26.0643 136.2431 6057623 136.2536 292.0371 2.05892655 78107
RS-10/11
1 18129U 87054A 97203.09383639 .00000035 00000-0 21479-4 0 03929
2 18129 82.9232 212.9247 0012577 118.2245 242.0177 13.72380437505024
UO-11
1 14781U 84021B 97203.50756029 .00000052 00000-0 16606-4 0 9889
2 14781 97.8376 183.3310 0010469 251.1015 108.9056 14.69566694716444
RS-12/13
1 21089U 91007A 97203.24351457 -.00000019 00000-0 -36693-4 0 9947
2 21089 82.9219 252.6416 0028433 197.2621 162.7546 13.74083122323973
UO-14
1 20437U 90005B 97202.73454702 -.00000022 00000-0 80403-5 0 02901
2 20437 98.5174 283.6552 0011883 103.8274 256.4231 14.29965704391158
RS-15
1 23439U 94085A 97203.10732238 -.00000039 00000-0 10000-3 0 02444
2 23439 64.8205 96.3765 0147737 125.7286 235.7493 11.27528174105876
AO-16
1 20439U 90005D 97202.81809070 -.00000052 00000-0 -34852-5 0 802
2 20439 98.5318 286.7386 0011875 105.0630 255.1845 14.30012649391183
RS-16
1 24744U 97010A 97203.11884856 .00002330 00000-0 78880-4 0 00613
2 24744 97.2728 107.5225 0007203 341.3687 18.7297 15.31574434021435
```

```
DO-17
1 20440U 90005E 97195.31457186 -.00000043 00000-0 80310-7 0 819
2 20440 98.5385 280.2609 0011748 124.8125 235.4165 14.30154853390148
WO-18
1 20441U 90005F 97202.72926019 -.00000010 00000-0 12669-4 0 01050
2 20441 98.5364 287.4293 0012377 103.5830 256.6732 14.30123393391208
LO-19
1 20442U 90005G 97203.18348800 -.00000061 00000-0 -67848-5 0 830
2 20442 98.5430 288.5691 0013341 104.9681 255.2991 14.30237739391299
FO-20
1 20480U 90013C 97202.88192410 -.00000035 00000-0 21103-5 0 09856
2 20480 99.0454 157.9468 0539973 298.8600 55.9330 12.83238396349158
AO-21
1 21087U 91006A 97202.92128811 .00000094 00000-0 82657-4 0 08406
2 21087 82.9391 25.8688 0034533 169.3275 190.8622 13.74584090324929
UO-22
1 21575U 91050B 97203.12848646 .00000008 00000-0 16887-4 0 08064
2 21575 98.2946 262.4338 0007945 141.6607 218.5147 14.37077340315506
KO-23
1 22077U 92052B 97203.43183575 -.00000037 00000-0 10000-3 0 6771
2 22077 66.0755 71.4349 0007536 204.6786 155.3914 12.86302566232285
KO-25
1 22828U 93061F 97203.09615386 -.00000015 00000-0 11089-4 0 05648
2 22828 98.5393 276.8770 0010702 119.2595 240.9646 14.28184614167194
IO-26
1 22826U 93061D 97202.78992636 -.00000027 00000-0 65204-5 0 05863
2 22826 98.5430 276.4947 0009626 137.0691 223.1221 14.27840807199025
AO-27
1 22825U 93061C 97203.17454846 -.00000027 00000-0 66538-5 0 05841
2 22825 98.5429 276.6143 0008812 132.7594 227.4334 14.27731081199061
FO-29
1 24278U 96046B 97203.57293588 .00000014 00000-0 46944-4 0 948
2 24278 98.5361 239.9712 0352246 94.4851 269.6608 13.52632771 45905
MO-30
1 24305U 96052B 97203.34407117 .00000204 00000-0 20364-3 0 1237
2 24305 82.9356 328.5965 0031094 105.4793 254.9758 13.73095598 43886
Mir
1 16609U 86017A 97203.61223607 .00002448 00000-0 36521-4 0 4761
2 16609 51.6533 267.9024 0003998 297.8137 62.2440 15.59578097652550

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
July 26, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2092. cw program

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: wi5s@cq.net
Message-ID: <33d53fea.104416977@news.iamerica.net>
Source record: 18356

You can download a free Morse code program at:

http://www.cq.net/users/wi5s/

Let me know how you like it.

2093. Re: cw program

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: cutie_boy@hotmail.com
Message-ID: <33d546c3.710017@news.bctel.ca>
Source record: 18357

On Tue, 22 Jul 1997 23:19:15 GMT, wi5s@cq.net wrote:

>You can download a free Morse code program at:
>
>http://www.cq.net/users/wi5s/
>
>Let me know how you like it.

Please do not post something irrelevant.

CW software has nothing to do with Space Communications. You may want
to post your article in: rec.radio.amateur, rec.radio.amateur.misc

Spammer AKA M@s@

Masa@WriteMe.NOSPAMcom

http://www.geocities.com/Yosemite/1325/ (General Interest)

http://www.geocities.com/Yosemite/1325/main.htm
(Ham Freqs + BC Freqs, 10 codes & Q codes, Morse Codes, R.S. scanners, Cellular Bands Info,
AT-600 Dual Bander, Int'l Freqs Info, Modifications,
CB General Info, Space Station MIR, Propagation Info)

http://www.geocities.com/Athens/Delphi/6630/
(Paragraphes, Essay, Shakespeares, Online Resources and more !!)

Spam Security is ON:
Remove "NOSPAM" from noted e-mail address to contact me.
*** I will NOT buy any products or visit web sites from the SPAM. ***

2094. AO-27 is NOT a packet satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-07-22 00:00:00 UTC
From: <>
Message-ID: <970622094640.tvr@mocha.ecofe.com>
Source record: 18358
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc

Someone is trying to send FM packet over AO-27 or operating locally in the space sub-band (145.80-146.00). Please don't do that. It is for voice, not packet. Also, please do not transmit until you can hear the downlink. It has a very sensitive receiver, and in the 'States, there is almost always someone on. If you can't hear it (around here at least), then you will almost you will interfere with others operating there, as you won't know when to transmit. Good luck and hope to hear you on AO-27 (and especially from those of you east of the Mississippi).

-- KD6PAG (networking old-timer, RF newbie)

P.S. I run both satellite mobile and packet portable, and will post the callsign of the station if it doesn't end soon.

2095. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: pokf4jrg@cheta.net
Message-ID: <33d56038.936435@news2>
Source record: 18359

On Sun, 20 Jul 1997 15:55:25 -0400, meckert@tir.com (Michael Eckert)
wrote:

>>>Please don't think I'm a nut.
>>>
>>>My brother-in-law, who professes alternately to be a libertarian or a
>>>flat-earther, saw some stupid video that has him convinced the moon
>>>landings didn't happen.
>>>
>>>The problem with that particular conspiracy is that there are witnesses.
>>>Aren't there?
>>>
>>>Are there any radio buffs who witnessed the moon landings? That is, anyone
>>>who listened in real-time to Houston and Tranquility Base talking back and
>>>forth?
>>>
>>>And if there are, is it possible to spoof radio transmissions to and from
>>>the moon? Could NASA, for instance, bounce the audio and video off a
>>>satellite in such a manner that nobody on Earth would be the wiser?
>>>(Actually, in such a way that everybody on Earth wouldn't notice.)
>>>
>>>TIA

Tell your Brother in law to take a jet flight on a clear day and look
at the curvature of the Earth. I don't believe any organization in
existence could fake all our space program.

Burton kf4jrg

2096. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: ka0yos@arn.net
Message-ID: <5r3ua1$2e2$1@services.arn.net>
Source record: 18360

In article <meckert-2007971555260001@ph72.tir.com>, meckert@tir.com says...
>
>Please don't think I'm a nut.
>
>My brother-in-law, who professes alternately to be a libertarian or a
>flat-earther, saw some stupid video that has him convinced the moon
>landings didn't happen.
>
>The problem with that particular conspiracy is that there are witnesses.
>Aren't there?
>
>Are there any radio buffs who witnessed the moon landings? That is, anyone
>who listened in real-time to Houston and Tranquility Base talking back and
>forth?
>
>And if there are, is it possible to spoof radio transmissions to and from
>the moon? Could NASA, for instance, bounce the audio and video off a
>satellite in such a manner that nobody on Earth would be the wiser?
>(Actually, in such a way that everybody on Earth wouldn't notice.)
>
>TIA
I'm not a flat earther,and I believe we have been to the moon, but faking
the transmissions would be pretty easy. The rest of the stuff would be more
diffucult.

Joe

2097. Re: Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.281.00081304@hugo.rz.fh-ulm.de>
Source record: 18361

>Hello Roman,

>I had my first QSO on AO-27 this past Saturday using an armstrong Az-El
>technique!

>The bird is active whenever it is in sunlight, it is off when it is in
>darkness. Point your browser to:

>http://www.umbra.com/sats/

>It tells you all about the sat and it's schedule (thanks to Michael
>Wyrick, N4USI, the control operator of AO-27).

Hello Mike,
many thanks for info. The reason why I couldn t hear AO-27 at some passes is
that it is ON 17 minutes after entering sunlight.

73, Roman (DL2SFE)

2098. (none)

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: sgoenka@hotmail.COM
Message-ID: <199707232035.NAA09114@labrador.cs.ucla.edu>
Source record: 18362

From: "Shyam Goenka" <sgoenka@hotmail.com>
Subject: A pictorial biography of King Birendra .... the beloved monarch of the land of Buddha
Date: Thu Jul 24 01:26:21 1997
Dear Sir ,

It gives us immense pleasure in enlightening your goodselves of our having published a "A Pictorial Biography of King Birendra" the beloved monarch of Nepal. The publication assumes historical significance in the light of this having commemorated the Silver Jubilee of His Majesty's Accession.

The endeavour of the Editors of this book, which has been a long drawn effort, was to reveal to the world the true profile of a "beloved monarch" and open doors to a nation that is blessed with peace, harmony and goodwill towards all. Through the King's eyes and through the eyes of his people, we have tried to paint a composite, memorable picture of Nepal. Nepal, the country of Mount Everest - The Summit of the world; Lumbini - the birth place of Lord Buddha. 'The Apostle of peace'; 'Pashupatinath' - the sacred shrine of the Hindus; the mountains, rivers, lakes, glaciers, valleys, temples, chaityas, stupas, monasteries and hundreds of landmarks in diversity spelling the rich cultural heritage, has always been beckoning the scholars, researchers, philanthropists, the nature lovers et at from all over the world from time immemorial. This effort presents a true picture of Nepal in nutshell.

The publication has globally been acclaimed as the best produced Pictorial Biography on a Head of State hitherto. It is a worthy souvenir from Nepal, the beautiful country.

We invite you to visit our website on the internet at http://www.webnepal.com/biography and if you please, you may opt to fill in the order form there and advise. We also welcome your valuable comments for improvements in our future endeavours.

Thanking you and assuring you of our best attention at all times.

We remain.

Yours Truly,
For Trans Asian Media Pvt. Ltd.

Shyam Goenka
Editor

2099. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: bat@gateway.grumman.com
Message-ID: <5r63ds$h16@gateway.grumman.com>
Source record: 18363

In article <5r3ua1$2e2$1@services.arn.net>, ka0yos <ka0yos@arn.net> wrote:
>In article <meckert-2007971555260001@ph72.tir.com>, meckert@tir.com says...
>>
>>Please don't think I'm a nut.
>>
>>My brother-in-law, who professes alternately to be a libertarian or a
>>flat-earther, saw some stupid video that has him convinced the moon
>>landings didn't happen.
>>

Look at the picture of K2RIW in the ARRL antenna book. He was also
on the cover of QST in the Appollo years. His portable dish antenna
and 2 gig downconverter followed the lunar modules throughout much
of their space trajectory. Lots of guys stood next to the radio
and heard the conversations from space. If that was all faked by a
satellite, he would have lost signal after a few minutes, but he was
not moving his antenna much. To actually fake the whole moon
landing would have cost more than actually doing it. Very silly.

--
* Pat Masterson B38-01, Northrop Grumman, * Ham:KE2LJ
* Plant 1, South Oyster Bay Rd., * Packet: KE2LJ@KC2FD.NY
* Bethpage, NY 11714 * President Grumman Amateur
* email: bat@grumman.com Fone: 516-346-6316 * Radio Club WA2LQO

2100. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-23 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970723184822.23762G-100000@oso.slonet.org>
Source record: 18364

Yes, and this is one of the very best testimonials that hams could ever
want! Criminently, Art Bell is stupid!! Cliff Buttschardt K7RR

On 23 Jul 1997, Pat Masterson wrote:

> In article <5r3ua1$2e2$1@services.arn.net>, ka0yos <ka0yos@arn.net> wrote:
> >In article <meckert-2007971555260001@ph72.tir.com>, meckert@tir.com says...
> >>
> >>Please don't think I'm a nut.
> >>
> >>My brother-in-law, who professes alternately to be a libertarian or a
> >>flat-earther, saw some stupid video that has him convinced the moon
> >>landings didn't happen.
> >>
>
>
> Look at the picture of K2RIW in the ARRL antenna book. He was also
> on the cover of QST in the Appollo years. His portable dish antenna
> and 2 gig downconverter followed the lunar modules throughout much
> of their space trajectory. Lots of guys stood next to the radio
> and heard the conversations from space. If that was all faked by a
> satellite, he would have lost signal after a few minutes, but he was
> not moving his antenna much. To actually fake the whole moon
> landing would have cost more than actually doing it. Very silly.
>
> --
> * Pat Masterson B38-01, Northrop Grumman, * Ham:KE2LJ
> * Plant 1, South Oyster Bay Rd., * Packet: KE2LJ@KC2FD.NY
> * Bethpage, NY 11714 * President Grumman Amateur
> * email: bat@grumman.com Fone: 516-346-6316 * Radio Club WA2LQO
>
>

2101. Special Event Certificate W6JBT

Newsgroup: rec.radio.amateur.space
Date: 1997-07-24 00:00:00 UTC
From: Tom Oliverius <tkoliver@telis.org>
Message-ID: <33D77D89.1853@telis.org>
Source record: 18365

W6JBT, The Citrus Belt Amateur Radio Club in San Bernardino California,
will be operating from 1600Z to 2000Z on Saturday, July 26, 1997.

This is a celebration of the club's 50th anniversary.

Frequencies will be 3.850, 7.240, 14.250, and 21.350, two meter phone
and packet. CW contacts will be on random frequencies.

For a commerative Certificate/QSL after contact, send your QSL and a
9"X12" SASE to:

W6JBT
Cirtus Belt ARC
P.O. Box 3788
San Bernardino, CA 92413

73 de WB6EEW

2102. satellite tracking software

Newsgroup: rec.radio.amateur.space
Date: 1997-07-24 00:00:00 UTC
From: gtrmastr@aol.com
Message-ID: <19970724224800.SAA21956@ladder02.news.aol.com>
Source record: 18366

if you have a satellite tracking software please let me have it email me
at gtrmastr@aol.com thankyou

2103. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-25 00:00:00 UTC
From: todd@tj.org
Message-ID: <5r94ng$nb2@news.scruz.net>
Source record: 18367

meckert@tir.com (Michael Eckert) writes:

> My brother-in-law, who professes alternately to be a
> libertarian or a flat-earther, saw some stupid video
> that has him convinced the moon landings didn't happen.

He probably believes that Elvis is dead, too!

Todd, KB6JXT

2104. Your Website At The Top Of The Search Engines.. Guaranteed

Newsgroup: rec.radio.amateur.space
Date: 1997-07-25 00:00:00 UTC
From: topsearch@aaaaaa.com
Message-ID: <5r99hf$i2c$756@news.internetmci.com>
Source record: 18368

If you want a GUARANTEED Top Placement in the Search Engines
Check out http://supercitymall.com/top_search
You can participate in an interactive session which gives
examples of other sites we've helped...
Reseller opportunities available!!!

2105. ..Your Invited: "Grand Re-Opening"...

Newsgroup: rec.radio.amateur.space
Date: 1997-07-25 00:00:00 UTC
From: sfjlkj@usa.net
Message-ID: <5rafeu$o66@buck.innerx.net>
Source record: 18369

YOUR INVITED!

We cordially invite you to the...
"GRAND RE-OPENING" of our Web Presence.

Double click, or cut and paste this URL
http://www.cyberbundle.com

FOR A LIMITED TIME...Receive a FREE gift worth
$99.00, as our appreciation for stopping by.

Our Motto...
Teaching people how to effectively market on the
Internet, one entrepreneur at a time.

2106. looking for a radio dx for sat.

Newsgroup: rec.radio.amateur.space
Date: 1997-07-25 00:00:00 UTC
From: fatdaddy <tmerriwe@bellsouth.net>
Message-ID: <01bc9898$7db50ec0$9def48a6@tmerriwe>
Source record: 18370

i need information on dx radio that can pick up from 70mhz to 4.0 gig do they make a radio that can handle that?

2107. Re: ICOM IC-970 vs FT-736R?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-25 00:00:00 UTC
From: Dietrich Morgenstern <76050.1341@CompuServe.com>
Message-ID: <33D857ED.5209@CompuServe.com>
Source record: 18371

Sandy Meltzer wrote:

> I'm in the process of setting up my satellite station and already
> own an Yaesu FT-736R. I have an opportunity to buy an
> ICOM IC-970A and was wondering if it offers any specific
> advanatages over the FT-736R for satellite work? I'm
> aware of the frequency capabilities of each radio and the extra
> cost of the IC-970, but don't know which would be better for
> LEO and OSCAR work.

Sandy:
I have owned a FT 736 and changed to a 970 H because I was VERY disappointed with the yaesu unit.
The ICOM is very much better in numerous fiels (quality, 70cm rx sensitivity, space for auxiliary units, user interface especially for satellite work, audio etc.) however: it costs almost double the price of an FT736.
If you can buy a 970 at a reasonable price, than you should do it. At the normal list price it would be too expensive.
You should be aware that the FT736 has such a good list price that it is definitely the market leader in satellite rigs.
(Beware of its technical manual: I found that the schematics do have several deviations from reality.)
Hope this helps.

Dietrich DJ1VA

2108. * SpaceNews 28-Jul-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-26 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0728.1997@ampr.org>
Source record: 18372
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0714
* SpaceNews 28-Jul-97 *

BID: $SPC0728

=========
SpaceNews
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MONDAY JULY 28, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
Francisco Costa, CT1EAT, downloaded the following message from Mike Foale
on the Mir space station:

Stat : PR
Posted : 07/21/97 10:13
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: status

I am having frequent power problems with tnc, and loosing all msgs.
Sorry. No supply store is near at hand. I would do anything for a 9pin
9pin serial adapter. Getting ready for next crew, August 7th. Mike.
kb5uac.

Claudio Ariotti, IK1SLD, downloaded the following message from Mike Foale
via the Mir Personal Message System:

Stat : PR
Posted : 07/25/97 09:53
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir status

Lost power to tnc again - lost all messages. Possibly will get new
tnc, with memory protection, in August, with next crew. We are doing
experiments, especially Vassily and Sasha, even though they now have

very little time leiroda and Krisctal still without power, but a little drier now, though still dark. I planted the first ever space produced seeds, two days ago, in Greenhouse. No sprouts yet.
Mike. kb5uac.

Other messages captured by Claudio may be found at the following URL:

http://www.geocities.com/~ik1sld/mirmsg_frame.htm

In other news, a serious problem with de-sensing of the 2-meter receiver exists on the Mir space station, and this has caused frustration on the part of the cosmonauts, groundstations, and the MIREX team. Mir is using multiple commercial VHF channels to send voice and data down to earth based tracking stations around the world. One of the commercial VHF transmitters operating on 143 MHz is de-sensing the 2-meter Amateur Radio Station. Because of the de-sensing problem, the 2-meter station is OFF the air or unable to copy groundstation signals most of the time.

The MIREX team has constructed a special filter for the 2-meter Mir radio station to help eliminate the desensing problem. However, because of higher priorities on onboard the Mir complex at the present time, the MIREX team has not been able to acquire all of the required permissions to deliver the filter to the cosmonauts on Mir. MIREX is still actively working on the situation. Pat Kilroy, WD8LAQ, reports that an effort is underway to send the filter with the Mir24/NASA5 crew. This task is being led by Will Marchant, Dave Larsen, and Miles Mann.

The following is a copy of a memo from Mir to the MIREX team regarding the recent Amateur Radio problems on the Mir space station:

An unidentified US ham recently interrupted a conversation between a Mir crew member and another ham on the ground. The unidentified station said, "Why don't you get your radios fixed?" The station never identified. This station also went on to say, "Who wants to talk to you anyway?".

The Mir crew member passed the following text message on to MIREX:

I realize this fellow's [behavior] is not representative of most hams, but it makes me think that US hams in general just don't understand the limitations [we have] without a filter for VHF. (We also don't have a store at hand to take our radios to..) Could you put out on the various ham nets in the US, an explanation as to why I can't hear hams on VHF, most often. I try not to let things like this bother me, but they do, as I don't want to be offending anybody.

The actions of the unidentified ham are unforgivable. It is interference like this that has caused the Mir crews to shutdown the Amateur Radio Experiment for months at a time. The MIREX team would like to remind people that if they not like the way the station on Mir is running, do NOT complain to the Mir crews. They are much too busy. Complaints and recommendations should insteadbe forwarded to MIREX President Dr. Dave Larsen [N6CO] or Miles Mann Director of Educational resources [WF1F]. And please DO NOT bother the crews. Everyone is doing the best with the limit resources available.

One of the options to get around the de-sensing problem is to temporarily move Mir Amateur radio operations to 70 cm. However, this would open up a whole new set of problems. Most 70 cm transceivers cannot work Mir for the following reasons:

1. Most transceivers sold in the USA do not transmit in the satellite subband between 435.000 MHz and 438.000 MHz.
2. Most transceivers cannot make the channel steps smaller than 5 kHz. A 1 kHz channel step works best when compensating with Doppler shift.
3. The Doppler shift on 70cm during a 10 minutes pass is +/- 10 kHz. This means groundstations need to adjust their transmitters and receivers in opposite directions at the same time, and the adjustments need to be made every 10 to 30 seconds for the duration for the pass. This is much too complicated for beginners.
4. MIREX has always felt that 2-meter 1200 baud simplex packet operations are the best for all that are new to satellite operations and is the most cost effective.

Note 1: Any comments about the 145.800/200 frequency should be directed to SAFEX.

Note 2: The reason Mir is sometimes heard on 145.985 MHz simplex is because the crew is using the 2-meter station as a backup source of family message traffic. The sysops N6CO and WF1F are uploading family message traffic daily. When Mir is in range of Europe, the crews (if they are not busy) will switch back to 800/200.

Remember the name of the 2-meter project on Mir is called the PMS Personal Message System. It is not a Public Bulletin Board System.

MIREX President Dave N6CO
doc@volcano.net

Miles Mann
mann@pictel.com

* RS-12 NEWS *
==========
Doug Brandon, N6RT, reports that DX on RS-12 from southern California (Orange county area) has been very good. In the past few weeks Doug has worked XE2HWB, YS1RRD, VE6DXX, TI5RLI, VE6JAZ, and KL7AH.

Stations he's heard, but wasn't able to contact include HR2A, XE3HN and UA9CLB!

* STS-85 NEWS *
==========
Ken Ernandes, N2WWD, reports that STS-85 pre-launch orbital data is now available on the AMSAT Web page. The nominal OMS-2 Keplerian Elements and time-independent State Vector are posted on the Shuttle Orbital Data page:

http://www.amsat.org/amsat/sarex/orbit.html

As with all Space Shuttle missions, this page will be updated several times daily during the mission with actual orbital data.

A complete mission orbit profile and corresponding time-independent nominal State Vectors are posted on the State Vector Tutorial page:

http://www.amsat.org/amsat/sarex/vectors.html

Any questions or comments regarding this data should be sent to Ken Ernandes, N2WWD at: n2wwd@amsat.org

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-

2109. KB8TNQ/CMARC Pages UPDATED!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-26 00:00:00 UTC
From: KB8TNQ <kb8tnq@voyager.net>
Message-ID: <33DA132B.D082AEBD@voyager.net>
Source record: 18373
Cross-posted to: rec.radio.amateur.homebrew,,rec.radio.amateur.equipment,,rec.radio.amateur.space,,rec.radio.amateur.antenna,,rec.radio.amateur.digital.misc,,uk.radio.amateur,,alt.hamradio.packet
Body handling: HTML body converted to readable text

Hi Gang!

I'd like to take a minute to invite you to stop into the Central Michigan Amateur Radio Club's Web Site, as well as the KB8TNQ Ultimate Amateur Radio Page! as soon as you can.

The first Site, CMARC's, is located at: http://www.kb8uyz.com/cmarc and offers information about our club. Additionally, and perhaps our biggest addition to the Site, (The "Trader's Page") offers FREE SPACE for you to post your items for sale. The guidelines are posted, so check it out.

The second, KB8TNQ's Page, is located at: http://www.kb8uyz.com/kb8tnq and is a great source for those in the hobby and those who are looking to get into Amateur Radio. With links to many other great sites, you'll have to stop in to check it out.

Thanks for your time and be sure you leave your comments and URL in the guestbooks, as we're always looking to add new ones.

7-3,
Jim KB8TNQ

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Thanks for your time and be sure you leave your comments and URL in the guestbooks, as we're always looking to add new ones.

7-3,

Jim KB8TNQ

2110. ARLK057 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-26 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk057.1997@arrl.org>
Source record: 18374
Cross-posted to: rec.radio.info,rec.radio.amateur.space

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SB KEP @ ARL $ARLK057
ARLK057 Keplerian data

ZCZC SK57
QST de W1AW
Keplerian Bulletin 57 ARLK057
From ARRL Headquarters
Newington, CT July 26, 1997
To all radio amateurs

SB KEP ARL ARLK057
ARLK057 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97206.01236539 .00000072 00000-0 10000-3 0 04981
2 14129 26.0496 135.5545 6056749 137.1421 290.5130 2.05879307078163
RS-10/11
1 18129U 87054A 97206.08302765 .00000039 00000-0 25527-4 0 03834
2 18129 82.9236 210.7154 0012903 110.8312 249.4224 13.72380525505434
UO-11
1 14781U 84021B 97205.95874376 .00000038 00000-0 14369-4 0 00065
2 14781 97.8379 185.6852 0010469 242.2257 117.7884 14.69567054716800
RS-12/13
1 21089U 91007A 97206.15619319 .00000065 00000-0 52574-4 0 00096
2 21089 82.9219 250.4821 0028528 188.9225 171.1429 13.74083955324374
UO-14
1 20437U 90005B 97206.23313529 .00000001 00000-0 16950-4 0 2856
2 20437 98.5174 287.0783 0012015 94.1803 266.0752 14.29966083391651
RS-15
1 23439U 94085A 97206.12290598 -.00000039 00000-0 10000-3 0 02403
2 23439 64.8198 91.5012 0147591 125.1133 236.3735 11.27528207106214
AO-16
1 20439U 90005D 97204.14751101 -.00000046 +00000-0 -12756-5 0 00858
2 20439 098.5319 288.0417 0011938 101.4883 258.7642 14.30012694391379
RS-16
1 24744U 97010A 97206.18956513 .00001894 00000-0 64553-4 0 00675
2 24744 97.2724 110.5333 0006601 330.9090 29.1782 15.31584651021907
```

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DO-17
1 20440U 90005E 97195.31457186 -.00000043 00000-0 80310-7 0 819
2 20440 98.5385 280.2609 0011748 124.8125 235.4165 14.30154853390148
WO-18
1 20441U 90005F 97206.15749922 -.00000025 00000-0 69507-5 0 01002
2 20441 98.5372 290.7939 0012574 94.0825 266.1797 14.30123288391691
LO-19
1 20442U 90005G 97206.19169748 .00000040 00000-0 32113-4 0 00972
2 20442 98.5426 291.5213 0013202 96.8944 263.3746 14.30239029391725
FO-20
1 20480U 90013C 97206.39031395 -.00000023 00000-0 28688-4 0 9828
2 20480 99.0466 160.7973 0540036 290.9264 63.4852 12.83238440349608
AO-21
1 21087U 91006A 97206.05128510 .00000094 00000-0 82657-4 0 08444
2 21087 82.9387 23.5502 0035032 160.3564 199.8948 13.74584159325355
UO-22
1 21575U 91050B 97206.19203231 .00000020 00000-0 20810-4 0 08019
2 21575 98.2951 265.3882 0008007 132.4409 227.7458 14.37077807315949
KO-23
1 22077U 92052B 97206.07533517 -.00000037 00000-0 10000-3 0 06892
2 22077 66.0758 65.9013 0007418 204.8589 155.2071 12.86302619232626
KO-25
1 22828U 93061F 97205.61827665 -.00000009 00000-0 13746-4 0 05569
2 22828 98.5393 279.3439 0010851 112.8058 247.4273 14.28184808167555
IO-26
1 22826U 93061D 97206.15356562 .00000016 00000-0 23706-4 0 05755
2 22826 98.5434 279.7853 0009656 127.6480 232.5590 14.27841414199506
AO-27
1 22825U 93061C 97206.18804022 -.00000019 00000-0 96065-5 0 05759
2 22825 98.5430 279.5612 0008956 124.0755 236.1283 14.27731276199491
FO-29
1 24278U 96046B 97206.16185982 -.00000012 00000-0 20376-4 0 01181
2 24278 98.5360 242.2059 0352396 87.7823 276.3615 13.52632699046256
Mir
1 16609U 86017A 97206.17533282 .00000451 00000-0 11930-4 0 04857
2 16609 51.6532 255.0249 0004348 308.6062 51.4530 15.59577585652959

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
July 29, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
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2111. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: hektek@midwest.com.au
Message-ID: <5re3goliu1@loomi.telstra.net>
Source record: 18228

In article <meckert-2007971552260001@ph72.tir.com>, meckert@tir.com says...
>
>Please don't think I'm a nut.
>
>My brother-in-law, who professes alternately to be a libertarian or a
>flat-earther, saw some stupid video that has him convinced the moon
>landings didn't happen.
>

Probably saw the video "Capricorn One". I think that was the name of it.

The film actually showed how easy it was to fake something like that. I am sure with technology nowadays it would be very simple to do.

On a side track...after seeing the Mars landing recently it would also be possible to fake that. After all from what I see of Mars on TV it looks strangely like any vacant land around here. Not that I say it was faked.

:-)

Phil...

2112. Who doesnt like spanish women?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: abdisme@internetconnect.net
Message-ID: <5rercmsms94@nw001.infi.net>
Source record: 18229

Hey,
Here's a site with archives of: -Nude CHEERLEADERS
-Latina Women!
-Naughty Secretaries
-Sluts in High Heels

http://www.porno.com

-Thomas-

(Sorry for the interuption, everyone needs some sexxy women!)

**
Why search the net for porn, just goto http://www.porno.com

2113. - FEM/ISO MALE

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: s@s.com
Message-ID: <5rf6ai$nel@news1-alterdial.uu.net>
Source record: 18230

ESCORT GUIDE AND ENTERTAINMENT DIRECTORY
A FREE SITE FOR YOUR PLEASURE
over 130 pages of adult playground

http://escortguide.com
http://escortguide.com
http://escortguide.com

THE BEST SITE ON THE WEB
VOTED ADULT SITE OF THE DAY

WHATS INSIDE!!

COMPLETE LISTINGS of escorts and escort services
brothels, callgirls and prostitutes
from the us and around the world

ACTUAL XXX RATED pics of the real escorts that you can
hire worldwide. All ages,Asian,blonde,
black,french,russian,canadian you name it

LIVE VIDEO FEED Yes live video feed of some of the
hottest escorts and call girls for you
to see before you sample.

ESCORT CHAT ROOM At last a conference room fot the girls
in the biz and prospective customers
like yourself to interact in discussion
XXX rated and free unlimited access of course

1000 SEX LINKS Links to over 1000 of the top sex sites on the web.
Free unlimited access to these site..never pay for
sex site again. All free all the time

ADULT TOY STORE The best online adult toy store

SWINGERS DIRECTORY place your personal ad here and meet the
women or couples you fantasize about

THIS IS JUST A SMALL SAMPLE OF WHATS INSIDE THIS SITE AND IT A FREE SITE
check us out at
http://escortguide.com

2114. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: oddjob@cix.co.uk
Message-ID: <memo.19970727110636.31381B@oddjob.compulink.co.uk>
Source record: 18231

In article <33D92F1A.3CC1C80D@netaxs.com>, thenut@netaxs.com
(Paul DiSciascio) wrote:

> I am looking for some schematics for a transmitter that
will transmit
> voice or even just CW on 170.245 MHz. If someone could
draw some up and
> email them to thenut@netaxs.com I would really appreciate
it.
>
> Thanks in advance,
> N3SML
>
Why?

You cannot possibly have licence to transmit on this
frequency?!

oddjob@cix.co.uk
Steve Walters: G7VFY: 0956-544202

2115. doppler, reverse and up/down HELP!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <33DB6AE3.51EF@worldnet.att.net>
Source record: 18232

Ok, I think I'll quit sending RF at FO29/20 until I know what I'm doing! Correct me on these if I'm wrong.

My uplink and down link are reversed. If I send on the high end it comes down on the low end of the downlink? If I send LSB I get USB down? I've read two differnt things with this next one! Should I adjust my uplink or downlink for doppler? Or even both? My transiever wants to track both at the same time (IC-820H). Help! 73's

2116. Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: brettwi@ix.netcom.com
Message-ID: <5rfr4n$i5n@dfw-ixnews11.ix.netcom.com>
Source record: 18233

Can anyone point me to a listing of weather sat. fax frequencies (in VHF range) for the NOAA or meteor sat series. After reading this months QST about a new fax program, I;d like to try it out, but the article only says 131.xx or 137.xx MHz.

Thanks

Brett WA6SXU

SoCa

2117. Re: Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33DB7DC5.76E3@larc.nasa.gov>
Source record: 18234

The frequencies used by NOAA satellites are 137.350, 137.500 and
137.620. Although I believe only 137.500 and 137.62 are presently
active. See:
http://www.newspace.com/feature/newsline/downlink.html
John
j.m.franke@larc.nasa.gov

2118. Pre-Amp Power via Coax?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: Mike Blanchard <mblancha@spd.dsccc.com>
Message-ID: <33DBA166.85E898E8@spd.dsccc.com>
Source record: 18235

A person at the HamCom 97' AMSAT booth said to NOT purchase nor install mask mounted pre-amps for OSCAR use that were powered via the coax. He said that it (power via the coax) would cause interference but was not sure why.

Is he correct?
What features should I look for in a mask mounted 2M or 70CM OSCAR pre amp?

Thanks,
Mike N5KDY

2119. Re: Pre-Amp Power via Coax?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <33DBC97B.CF2@worldnet.att.net>
Source record: 18236

Mike Blanchard wrote:
>
> A person at the HamCom 97' AMSAT booth said to NOT purchase nor install
> mask mounted pre-amps for OSCAR use that were powered via the coax. He
> said that it (power via the coax) would cause interference but was not
> sure why.
>
> Is he correct?
> What features should I look for in a mask mounted 2M or 70CM OSCAR pre
> amp?
>
> Thanks,
> Mike N5KDY
I'm interested in the answer myself. Als, is there a wideband preamp
that will work 430/145 with a single cable feed?

2120. SASI Sat Tracker - Good? Bad?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: sandy@sandy.com
Message-ID: <5rgk3j$ior@surf.com>
Source record: 18237

Hello All,

I'm thinking about buying a used SASI Sat Tracker and would
appreciate ANY comments or feedback about your experiences
with this product. How does it compare to others on the market
like KC Tracker, etc.? Send email or post to this newsgroup.

Thanks.

--sandy

2121. Re: Question on AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970727013200.VAA28583@ladder02.news.aol.com>
Source record: 18375

>I need some info on AO-27

>* WHEN is it working (only weekend ?)

<A HREF="http://oeonline.com/~kf8bex/ao-27.html">South East Michigan AMSAT
Net - AO-27</A>
or
http://www.umbra.com/sats/

>* WHICH equipment is neccesary?

FM Transmitter for 146.850
FM Receiver for 436.800

Also see the 146/437-10 Antenna at......

<A HREF="http://members.aol.com/Arrow146/index.html">Arrow Antenna</A>
or
http://Members.aol.com/Arrow146/index.html

>many thanks,
>Roman (DL2SFE)

73 Al

2122. FAQ?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-27 00:00:00 UTC
From: hkanare@aol.com
Message-ID: <19970727032301.XAA21793@ladder01.news.aol.com>
Source record: 18376

Hi. Is there a FAQ or best website for newbie info for this newsgroup?
Thanks.

2123. Don't Pay For $ex $site Pa$$words

Newsgroup: rec.radio.amateur.space
Date: 1997-07-28 00:00:00 UTC
From: 76896545@compuserve.com
Message-ID: <5rh5a6$c9a@news1-alterdial.uu.net>
Source record: 18238

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

2124. * Amateur CW/Voice Satellite Frequencies FAQ 07.28.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-07-28 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2807970934500001@cqt-pm2-072.dowco.com>
Source record: 18239
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ07.28
Amateur CW/Voice Satellite Frequencies for July 28, 1997.

BID: $FREQ0728
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
```

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse. Excellent reports on this satellite lately.

* Radio Sport-10's beacon, ROBOT and transponder remain silent. Bad news to report regarding the satellite:

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

Still no firm information as to what is wrong with the bird and why the problem occured. Let's pray that this report was a 'bad translation' from Russian to English.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater. Recently a station has been heard sending Packet on this satellite. This is frowned upon and not one of the recommended uses of this satellite.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This

schedule has been known to be amended with little or no notice by the
ground control station.

The latest FO-29 Schedule:

July 25 (Fri) 09:23z JA
Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA

* Mir Simplex - Astronaut Mike Foale has been farily active, making the
odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and
the 145.985 simplex have been used.

* Mir SAFEX Repeater - Not operational at this time.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

2125. Seti?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-28 00:00:00 UTC
From: Franz Thome <fthome@amug.org>
Message-ID: <Pine.SOL.3.96.970728110041.8860A-100000@general>
Source record: 18240

HI all, I was wondering if anybody can recommend any good books to read on seti?

Thanks,
Alex

--Believe nothing until you question everything--

>>Knowledge is Power<<

"... It doesn't tell the whole story. Remeber that. Nothing ever does..."

-----BEGIN GEEK CODE BLOCK-----
Version: 3.1
GCS/M/P d- s++:++ a? C++++ BLSX U+++ P+ L+ E-- W- N++ o? K w---
@O M++ V PS++ PE Y++ PGP++ t+ 5+ X+++ R+ tv- b+++ DI+++ D G++ e-
h!++ r y !z
------END GEEK CODE BLOCK------

2126. Re: Seti?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-28 00:00:00 UTC
From: pwinter@best.com
Message-ID: <5rjht3$p8p$1@shell5.ba.best.com>
Source record: 18241

[posted and mailed]

In article <Pine.SOL.3.96.970728110041.8860A-100000@general>,
Franz Thome <fthome@amug.org> wrote:
>HI all, I was wondering if anybody can recommend any good books to read on
>seti?

The SETI Institute Web site (http://www.seti.org) not only offers books
on the subject (including one by their president, Dr. Frank Drake), but
also has links to various SETI projects, including some being done by
amateurs. (I particularly like the one called Project BAMBI. :-))
So you could even get involved in SETI yourself!

(You can also get a SETII lapel pin just like the one Ellie Arroway
wore to that White House press conference. :-) :-))

Patty

================================ N6BIS ================================
"Due South" will be back this fall!
See http://fly.HiWAAY.net/~warydbom/duesouth/3seasus.htm for a list
of the U.S. stations that will be carrying it in syndication.
========== patty@wintertime.com ======= Sunnyvale, Calif. =============

2127. Re: Seti?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: rhelton@netcom.com
Message-ID: <rheltonEE20wC.FLM@netcom.com>
Source record: 18242

Try "Is anyone out there? The scientific search for extraterrestrial intelligence" by Frank Drake and Dava Sobel

also "The search for life in the universe" by Donald Goldsmith and Tobias Owen.

Good reading to you.

Franz Thome (fthome@amug.org) wrote:
: HI all, I was wondering if anybody can recommend any good books to read on
: seti?

: Thanks,
: Alex

: --Believe nothing until you question everything--

: >>Knowledge is Power<<

: "... It doesn't tell the whole story. Remeber that. Nothing ever does..."

: -----BEGIN GEEK CODE BLOCK-----
: Version: 3.1
: GCS/M/P d- s++:++ a? C++++ BLSX U+++ P+ L+ E-- W- N++ o? K w---
: @O M++ V PS++ PE Y++ PGP++ t+ 5+ X+++ R+ tv- b+++ DI+++ D G++ e-
: h!++ r y !z
: ------END GEEK CODE BLOCK------

--
rhelton@netcom.com

2128. Learn about Amateur (Ham) TV at this WEB site

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: wb6izg@qsl.net
Message-ID: <33e06f0e.3006015@news.adnc.com>
Source record: 18243
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

If your have ever thought about getting into Amateur Television or just wonder what it is all about then you need to check out my ATV web site at:

http://www.qsl.net/wb6izg

ATV is the least understood of all Ham activities and all it requires is a no-code Ham license. It is also not as expensive as you might think. Check it out.

73,

Bruce Forsberg WB6IZG

2129. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: James O'Brien <littlejimmyinthewoodpile@radia1.com>
Message-ID: <33DD715D.6279@radia1.com>
Source record: 18244
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

CrACKeD wrote:
>
> SCO <sco@sco-inc.com> wrote:
> : Paul DiSciascio <thenut@netaxs.com> wrote:
>
> : >I am looking for some schematics for a transmitter that will transmit
> : >voice or even just CW on 170.245 MHz. If someone could draw some up and
> : >email them to thenut@netaxs.com I would really appreciate it.
> : >
> : >Thanks in advance,
> : >N3SML
>
> : I might be dense but ... 170.245 is NOT a ham band. I don't even know
> : what service band that is.
> : AF4DT
> : Founder
> : U.S. Amateur Radio Assoc.
> : USARA@mindspring.com
>
> I don't have a bandplan sitting in front of me right now, but 170.245
> sounds like a wireless microphone frequency. Transmitting there isn't
> going to hurt anybody.
>
> CrACKeD <CrACKeD@primenet.com>

Get back in the closet.

2130. Polland & Austrian People with Contacts There

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: PCC International <PCCI@ozarkad.com>
Message-ID: <5rkiscdeh897@news.internetmci.com>
Source record: 18245

We're expanding our Business in E & W Europe, (Polland & Austria) + ASIA & So. America. Please E mail Us if your can Help.

mailto:pcci@ozarkad.com

2131. Re: Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <33DDF9F4.341F@one.net>
Source record: 18246

brettwi@ix.netcom.com wrote:
>
> Can anyone point me to a listing of weather sat. fax frequencies (in
> VHF range) for the NOAA or meteor sat series. After reading this
> months QST about a new fax program, I;d like to try it out, but the
> article only says 131.xx or 137.xx MHz.
>
> Thanks
>
> Brett WA6SXU
>
> SoCa

Be sure to distinguish between FAX and the satellite direct transmissions.

You can receive the NOAA 12 satellite's APT transmissions directly on 137.50 MHz, NOAA 14 APT on 137.62, and Meteor 3-5 APT on 137.85 (when it's not turned off).

By "FAX", people generally mean the HF transmissions (e.g., 8080 kHz) sent by numerous stations in conventional facsimile format (120 lines per minute, etc.). There are many of these stations around the globe, and the best one for you depends on where you are, propagation at that time, etc.

Rich W2RG

2132. Re: Pre-Amp Power via Coax?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <33DDFBB6.6371@one.net>
Source record: 18247

Mike Blanchard wrote:
>
> A person at the HamCom 97' AMSAT booth said to NOT purchase nor install
> mask mounted pre-amps for OSCAR use that were powered via the coax. He
> said that it (power via the coax) would cause interference but was not
> sure why.
>
> Is he correct?

No.

Except that using a high-gain, mast-mounted amp can aggravate the problem
is you're already suffering from adjacent strong signals.

> What features should I look for in a mask mounted 2M or 70CM OSCAR pre
> amp?
>
> Thanks,
> Mike N5KDY

I recommend (1) low noise figure and then (2) moderate gain.

Rich W2RG

2133. swap page

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33DE09B6.5C67@fishnet.net>
Source record: 18248

Huge Ham Swap Page, Buy, Sell, Trade and Wants
Over 100 hits per day
All "Non-Commercial" Ads Posted Free
Click Here ----> http://www.fishnet.net/~ko6oy/swapage.htm

More Exlent Info. ----> http://www.fishnet.net/~ko6oy/ko6oy.html
73 Danny KO6OY

2134. Re: Pre-Amp Power via Coax?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <n1tx@amsat.org>
Message-ID: <33DE12C6.A444021D@amsat.org>
Source record: 18249

Mike Blanchard wrote:

> A person at the HamCom 97' AMSAT booth said to NOT purchase nor
> install
> mask mounted pre-amps for OSCAR use that were powered via the coax. He
>
> said that it (power via the coax) would cause interference but was not
>
> sure why.
>
> Is he correct?
> What features should I look for in a mask mounted 2M or 70CM OSCAR pre
>
> amp?

I think mounting a preamp on your mask is more likely to obscure your
vision, thus
making it difficult to tune your radios and operate the other equipment.
:-)

Mast-mounted pre-amps are the preferred method unless you have short
coax runs.
Powering via coax is more a matter of convenience. The in-line DC
coupler will add a
bit more loss, but it should be insignificant for most applications.

As for features, look for GaAs FET designs with 10-20 dB gain
(adjustable is even
better). You shouldn't run high power through the satellites, so a
pre-amp with
VOX (RF-sensed) T/R switching is much more convenient to use. However,
since
you typically just listen on one band and transmit on the other, this
feature is not
absolutely required. However, if you don't have it, you're sure to make
a mistake and
accidentally transmit through the amp, thus ruining your investment.

Happy tuning.

73 Larry N1TX

P.S. Make sure you visit http://www.delphi.com/electronic for more
expert advice.

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist

PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

2135. Re: Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: "Larry L. Ledlow, Jr." <n1tx@amsat.org>
Message-ID: <33DE0F81.B7B9DB49@amsat.org>
Source record: 18250

brettwi@ix.netcom.com wrote:

> Can anyone point me to a listing of weather sat. fax frequencies (in
> VHF range) for the NOAA or meteor sat series. After reading this
> months QST about a new fax program, I;d like to try it out, but the
> article only says 131.xx or 137.xx MHz.
>
> Thanks
>
> Brett WA6SXU
>
> SoCa

The following information is from the Remote Imaging Group (UK), which has a homepage at http://www.rig.org.uk/index.html.

NOAA 12_____137.5Mhz.
NOAA 14_____137.62Mhz.
NOAA HRPT on 1698Mhz and 1707Mhz.
OKEAN 4____137.4Mhz.
Sich -1_______137.4Mhz.
Meteor 3-5___137.85Mhz.
Meteor 3-6___137.30Mhz??
Meteor 2-21__137.85Mhz.
Meteosat 6 1691.0Mhz and 1694.5MhzMhz.

Vehicle status:

NOAA 12. *** Prime morning, south bound, satellite. *** This spacecraft continues to operate normally.

NOAA 14 *** Prime lunchtime satellite *** This spacecraft continues to operate normally.

METEOR 2-21 is currently on standby but when operational Meteor 2-21s signal is mostly weak and images are poor.

METEOR 3-5. With its height advantage over the NOAA spacecraft it is a thousand kilometres further away when near the horizon permitting views of the north
pole from southern England. Image quality is variable and this bird may be near the end of of it's life

METEOR 3-6. The return of Meteor 3-6 seemed likely when a FANAS prediction bulletin was issued from Moscow but although the encoded data purported to
be for Meteor 3-6 it was in fact consistent with the orbital parameters

of Meteor 3-5! Nothing has been heard from Meteor 3-6 for over 2 years now.

OKEAN 4. Continues to provide high quality images. It has been heard in Mauritius recently. European high-latitude observers are in the best position to receive
images. A schedule of transmissions is posted to the wx-sat mail list.

Sich-1. is a sister of Okean 4 is renowned for it's store and dump images. Images of Antarica, The Falkand Isles and Panama have been received in the UK.
Transmissons off until March 1997.
--

73 Larry N1TX

N1TX (ex-NA5E, G0CQW) ARRL Technical Specialist
PACSATs: AO16/LO19 E-mail: n1tx@amsat.org
Terrestrial packet: WA1WOK.FN43FE.NH.USA.NOAM

2136. Re: Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33DE2213.7F6989C0@direct.ca>
Source record: 18251

Rich Griffiths wrote:

> You can receive the NOAA 12 satellite's APT transmissions
> directly on 137.50 MHz, NOAA 14 APT on 137.62, and Meteor
> 3-5 APT on 137.85 (when it's not turned off).

These satellites are in sun-synchronous orbits, so they go over at approximately the same time each day. NOAA-12 is around dawn/sunset, and NOAA-14 is in the early afternoon. I had given up on the Russian satellites, but maybe I'll try listening for Meteor 3-5.

I receive them on a Radio Shack scanner hooked up to a wire dipole and get pretty good (but not perfect) pictures. The signal is full-quieting, but the receiver bandwidth is wrong...

My software is my own - a first stab at DSP using my PC's sound card.

--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

2137. Y pay 4 sex site passwords?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: 98765555545@compuserve.com
Message-ID: <5rlqqs$ic7@news1-alterdial.uu.net>
Source record: 18252

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

2138. ARLK058 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-07-29 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk058.1997@arrl.org>
Source record: 18253
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK058
ARLK058 Keplerian data

ZCZC SK58
QST de W1AW
Keplerian Bulletin 58 ARLK058
From ARRL Headquarters
Newington, CT July 29, 1997
To all radio amateurs

SB KEP ARL ARLK058
ARLK058 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97209.89567768 -.00000124 00000-0 10000-3 0 05048
2 14129 26.0640 134.8941 6056122 138.2150 288.7072 2.05881317078249
RS-10/11
1 18129U 87054A 97210.02000950 .00000045 00000-0 33006-4 0 03843
2 18129 82.9245 207.8068 0013153 100.9206 259.3426 13.72380805505979
UO-11
1 14781U 84021B 97209.97595952 .00000090 00000-0 23056-4 0 00129
2 14781 97.8383 189.5434 0010634 227.2196 132.8116 14.69568219717398
RS-12/13
1 21089U 91007A 97210.16112599 .00000071 00000-0 58849-4 0 00122
2 21089 82.9215 247.5098 0028883 177.5777 182.5518 13.74084364324924
UO-14
1 20437U 90005B 97210.29149668 -.00000025 00000-0 69906-5 0 2866
2 20437 98.5171 291.0476 0012041 82.3765 277.8786 14.29966174392230
RS-15
1 23439U 94085A 97210.11411698 -.00000039 00000-0 10000-3 0 02403
2 23439 64.8189 85.0479 0147906 124.5197 236.9796 11.27528280106665
AO-16
1 20439U 90005D 97210.16487941 -.00000006 00000-0 14550-4 0 01090
2 20439 98.5343 293.9452 0012224 86.4030 273.8551 14.30013524392231
RS-16
1 24744U 97010A 97210.17493041 .00001892 00000-0 64455-4 0 00670
2 24744 97.2720 114.4433 0005925 315.2679 44.8084 15.31598613022514
```

```
DO-17
1 20440U 90005E 97208.25762543 -.00000043 00000-0 80310-7 0 824
2 20440 98.5388 292.9653 0012281 89.3492 270.9124 14.30156088391990
WO-18
1 20441U 90005F 97210.14544750 .00000003 00000-0 18019-4 0 00991
2 20441 98.5382 294.7083 0012819 83.7555 276.5088 14.30123798392261
LO-19
1 20442U 90005G 97210.17932268 .00000097 00000-0 54134-4 0 01015
2 20442 98.5424 295.4353 0013254 85.1957 275.0737 14.30240344392298
FO-20
1 20480U 90013C 97210.44448240 -.00000027 00000-0 20019-4 0 9835
2 20480 99.0473 164.0903 0540193 281.7723 72.3280 12.83238303350129
AO-21
1 21087U 91006A 97209.98197840 .00000094 00000-0 82657-4 0 08463
2 21087 82.9387 20.6401 0035427 149.2907 211.0332 13.74584231325890
UO-22
1 21575U 91050B 97210.16071664 -.00000029 00000-0 42525-5 0 07998
2 21575 98.2993 269.2219 0007761 119.4273 240.7692 14.37077528316511
KO-23
1 22077U 92052B 97210.04058691 -.00000037 00000-0 10000-3 0 07070
2 22077 66.0762 57.6017 0007000 203.5224 156.5472 12.86302649233131
KO-25
1 22828U 93061F 97210.17210513 .00000024 00000-0 26885-4 0 05535
2 22828 98.5392 283.7973 0011007 100.9339 259.3074 14.28185762168204
IO-26
1 22826U 93061D 97210.14788487 .00000031 00000-0 30056-4 0 05757
2 22826 98.5430 283.6906 0009857 116.3556 243.8640 14.27842089200072
AO-27
1 22825U 93061C 97210.18266729 -.00000030 00000-0 53756-5 0 05753
2 22825 98.5431 283.4671 0009098 113.7287 246.4858 14.27731445200060
FO-29
1 24278U 96046B 97210.15617693 -.00000035 00000-0 -22436-5 0 01269
2 24278 98.5355 245.6529 0352434 77.4492 286.5823 13.52632649046798
MO-30
1 24305U 96052B 97209.82944076 .00000204 00000-0 20364-3 0 1258
2 24305 82.9327 323.8001 0031451 87.5095 272.9652 13.73096553 44779
Mir
1 16609U 86017A 97210.14809894 .00001780 00000-0 28267-4 0 04930
2 16609 51.6528 235.0630 0003706 320.0742 39.9977 15.59597614653576

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
August 2, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2139. Be Number 1

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: search@search30.com
Message-ID: <33de973a.0@news1.abac.com>
Source record: 18254

HOW CAN YOU BECOME SUCCESSFUL ON THE INTERNET?
The Secret is Don't get lost in the Search Engines
Do you want to know the secrets to getting the greatest number of hits by
BEST POSITIONING YOUR WEB SITE ON THE SEARCH ENGINES? No problem, our
complete scientific study, shows exactly how! In fact, the program is so
powerful, it's dangerous to your competitors
...PLUS....
Two (2) absolutely NEW tricks just created by our staff on July 8, 1997
be the first to use them

http://www.e-earth.net/reports.htm

2140. Protect your children from viewing adult sex on line

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: pete6444929@aol.com
Message-ID: <5rm6sc$mrh@news1-alterdial.uu.net>
Source record: 18255

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

2141. Simulation & Synthesis Capability for Ham Organizations

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <33DF5394.1AD4@webblabs.com>
Source record: 18256
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf,alt.ham-radio.marketplace

Many amateur radio operators have contacted us in recent months regarding availability of affordable electronic analysis and synthesis tools. We have now released Version 2 of the Professional Partnership (PP) Program. For the nominal one-time $975 charge, the PP program may be distributed throughout a club, organization or company. Of special significance is the profound level of Wireless/RF/Microwave capability included:

Nodal Circuit Analysis with True Two-Node Port Definition
Unconstrained Noise Analysis
Transmission Structure Synthesis & Analysis
Over 40 Single & Coupled Topologies
Strip (Planar) Structures
Wire Lines
Coaxial Arrangements
Waveguide (Non-TEM) Topologies
Passive Filter Synthesis
Lowpass
Highpass
Bandpass
Prototypes
Practical Reactively-Coupled Realizations
System & Receiver Design Support
Link, Terminal & Radar Analysis
System Architecture Characterization
Spurious Analysis
Transmit & Receive
Coincident & Tuned
Preselector & Output Filtering
Phase Noise Analysis
Time Domain Effects
Frequency Domain Effects

600+ Page User's Manual with Examples & References

Acquire a single PP Program package for your club, company or organization and you will be furnishing all of this needed capability to every designer, not just one! Our competitors are furious with us for having created the uniquely progressive opportunity. It seems they're still using dongles to hinder access to their own products.

Please contact me for additional information, or see:

http://www.webblabs.com/pp.htm

Kathy Goerg
Professional Partnership Program Coordinator

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005
TEL 414.367.6825
FAX 414.367.6824

2142. ARLS026 September Phase 3D Launch Doubtful

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls026.1997@arrl.org>
Source record: 18257
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS026
ARLS026 September Phase 3D Launch Doubtful

ZCZC AS26
QST de W1AW
Space Bulletin 026 ARLS026
From ARRL Headquarters
Newington, CT July 30, 1997
To all radio amateurs

SB SPACE ARL ARLS026
ARLS026 September Phase 3D Launch Doubtful

The September 30 launch of the Phase 3D Amateur Radio satellite was put in grave doubt this week. It appears extremely unlikely that Phase 3D will be able to meet revised mechanical specifications in time to fly on schedule aboard the Ariane 502 rocket. AMSAT officials are holding out a glimmer of hope that the Ariane 502's schedule will slip just enough to let Phase 3D catch up again, but those chances are considered very slim. In a statement, AMSAT called the turn of events ''very bad news.''

AMSAT-NA President Bill Tynan, W3XO, confirmed that, in order to include Phase 3D, the Ariane 502's overall launch schedule would have to slip a month or two. But, he said, ''if it goes on schedule, we won't go on '502.''

The latest setback for the next-generation Amateur Radio satellite came when the European Space Agency (ESA) significantly increased its estimate of vibration levels the Phase 3D payload would be exposed to aboard the Ariane 502. The revised estimates mean AMSAT will have to move fast to make structural changes in the Phase 3D spaceframe in order to withstand the anticipated rougher ride. Phase 3D Project Leader Karl Meinzer, DJ4ZC, told ESA in mid-July that the work required by the agency's new information would prevent AMSAT from delivering the spacecraft to Kourou, French Guiana, by the specified August 10 date. AMSAT brought in an independent structural engineer to review the spacecraft's design and construction. Since his report, AMSAT said that ''substantial effort has been taking place at the Phase 3D Integration Lab in Orlando, Florida'' to make and install the recommended structural reinforcements. That work continues.

If the Phase 3D payload is not going to be available on time, AMSAT must supply a ''mass simulator'' representing the Phase 3D spacecraft

by September 5.

Tynan was philosophical about the latest complication for the Phase 3D program. ''This is the way engineering works sometimes. It's trade-offs and give-and-take with other people.'' He said it was too early to speculate on future launch possibilities.
NNNN
/EX

2143. What's up with AMSAT.ORG?

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: Ken Southwell <southwel@flnet.com>
Message-ID: <01bc9d1a$a08f7d00$8ae8f0cd@main-system>
Source record: 18258

OK, I am in SW Florida and I have tried many times to make a normal connection with amsat-dot-org... I have done a traceroute on it and the lag dramatically increases on amsat's end. What's wrong, and has anyone notified AMSAT about this?
Ryan, KE4GEN
southwel@flnet.com

2144. Re: Learn about Amateur (Ham) TV at this WEB site

Newsgroup: rec.radio.amateur.space
Date: 1997-07-30 00:00:00 UTC
From: bb099@cleveland.Freenet.Edu
Message-ID: <5rodk6$pvr@alexander.INS.CWRU.Edu>
Source record: 18259
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In a previous article, wb6izg@qsl.net (Bruce W. Forsberg) says:

>If your have ever thought about getting into Amateur Television or just wonder
>what it is all about then you need to check out my ATV web site at:
>
>http://www.qsl.net/wb6izg
>
>ATV is the least understood of all Ham activities and all it requires is a
>no-code Ham license. It is also not as expensive as you might think. Check it
>out.
>
>73,

Go for it, but just don't mention HF privleges ;-)

73's
--
```
_____________________________________________________________________
/ \
| "Death before disco !" bb099@cleveland.freenet.edu "Fuzzy Navels suck !" |
\_____________________________________________________________________/
```

2145. P3D likely bumped off Arianne 502

Newsgroup: rec.radio.amateur.space
Date: 1997-07-31 00:00:00 UTC
From: tuffenuph@aol.com
Message-ID: <19970731045000.AAA29163@ladder01.news.aol.com>
Source record: 18260

YGBSM

The idea of launching dead weight in the place of a working P3D
because the Arianne tech data was way off in the first place
just makes me want to vomit.

What a colossal waste.

2146. Re: doppler, reverse and up/down HELP!

Newsgroup: rec.radio.amateur.space
Date: 1997-07-31 00:00:00 UTC
From: Jeff Griffin <kb2wqm@amsat.org>
Message-ID: <33E08C08.C03DB0EC@amsat.org>
Source record: 18261

N8XYN wrote:

> Ok, I think I'll quit sending RF at FO29/20 until I know what I'm
> doing! Correct me on these if I'm wrong.
>
> My uplink and down link are reversed. If I send on the high end it
> comes down on the low end of the downlink? If I send LSB I get USB
> down? I've read two differnt things with this next one! Should I
> adjust my uplink or downlink for doppler? Or even both? My
> transiever
> wants to track both at the same time (IC-820H). Help! 73's

You should TX LSB, RX USB on both FO-20 and FO-29 satellites, when in analog mode. The method I use is to first find my downlink freq offset by sending short (2 or 3 dits) of CW. Then I start calling CQ or noting my offset, answer someone else's by moving my TX/RX freq up or down to where there downlink is. You should NEVER move your TX freq unless you have a fairly good idea where you will be coming down. After awhile you will get a feel for the offset on each satellite. This seems to work for me. I hope this helps.

73 Jeff kb2wqm

2147. Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-07-31 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <33E0E986.EE1@ibag.com>
Source record: 18262

Yes, it is VERY disturbing, after all the blood, time and treasury that has gone into this satellite. If the 502 should end up going up without Phase IIID, I think AMSAT should work a campaign to ask ESA to put us up on the next Arianne 4 that they can, stressing that the delay on OUR part was caused by a last minute change in flight specifications on THEIR part. We have already paid them our $1M + launch fee, and I hope they don't take the attitude that they launched our dummy load, and that satisfies the contract. I fear this whole thing turning into a giant boondoggle, with lots of finger point and recriminations unless we can get the structural changes ready for this launch date....whatever that turns out to be.

Rick Tannehill - W7RT

2148. Re: Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-07-31 00:00:00 UTC
From: Dan O'Connell <oconneld@OIT.EDU>
Message-ID: <Pine.OSF.3.96.970731153712.5513A-100000@internet.oit.edu>
Source record: 18263

> Yes, it is VERY disturbing, after all the blood, time and treasury that
> has gone into this satellite. If the 502 should end up going up without
> Phase IIID, I think AMSAT should work a campaign to ask ESA to put us up
> on the next Arianne 4 that they can, stressing that the delay on OUR
> part was caused by a last minute change in flight specifications on
> THEIR part.

Is it possible we can work something out with the Russians who HAVE
a
launch vehicle that actually works????? IMO Arianne has HORRIBLE "success"
rate. It's junk! Dan WA7TDZ

2149. Re: doppler, reverse and up/down HELP!

Newsgroup: rec.radio.amateur.space
Date: 1997-08-01 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <33E1C8DD.3FAA@worldnet.att.net>
Source record: 18264

Jeff Griffin wrote:
>
> N8XYN wrote:
>
> > Ok, I think I'll quit sending RF at FO29/20 until I know what I'm
> > doing! Correct me on these if I'm wrong.
> >
> > My uplink and down link are reversed. If I send on the high end it
> > comes down on the low end of the downlink? If I send LSB I get USB
> > down? I've read two differnt things with this next one! Should I
> > adjust my uplink or downlink for doppler? Or even both? My
> > transiever
> > wants to track both at the same time (IC-820H). Help! 73's
>
> You should TX LSB, RX USB on both FO-20 and FO-29 satellites, when in
> analog mode. The method I use is to first find my downlink freq offset
> by sending short (2 or 3 dits) of CW. Then I start calling CQ or noting
> my offset, answer someone else's by moving my TX/RX freq up or down to
> where there downlink is. You should NEVER move your TX freq unless you
> have a fairly good idea where you will be coming down. After awhile you
> will get a feel for the offset on each satellite. This seems to work for
> me. I hope this helps.
>
> 73 Jeff kb2wqm

TNX for input OM. This sure isnt like working anything else. 73

2150. Re: * SpaceNews 28-Jul-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-01 00:00:00 UTC
From: Derek Michael Hodgins <derek@cyberhole.com>
Message-ID: <33E25DCD.35D2@cyberhole.com>
Source record: 18265

Check out the newest astronomy site on the internet....
http://www.cyberhole.com

We should talk about doing a partnership between Cyberhole and
SpaceNews.

--

Derek Michael Hodgins
Galaxy Telecommunications
derek@cyberhole.com

Cyberhole Online Astronomy
http://www.cyberhole.com

2151. Pass for 1800 sex sites 4 REAL U see

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: klsaASdklASDI@HOTMAIL.COM
Message-ID: <5ru7ro$6tk@news1-alterdial.uu.net>
Source record: 18266

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL above.

2152. easy money

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: adrianos@infosel.net.mx
Message-ID: <33e27f62.12219373@news.infosel.com.mx>
Source record: 18267

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----------
| From: Robert <rw79@centuryinter.net>
| Newsgroups: microsoft.public.access.3rdpartyusrgrp
| Subject: making money
| Date: Lunes 26 de Mayo de 1997 1:47 AM
|

Interrest by making $50,000 ?

HERE"S A FUN WAY TO MAKE SOME EXTRA CASH!!!! WHO KNOWS YOU MAY EVEN
GET RICH!!!!!!!!!!!!!!!!!!!!!!!!!!!!You gotta be crazy! How on earth
do you think you can buy 50 grand for lousy 5 buck? Well, that's what
I was wondering, too until I came across this letter.First of all,
IT'S PERFECTLY LEGAL!(Call 1-800-725-2161) if you have any questions
about the following opportunity to make $50,000.00 and that probably
WITHIN LESS THAN TWO MONTHS!Well, here it goes:A little while back, I
was browsing these newsgroups, just like you are now, and came across
an article similar to this that said you could make thousands of
dollars within weeks with only an
initial investment of $5.00! So I thought, "yeah, right, this must be
a
joke," but like most of us I was curious, so I kept reading. Anyway,
it said
that you $1.00 toeach ofthe 5 names and addresses stated in the
article.
You then place your own name and address in the bottom of the list at
#5, and
post the article in at least 200 newsgroups. (There are thousands) No
catch,
that was it.I knew that that was the opportunity I had waited for a
long
time.I thought it was about time that the money of the world gets into
the right hands! OURS, right? I never had a doubt that this thing
will
actually work and even if it didn't, what were 5 stamps and $5.00 for
a
try? As I mention before, like most of us I was a little skeptical and
a little worried about the legal aspects of it all. So I checked it
out
with the US Post Office (1-800-725-2161) and they confirmed that it is
indeed
legal! Now, that's how your story WILL sound like, too if you
participate:Well GUESS WHAT!!... within 7 days, I started getting
money in
the mail! Iwas shocked! I still figure it would end soon, and didn't
```

give
it another thought. But the money kept coming in. In my first week,
I
made about $20.00 to $30.00 dollars. By the end of the second week I
had
made a totalof over $1,000.00!!!!! In the third week I had over
$10,000.00
and it's still growing. This is now my fourth week and I have made a
total
of just $42,000.00 and it's still coming in....Let me tell you how
this works
and most importantly, why it works...also,make sure you print a copy
of this
article NOW, so you can get the information off of it as you need it.
The
process is very simple and consist of 3 easy steps:STEP1: Get 5
separate
pieces of paper and write the following on each piece of paper "PLEASE
PUT ME
ON YOUR MAILING LIST." Now get 5 $1.00 bills and place ONE inside each
of the 5 pieces of paper so the bill will not be seen through the
envelope to
prevent thievery. Next, place one paper ineach ofthe 5 envelopes and
seal
them. You should now have 5 sealed envelopes,each with a piece of
paper
stating the above phrase and a $1.00 bill.What you are doing is
creating a
service by this. This is perfectly legal! Mail the 5 envelopes to the
following addresses:

#1 J. A. Gang
970 Paces Circle #300
Apopka, FL
32703

#2 T.J. Kashin
2009 Hollyhock St
Pekin, IL 61554

#3 Fred Dufour
1596 39avenue
Montreal, QC
H1A4A2, Canada

#4 Robert Wisowaty
1341 Kane st.
La Crosse, WI 54603

#5 Adrian Silva
Tepozteco 102A
Cuernavaca MOR 62150

Mexico

STEP 2: Now take the #1 name off the list that you see above, move the other names up(2 becomes 1, 3 becomes 2, ect...) and YOUR NAME as number 5 on the list.STEP 3: Change anything you need to but try to keep this article as close to the original as possible.
Now, post your article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you need is 200, but remember, the more you
post, the more money you make!Don't know HOW to post in the newsgroups?
Well do exactly the following:**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!!BUT YOU HAVE TO POST A MINIMUM OF 200****If these instructions are too complex to follow, try Forte's "Free Agent." It is freeware for non-commercial use.To download it, simply use a search utility and type "Forte Free Agent". You should be able to find it.**That's it! You will begin receiving money from around the world within days! You may eventully want to rent a P.O. box due to the large amount of mail you receive. If you wish to say anonymous,you can invent a name to use as long
as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**Now the Why part:This entire principle works because it is in a
format of an upside down tree with thousands of branches. Everyone below you
will see to it that the tree continues because they want to get money. Those
below THEM will continue because THEY want to get the cash ect.Out of 200
postings, say I receive only 5 replies (a very low example). So then I made
$5.00 with my name at #5 on the letter. Now, each ofthe 5 persons who just
sent me $1.00 make the minimum 200 postings, each with myname at #4 and only
5 persons responds to each of the original 5, that is another $25.00 for me,
now those 25 each make 200 minimum post with myname at #3 and only 5 reply each, I will bring in an additional $125.00!Now,those 125 persons
turn around and post the minimun 200 with my name at#2 and only 5 replies
each, I will make an additional $626.00! Ok, now here is the fun part, each
of the 625 persons post a minimum of 200 letters with my name at #1 and they
each receive 5 replies, that just made me $3,125.00!!! With a original
investment of only $5.00! AMAZING! And as I said 5 resonses is actually VERY

LOW! Average is probable 20 to 30! So lets put those figures at just 15
responses per person. Here is what you will make:at #5 $15.00 at #4 $225.00 at
#3 $3,375.00 at #2 $50,625.00 at #1 $759,375.00. When your name is no longer on
the list, you just take the latest posting in the newsgroups, and send out
another $5.00 to the names on the list, putting your name at number 5 and
start posting again. The thing to remember is that thousands of people all
over the world are joining the internet and reading these articles everyday,
JUST LIKE YOU are now!!And this will go on and on and on...get the picture?
Well, there's 5,000,000,000 people in the world and most of them will
eventully end up being hooked into the internet. So there are virtually
unlimited resources. Of course this will work the best at the very
beginning so the faster you post, the better for YOU!So can you afford $5.00
and see if it really works?? I think so! People have said, "what if the plan
is played out and no one sends you the money? So what! What are the chances
of that happening when there are tons of newusers and new honest works?? I
think so... People have said, "what if the plan is played out and no one
sends you the money? So what! What are the chances of that happening when
there are tons of new honest users and new honest people who are joining the
internet and newsgroups everyday and are willing to give it a try? Estimates
are at 20,000 to 30,000 new users everyday, with thousands of those joining
the actual internet. remember, play FAIRLY and HONESTLY and this will work.
You just have to be honest.Make sure you print this article out RIGHT NOW,
also. Try to keep a list of everyone that you sends you money and always
keep an eye on the news groups to make sure everyone is playing fairly.Remember
, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea
to make the money!!GOOD LUCK to all and pleas play fairly and reap the
huge rewards from this,which is tons of extra CASH. **By the way, if you try to

deceive people by posting the messages with your name in the list and not
sending the money to the rest of the people already on the list, you will not
get as much. Someone I talked to knew someone who did that and he only made
about $150.00, and that's after seven or eight weeks! Then he sent the 5
$1.00 bills, people added him to their list, and inn 4-5 weeks he had over
$10k. This is the fairest and most honest way I have ever seen to share the
wealth of the world without costing anything but our time!!! You also may
want to buy mailing ande-mail list for future dollars.Please remember to
declare your extra income. Thanks once again......

2153. Military SATCOM Web page

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: Brandon and Kristin <illusions@enterprise.net>
Message-ID: <33E366E5.5EFA@enterprise.net>
Source record: 18268

I have just completed a project for work and have posted it on my server to get some feedback. If you would be kind enough to take a quick look and drop me an email with your suggestions, critiques, and/or comments, I'd be most appreciative. Also, If you have any questions, I will be glad to answer them.

Thank you!
~Brandon

http://homepages.enterprise.net/illusions/main.html

2154. Re: Free Internet Access World Wide

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: AciDiC <dbrearle@schreiber.lakeheadu.ca>
Message-ID: <01bc9f11$36962040$162722cf@LU-Net>
Source record: 18269

Abdul Safar <ASE1000@1stfamily.com> wrote in article
<7147cd$f2fc.307@NEWS>...
> Greetings from 1stfamily,
>
> As we all know unlimited Internet access is $19.95 / month
> with every major Internet access company. From Netcom to
> AT&T that price never changed. So what makes us any
> different when we are also charging $19.95 / month ???
>
> Our Marketing Plan.
>
> Our method is this. Unlimited Internet access for $19.95 per
> month. If you find our service to be extremely satisfactory,
> in which we are sure you will, you can refer our service
> to 10 of your friends and family. If you do , you will get
> free Unlimited Internet access with your e-mail address
> for life !
>
>
> What we offer is this:
>
> * The fastest, clearest Internet access in the world.
>
> * World Wide Internet access in over 110 countries.
>
> * An e-mail account that is also life time free if you refer
> 10 of your friends and family to using our service.
>
> * America On-line for only $10 / month !
>
> * Much much more that will amaze you !
>
>
> Our plan is by the year 2005 we will be the world's ONLY
> Internet service providers. With our technique of offering you
> life time free Internet access we will be.
>
> Please visit our web site http://www.freeisp.com/ any where
> from the world to know more about our opportunity and to even
> get on the wagon before every one else beats you there.
>
> http://www.freeisp.com/
>
> Please forward this message to all of your online friends. Wouldn't you

> want all of them to get free internet access ?
>
> ------------------------------------
> Abdul (SPONSOR ID # SAF5197)
> Stop paying for Internet access !
> http://www.freeisp.com/
> mailto:webmaster@freeisp.com
> ------------------------------------
>
>
>
>

God its crap like this that gives newsgroups a bad name. Some people should be more considerate of where they post there ads.

-Don Brearley
'Sure you could drive, buy why?'

2155. ARLK059 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk059.1997@arrl.org>
Source record: 18270
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK059
ARLK059 Keplerian data

ZCZC SK59
QST de W1AW
Keplerian Bulletin 59 ARLK059
From ARRL Headquarters
Newington, CT August 2, 1997
To all radio amateurs

SB KEP ARL ARLK059
ARLK059 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97209.89567768 -.00000124 00000-0 10000-3 0 05048
2 14129 26.0640 134.8941 6056122 138.2150 288.7072 2.05881317078249
RS-10/11
1 18129U 87054A 97213.00919898 .00000035 00000-0 21420-4 0 04133
2 18129 82.9245 205.5970 0013278 93.4992 266.7677 13.72380820506385
UO-11
1 14781U 84021B 97212.90376029 .00000071 00000-0 19839-4 0 09973
2 14781 97.8387 192.3556 0010698 217.3098 142.7368 14.69568811717825
RS-12/13
1 21089U 91007A 97213.14662211 .00000034 00000-0 20110-4 0 00066
2 21089 82.9217 245.2961 0028861 169.3189 190.8586 13.74084227325333
UO-14
1 20437U 90005B 97213.16033630 .00000003 00000-0 17707-4 0 03009
2 20437 98.5170 293.8537 0012050 74.1024 286.1488 14.29966659392649
RS-15
1 23439U 94085A 97213.12970140 -.00000039 00000-0 10000-3 0 02544
2 23439 64.8193 80.1727 0147536 123.7838 237.7239 11.27528435107006
AO-16
1 20439U 90005D 97213.17356299 .00000005 00000-0 18670-4 0 00943
2 20439 98.5345 296.8953 0012248 77.5678 282.6876 14.30013835392666
RS-16
1 24744U 97010A 97213.18026466 .00001702 00000-0 58236-4 0 01027
2 24744 97.2721 117.3920 0005927 303.3537 56.7138 15.31608380022976
```

```
DO-17
1 20440U 90005E 97208.25762543 -.00000043 00000-0 80310-7 0 824
2 20440 98.5388 292.9653 0012281 89.3492 270.9124 14.30156088391990
WO-18
1 20441U 90005F 97213.15389920 -.00000013 00000-0 11818-4 0 00915
2 20441 98.5379 297.6590 0012816 75.5641 284.6966 14.30123926392699
LO-19
1 20442U 90005G 97213.18753246 -.00000000 00000-0 16605-4 0 00932
2 20442 98.5423 298.3874 0013323 76.9841 283.2830 14.30239745392720
FO-20
1 20480U 90013C 97212.86140700 -.00000073 00000-0 -83410-4 0 09974
2 20480 99.0478 166.0545 0540066 276.2787 77.7090 12.83237697350433
AO-21
1 21087U 91006A 97213.03918343 .00000094 00000-0 82657-4 0 08452
2 21087 82.9384 18.3763 0035557 141.1321 219.2395 13.74584249326313
UO-22
1 21575U 91050B 97213.15463449 -.00000008 00000-0 11486-4 0 07950
2 21575 98.2976 272.1064 0007941 111.1976 249.0060 14.37078076316949
KO-23
1 22077U 92052B 97212.99508765 -.00000037 00000-0 10000-3 0 06910
2 22077 66.0761 51.4158 0007187 200.8115 159.2610 12.86302575233517
KO-25
1 22828U 93061F 97213.18463853 -.00000001 00000-0 16681-4 0 05704
2 22828 98.5387 286.7420 0011068 92.8866 267.3583 14.28185720168634
IO-26
1 22826U 93061D 97213.16114264 .00000028 00000-0 28551-4 0 05885
2 22826 98.5430 286.6373 0010051 108.1020 252.1257 14.27842333200503
AO-27
1 22825U 93061C 97213.19615733 -.00000027 00000-0 65706-5 0 05923
2 22825 98.5427 286.4118 0009341 106.2283 253.9934 14.27731619200496
FO-29
1 24278U 96046B 97213.11491351 -.00000034 00000-0 -12132-5 0 01057
2 24278 98.5361 248.2089 0352339 69.7897 294.0762 13.52632588047195
Mir
1 16609U 86017A 97213.15969175 .00001052 00000-0 19318-4 0 04998
2 16609 51.6527 219.9300 0004284 332.0068 28.0689 15.59604366654041

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
August 5, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2156. * SpaceNews 04-Aug-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0804.1997@ampr.org>
Source record: 18271
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0804
* SpaceNews 04-Aug-97 *

BID: $SPC0804

=========
SpaceNews
=========

MONDAY AUGUST 4, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
Claudio Ariotti, IK1SLD from Italy downloaded the following message from
Mike Foale in the Mir space station:

Stat : PR
Posted : 07/28/97 23:19
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir status

TNC froze again, this time the PMS. Waiting for a replacement with Mir
24, Anatoli and Pavel, docking on 7th. Crew is preparing for their
arrival, getting Progress loaded with trash, to be undocked before next
crew. Greenhousing, but not yet showing cotyledons. Mike.

NASA reports that Astronaut Wendy Lawrence (Cmdr, USN) has been replaced
by her backup, Dr. David Wolf, for the next long duration stay on the
Russian Mir space station. The change will enable Wolf to act as a
backup crew member for spacewalks planned over the next several months
to repair the damaged Spektr module on the Russian outpost. Lawrence
does not fit in the Orlan suit which Russian cosmonauts use for spacewalk
tasks and never underwent spacewalk training. Wolf fits in the Orlan suit.

Lawrence will continue training in the backup role according to normal
procedures, in the unlikely event that she is needed.

On 05-Aug-97, a Soyuz TM26 spacecraft carrying a two-man crew is expected
to be launched to Mir on a Soyuz U vehicle from Baykonur, Kazakhstan.
Docking is expected on 07-Aug-97.

* STS-85 NEWS *
==========
Space Shuttle DISCOVERY is set for lift-off from Kennedy Space Center
(KSC), Florida on 07-Aug-97 for an 11-day mission to release and retrieve
the US/German CRISTA-SPAS 2 platform used to study the atmosphere.

The nominal OMS-2 State Vector and Keplerian Elements for STS-85 follow.
The vector data comes from NASA. The Keplerian Elements were computed from
the vector.

This file may be read by VEC2TLE version 9648 to update your Keplerian
Elements text file.

Vector format = 10117
Satellite Name: STS-85
Catalog Number: 99985
Epoch MET: 0.02694288194
0/00:38:47.865 MET
EFG E: 9312888.2997 ft
F: 19528753.2625 ft
G: 3386153.5174 ft
Edot: -9779.3058815773 ft/s
Fdot: 8295.0387295085 ft/s
Gdot: -20910.457822872 ft/s
ndot/2 (drag): 0.00029652672 rev/day^2
nddt/6: 3.68109E-09 rev/day^3
Bstar: 8.58271E-05 1/Earth Radii
Elset #: 1
Rev @ Epoch: 1.47042961084

Scheduled Launch: 07-AUG-97 / 14:41 UTC

Note that 99985 is a temporary Catalog Number. A permanent Catalog Number
and International Designator will be assigned following the Launch of STS-85.

The following Keplerian elements were computed by VEC2TLE from this vector,
using a 1.0 drag multiplier:

STS-85
1 99985U 97219.63874844 .00029653 36811-8 85827-4 0 12
2 99985 57.0000 76.4760 0008548 266.7495 262.6168 15.92299149 11

Satellite: STS-85
Catalog number: 99985
Epoch time: 97219.63874844
Element set: 1
Inclination: 57.0000 deg
RA of node: 76.4760 deg
Eccentricity: 0.0008548
Arg of perigee: 266.7495 deg
Mean anomaly: 262.6168 deg
Mean motion: 15.92299149 rev/day
Decay rate: 2.96527e-04 rev/day^2
Epoch rev: 1

Checksum: 354

VEC2TLE may be downloaded from: http://www.amsat.org/amsat/sarex/orbit.html.

[Info via Ken Ernandes, N2WWD]

* PHASE 3D LAUNCH DELAY *
==========
On Wednesday 16-Jul-97, a meeting was held in Marburg, Germany between Dr. Karl Meinzer, DJ4ZC, the Phase 3-D Project Leader and AMSAT-DL President, Werner Haas, DJ5KQ, AMSAT-DL Vice President, and officials of the European Space Agency (ESA). The purpose of the meeting was to discuss the launch schedule for Ariane 502, on which the Phase 3-D spacecraft is to fly. At this meeting, the ESA officials re-iterated their intent to launch A-502 at the end of September and said that the launch campaign for this flight has already begun. They stated that, as part of this launch campaign the Phase 3-D spacecraft must arrive in Kourou by 10-Aug-97.

Earlier, ESA had informed AMSAT that, following analysis of data from the Ariane 501 flight, they had significantly increased their estimates for the acceleration and vibration environments which spacecraft riding on Ariane 502 are expected to encounter. As a result of this new information, AMSAT has been re-evaluating the structural capabilities of the Phase 3-D spaceframe. As a part of this effort, an independent structural engineer was brought in to review the spacecraft's design and construction. His conclusions were recently presented to Dr. Meinzer and AMSAT-NA people. His report stated that, in order to be confident of surviving these increased launch environments, a number of modifications must be made to the spacecraft. Since that report was presented, substantial effort has been taking place at the Phase 3-D Integration Laboratory in Orlando, Florida to manufacture and install the recommended structural parts necessary to increase the spacecraft's vibration and acceleration capability.

At the Marburg meeting, Dr. Meinzer made it clear to the ESA officials, that this work, made necessary by ESA's new environmental information, would prevent AMSAT from delivering the spacecraft to Kourou by the specified 10-Aug-97 date. Thus, it was the conclusion of the meeting that, as a result of these ESA specification changes, the Phase 3-D schedule and that of ESA for Ariane 502 are not compatible. Therefore, unless, something changes, which ESA does not presently contemplate, Phase 3-D will not be able to be launched on Ariane 502. Furthermore, in order to maintain the planned mass characteristics of the Ariane 502 vehicle, AMSAT must supply a mass simulator representing the Phase 3-D spacecraft to be sent aloft on the flight. This must be in Kourou by 05-Sep-97.

Despite this very bad news, Dr. Meinzer and other AMSAT officials expressed some degree of confidence the Phase 3-D may yet fly on Ariane 502. They based this on a number of activities taking place in the preparation of the launch vehicle that they believe could cause a slip in the currently published ESA schedule. The ESA officials attending

the Marburg meeting said that if a slip should occur, which they do not currently contemplate, that results in the two schedules again becoming compatible, efforts would be made to substitute the Phase 3-D spacecraft for the mass simulator. Therefore, AMSAT is continuing in the work of completing the necessary structural modifications to the spacecraft, and conducting environmental testing.

AMSAT-NA President Bill Tynan, W3XO, pointed out that revelations such as the increased vibration and acceleration requirements now imposed on the Phase 3-D spacecraft are not all that unusual in a development program such as the Ariane 5. He is sure that the situation is as unpleasent for ESA as it is for AMSAT, and is sure that ESA will be working on ways to reduce the environments on future Ariane 5s, possibly even on 502. It is NOT a matter of poor engineering, or bad faith, on the part of ESA, but merely what sometimes happens when the state of the art is being pushed.

[Info via the AMSAT-NA News Service and AMSAT-NA President Bill Tynan, W3XO]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

2157. WTD: Kenwood UT-10

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: shell@callamer.com
Message-ID: <33e5b555.30307029@news.callamer.com>
Source record: 18272

Wanted:

UT10 KENWOOD 10W 1.2GHZ MODULE

1.2 GHz module for TS-790A.

If you have one you are not using, or just want to get rid of, please
contact me by email at:

shell@callamer.com

Thanks for reading this.
73, Bill
N6WS
shell@callamer.com

2158. FS: 432-437 MHz Transverter.

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: shell@callamer.com
Message-ID: <33e8c01c.33066827@news.callamer.com>
Source record: 18273

Thanks for reading this posting.

I have a Hamtronics XV4 UHF Transverter for sale.
It has a 28-30 MHz IF. Both crystals are with it for
432-434 MHz and 435-437 MHz coverage.
It is packaged in a 2"x3"x5" Bud box with BNC
connectors.

Asking $50 and I will pay shipping.

Please respond via email to:
shell@callamer.com

TU es 73, Bill
N6WS ex-WA6IET

2159. FS: 435 MHz RX Converter

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: shell@callamer.com
Message-ID: <33edc48e.34204934@news.callamer.com>
Source record: 18274

Thanks for reading this posting.

I have a Hamtronics CC432-5 UHF Converter for sale.
It has a 28-30 MHz IF. Both crystals are with it for
432-434 MHz and 435-437 MHz coverage.
It is packaged in a 2"x3"x5" Bud box with BNC
connectors.

Asking $25 and I will pay shipping.

Please respond via email to:
shell@callamer.com

TU es 73, Bill
N6WS ex-WA6IET

2160. FS: 28 MHz and 144 MHz Preamps

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: shell@callamer.com
Message-ID: <33eac166.33396651@news.callamer.com>
Source record: 18275

Thanks for reading this posting.

I have 2 Hamtronics preamps for sale.

P30 - 28-30 MHz $25

LNG-144 - 144-148 MHz GaAs FET $35

Asking $55 for both, and I will pay shipping.

Please respond via email to:
shell@callamer.com

TU es 73, Bill
N6WS ex-WA6IET

2161. Re: Asian Ladies

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: AciDiC <dbrearle@schreiber.lakeheadu.ca>
Message-ID: <01bc9f10$e397c9c0$162722cf@LU-Net>
Source record: 18276

> No, just a reminder that the Internet is going straight down the friggin'
> toilet. That's what happens when a technology goes commercial.
>
> Call me an old fashioned 23 year old but I don't remember anything like
> this junk on FidoNet or the good old BBS'es. Also, the boys at CERN are
> certainly happy about which direction their "world wide web" is heading.
>
>
> Cheers,
> KF4PTH
> Sean
> stbowers@juno.com
>

No kidding eh.. Bring back the Inter-BBS nets and the Boards anytime!!
In fact, after reading this.. im gonna put my board back online!!

-Don Brearley
'I only know that I know nothing'

2162. Jeg skal bare lige pr&#65533;ve det

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: mads@post.dk
Message-ID: <33e3785b.0@208.212.139.3>
Source record: 18277

Det var da sjovt

2163. Re: Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-08-02 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33e6fd36.277730485@news.sci.fi>
Source record: 18278

"Richard L. Tannehill, P.E." <rickw7rt@ibag.com> wrote:

>Yes, it is VERY disturbing, after all the blood, time and treasury that
>has gone into this satellite. If the 502 should end up going up without
>Phase IIID, I think AMSAT should work a campaign to ask ESA to put us up
>on the next Arianne 4 that they can, stressing that the delay on OUR
>part was caused by a last minute change in flight specifications on
>THEIR part. We have already paid them our $1M + launch fee, and I hope
>they don't take the attitude that they launched our dummy load, and that
>satisfies the contract. I fear this whole thing turning into a giant
>boondoggle, with lots of finger point and recriminations unless we can
>get the structural changes ready for this launch date....whatever that
>turns out to be.

Yes, this is a strange situation.

Apparently the vibration on the Arianne 501 launch were much stronger
than expected, thus requiring strengthening the payload. This also
means that commercial payloads intended for later launches of Arianne
5 must be strengthened, making them heavier and reducing the amount of
instruments carried. It also means that all equipment intended for the
commercial payload must be requalified for the higher vibration
levels.

I don't know what the new vibration levels are compared to other
commercial launchers, but if they are much higher, it can be hard to
attract customers, in case the levels are higher than what some (more
or less) standard comsat types are qualified for. My guess is that ESA
will have to do something to reduce the vibration levels in future
launches. The sad thing is that it will not help the 502 launch.

Paul OH3LWR

2164. Re: doppler, reverse and up/down HELP!

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <33E4358F.2177@muenster.de>
Source record: 18279

N8XYN wrote:
>
> Ok, I think I'll quit sending RF at FO29/20 until I know what I'm
> doing! Correct me on these if I'm wrong.
>
> My uplink and down link are reversed. If I send on the high end it
> comes down on the low end of the downlink? If I send LSB I get USB
> down? I've read two differnt things with this next one! Should I
> adjust my uplink or downlink for doppler? Or even both? My transiever
> wants to track both at the same time (IC-820H). Help! 73's

146.000 up = 435.800 down
145.900 up = 435.900 down

... and all combinations in-between.

Send LSB up, will return as USB down (no such probs with CW, hi).

Of course, you have to adjust for doppler shift - makes up to (appr.)
+/- 9 kHz on 70 cm and +/- 3 kHz on 2 m. Be aware that doppler works for
the uplink _and_ downlink.

Example (on AOL):
You send a carrier on 145.925
Sat receives it with +3 kHz doppler -> 145.928 on transponder
Sat retransmits on 435.872
You receive it with +9 kHz doppler -> 435.881

Without doppler, you would expect the sig at 435.875

Since it is an inverting transponder, the doppler effect is not as big
as it would be on a non-inverting transponder (would make a difference
of 9 + 3 = 12 kHz, here it is 9 - 3 = 6 kHz).

I hope this is correct...

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

2165. Re: FS: 432-437 MHz Transverter.

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: shell@callamer.com
Message-ID: <33efca2d.35643783@news.callamer.com>
Source record: 18280

The XV4 has been sold. Thank you.

On Sat, 02 Aug 1997 23:18:14 GMT, shell@callamer.com (William Shell)
wrote:

>Thanks for reading this posting.
>
>I have a Hamtronics XV4 UHF Transverter for sale.
>It has a 28-30 MHz IF. Both crystals are with it for
>432-434 MHz and 435-437 MHz coverage.
>It is packaged in a 2"x3"x5" Bud box with BNC
>connectors.
>
>Asking $50 and I will pay shipping.
>
>Please respond via email to:
>shell@callamer.com
>
>TU es 73, Bill
>N6WS ex-WA6IET

2166. Re: Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EEC3Fr.G89@pe1chl>
Source record: 18281

In <Pine.OSF.3.96.970731153712.5513A-100000@internet.oit.edu> Dan O'Connell <oconneld@OIT.EDU> writes:

>> Yes, it is VERY disturbing, after all the blood, time and treasury that
>> has gone into this satellite. If the 502 should end up going up without
>> Phase IIID, I think AMSAT should work a campaign to ask ESA to put us up
>> on the next Arianne 4 that they can, stressing that the delay on OUR
>> part was caused by a last minute change in flight specifications on
>> THEIR part.

> Is it possible we can work something out with the Russians who HAVE
>a
>launch vehicle that actually works????? IMO Arianne has HORRIBLE "success"
>rate. It's junk! Dan WA7TDZ

That is your opinion. In reality, the success rate is not so bad.
Of course not on Ariane 5 (1 launch, 1 failure), but on Ariane 4 it's OK.

BTW: why is it that Americans can's spell Ariane?
Do you expect Europeans to write NASSA when naming your space agency?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2167. hey boys

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: sexc@com.com
Message-ID: <870606923.470794@angel.comcen.com.au>
Source record: 18282

hi guys check this out!!!
http://www.sexmansion.com
pics of me!
love,

cindy

2168. julie needs a man

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: candy@plastic.com
Message-ID: <870611671.226879@angel.comcen.com.au>
Source record: 18283

hi guys check this out!!!
http://www.sexmansion.com
pics of me!
love,

cindy

2169. Re: Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33e4d10f.17301376@news.capital.net>
Source record: 18284

On Sun, 3 Aug 1997 10:50:15 GMT, rob@pe1chl (Rob Janssen) wrote:

>BTW: why is it that Americans can's spell Ariane?
>Do you expect Europeans to write NASSA when naming your space agency?
>
>Rob
>--
>+---------------------------------+--------------------------------------+
>| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
>| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |

A good percentage of Americans can't spell anything, Rob. They don't
teach spelling in school anymore. Johnny can't read, Johnny can't
spell. But in liberal, politically correct America that's O.K. "Just
spell it the way it sounds, Johnny. We'll give you E for effort, and
an Attaboy."

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

2170. ****CABLE BOX DESCRAMBLER**** BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Newsgroup: rec.radio.amateur.space
Date: 1997-08-03 00:00:00 UTC
From: Free Cable <killty@salom.com>
Message-ID: <5s2u59$eho@chronicle.concentric.net>
Source record: 18285

****CABLE BOX DESCRAMBLER****

BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Cable Descrambler plans available for $ 5.00
Build your own cable descrambler box using parts
you can buy from Radio Shack for less than $15
Can be used on pay per view and Premuim Movie Channels
See all your favorite movie channels, pay per view etc.

To recieve detail instructions and diagrams on how to construct
your own Cable Box Descrambler send $5.00
CASH MONEY ORDER CHECK to the address below.

S&G Enterprise
12145 Augusta Woods Cir
Orlando FL. 32824

Please include your full mailing address.

Please allow one week for checks
to clear before our report is sent to you.

Thank You
Seth Garner

2171. Re: WXsat

Newsgroup: rec.radio.amateur.space
Date: 1997-08-04 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33E60BFA.3BB423ED@direct.ca>
Source record: 18286

William F. Erhardt wrote:
>
> Howdy from Helena, Montana (KA7YAO Bill)
>
> I tried the NOAA and Meteor WX satellites according to the
> article in August QST and have only limited success with Meteor
> Sat and pictures are so so.
>
> On the meteor, I am using my sat antennas, a FGR 9600 receiver,
> and pentium computer with sound card set according to specs
> (mono, 8bit 11.025 hz) and I have program set to fm and receiver
> to am in order to get a so so copy.

(I haven't seen the August QST yet, but...)

This is backwards. The RF from the satellite is (fairly wide) FM,
and the audio subcarrier of interest to your computer is AM. I've
had success with my own software on a junky 486/66 digitizing 8 bits
mono at 22.05 kHz. See:

http://mypage.direct.ca/v/ve7ldh/wxsat.html

> On the NOAA sats, I cannot get anything to print live copy. I
> did record the wav and got only a white screen with some black
> splatter is best way to describe it.
>
> Can any help me on what I am doing wrong.

The sound of these satellites is very distinctive - the "whee whee
whee" of the subcarrier, overlaid with the "tick-tock" sync
pulses. Meteor sounds like it's running in slow motion, since
the subcarrier is the same (2400 Hz), but it's only sending
120 LPM, not 240 like the nOAA satellites.

Get the modulation right and it's dead simple - these puppies
are *loud*.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

2172. WXsat

Newsgroup: rec.radio.amateur.space
Date: 1997-08-04 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bca0d6$86444d80$5e427fce@default>
Source record: 18287

Howdy from Helena, Montana (KA7YAO Bill)

I tried the NOAA and Meteor WX satellites according to the artice in August QST and have only limited success with Meteor Sat and pictures are so so.

On the meteor, I am using my sat antennas, a FGR 9600 receiver, and pentuim computer with sound card set according to specs (mono, 8bit 11.025 hz) and I have program set to fm and receiver to am in order to get a so so copy.

On the NOAA sats, I cannot get anything to print live copy. I did record the wav and got only a white screen with some black splatter is best way to describe it.

Can any help me on what I am doing wrong.

Bill

2173. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0508970408270001@wd1v.mv.com>
Source record: 18288
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

2174. Educational Pricing

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: Joseph W Walz <jwalz@unique-software.com>
Message-ID: <5s793u$lv8@wolf.tela.com>
Source record: 18289

Please forgive me for this e-mail, but I felt I just had to let more people know about this and get in on the ground floor!

Microsoft Educational Price Software

Students and Faculty Members Only (ID or Fee Statement Req)

Microsoft Office Pro 97 $179.95
Visual Basic 5.0 $99.00
Visual C++ $99.00
Visual Studio $229.00

Memory 16 MB 72-Pin $58
32 MB 72-Pin $139

Don't miss this opportunity, email me for more details. (webmaster@unique-software.com)

Thanks

2175. * Amateur CW/Voice Satellite Frequencies FAQ 08.05.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-0508970955490001@cqt-pm3-083.dowco.com>
Source record: 18290
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ08.05
Amateur CW/Voice Satellite Frequencies for August 5, 1997.

BID: $FREQ0805
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
```

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse. Excellent reports on this satellite lately.

* Radio Sport-10's beacon, ROBOT and transponder remain silent. Bad news to report regarding the satellite:

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

Still no firm information as to what is wrong with the bird and why the problem occured. Let's pray that this report was a 'bad translation' from Russian to English.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater. Recently a station has been heard sending Packet on this satellite. This is frowned upon and not one of the recommended uses of this satellite.

AO-27 TEPR (Timed Eclipse Power Regulation) States are as follows
As of July 6, 1997
TEPR STATE Time TX Status
---

1 n/a OFF
2 n/a OFF
3 --- OFF

4 21 OFF
5 17 ON at Med Power
6 --- OFF

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time) ...

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5) ...

You should note that TEPR states 1,2 and 3 happen during the Night Time passes and TEPR states 4,5 and 6 happen during the Day time passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

The latest FO-29 Schedule:

Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA

* Mir Simplex - Astronaut Mike Foale has been farily active, making the odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and the 145.985 simplex have been used. Please do not interrupt QSO's already in progress.

* Mir SAFEX Repeater - Not operational at this time.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

2176. ARLK060 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk060.1997@arrl.org>
Source record: 18291
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK060
ARLK060 Keplerian data

ZCZC SK60
QST de W1AW
Keplerian Bulletin 60 ARLK060
From ARRL Headquarters
Newington, CT August 5, 1997
To all radio amateurs

SB KEP ARL ARLK060
ARLK060 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97209.89567768 -.00000124 00000-0 10000-3 0 05048
2 14129 26.0640 134.8941 6056122 138.2150 288.7072 2.05881317078249
RS-10/11
1 18129U 87054A 97217.01908556 .00000039 00000-0 26429-4 0 04214
2 18129 82.9250 202.6345 0013321 83.6632 276.6034 13.72380993506935
UO-11
1 14781U 84021B 97216.98906283 .00000040 00000-0 14592-4 0 09995
2 14781 97.8393 196.2800 0010806 203.4213 156.6502 14.69569341718423
RS-12/13
1 21089U 91007A 97217.15155474 .00000026 00000-0 11301-4 0 00073
2 21089 82.9218 242.3262 0029126 158.0902 202.1504 13.74084222325881
UO-14
1 20437U 90005B 97217.14872206 -.00000015 00000-0 10881-4 0 03023
2 20437 98.5159 297.7518 0011939 63.3186 296.9219 14.29966905393211
RS-15
1 23439U 94085A 97217.03222106 -.00000039 00000-0 10000-3 0 02528
2 23439 64.8184 73.8616 0147647 123.0634 238.4574 11.27528389107448
AO-16
1 20439U 90005D 97217.16181636 .00000001 00000-0 17253-4 0 00860
2 20439 98.5348 300.8064 0012197 66.3830 293.8633 14.30014090393230
RS-16
1 24744U 97010A 97217.16556323 .00001958 00000-0 66583-4 0 01004
2 24744 97.2712 121.3008 0005691 284.6277 75.4334 15.31624512023587
```

```
DO-17
1 20440U 90005E 97208.25762543 -.00000043 00000-0 80310-7 0 824
2 20440 98.5388 292.9653 0012281 89.3492 270.9124 14.30156088391990
WO-18
1 20441U 90005F 97217.14184358 .00000036 00000-0 30671-4 0 00930
2 20441 98.5379 301.5715 0012701 63.5764 296.6752 14.30124847393262
LO-19
1 20442U 90005G 97217.17515631 -.00000013 00000-0 11505-4 0 00926
2 20442 98.5421 302.3009 0013350 65.6681 294.5896 14.30239833393299
FO-20
1 20480U 90013C 97216.91562791 -.00000013 00000-0 51052-4 0 09983
2 20480 99.0472 169.3452 0540059 267.1201 86.7998 12.83238236350956
AO-21
1 21087U 91006A 97217.04266346 .00000094 00000-0 82657-4 0 08535
2 21087 82.9385 15.4125 0035793 130.0398 230.3911 13.74584418326863
UO-22
1 21575U 91050B 97217.19294139 .00000009 00000-0 17083-4 0 7900
2 21575 98.2976 276.0005 0008373 100.6823 259.5306 14.37078540317521
KO-23
1 22077U 92052B 97217.03808750 -.00000037 00000-0 10000-3 0 06883
2 22077 66.0763 42.9507 0007110 199.9594 160.1146 12.86302728234030
KO-25
1 22828U 93061F 97217.17799351 .00000027 00000-0 27906-4 0 05666
2 22828 98.5386 290.6471 0011018 81.4706 278.7719 14.28186261169207
IO-26
1 22826U 93061D 97217.15546133 -.00000022 00000-0 83613-5 0 05866
2 22826 98.5398 290.5414 0010185 98.4358 261.7987 14.27842015201075
AO-27
1 22825U 93061C 97217.05062000 -.00000039 00000-0 17997-5 0 05893
2 22825 98.5414 290.1750 0009444 95.3676 264.8558 14.27731857201043
FO-29
1 24278U 96046B 97217.10918655 -.00000028 00000-0 55554-5 0 01069
2 24278 98.5353 251.6555 0352348 59.4813 304.0614 13.52632784047732
MO-30
1 24305U 96052B 97217.26210566 .00000204 00000-0 20364-3 0 1288
2 24305 82.9391 318.3168 0031500 68.9524 291.4985 13.73095304 45799
Mir
1 16609U 86017A 97217.00423862 .00000296 00000-0 10000-4 0 5027
2 16609 51.6521 200.6154 0004269 352.7203 7.3677 15.59626743654648

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
August 9, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2177. subscribe

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: ce4usw@ce4ta.radio.CL
Message-ID: <1247@ce4ta.radio.cl>
Source record: 18292

```
subscribe
```

2178. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-08-05 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5s89nm$epb@blackbird.afit.af.mil>
Source record: 18293

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2179. ***LOOKING TO BUY A CHEAP HT***

Newsgroup: rec.radio.amateur.space
Date: 1997-08-06 00:00:00 UTC
From: eugened@aol.com
Message-ID: <19970806032400.XAA01853@ladder02.news.aol.com>
Source record: 18294

Hello hams,

I am getting my ham ticket soon, and I am looking for a cheap HT. I can spend $100 (I know it's not much, but I'm only 14 years old) (Don't worry, my dad can make all the transactions). I am looking for a 2 meter HT, and it would be a *big* plus if the radio if the radio is wide-band transmit, or a mod that allows it. I live in the Philadelphia, PA area. Please e-mail me if you have anyting.

Thanks in advance, 73's,
EugeneD@aol.com

2180. Re: Educational Pricing

Newsgroup: rec.radio.amateur.space
Date: 1997-08-06 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bca261$bfd891a0$7360b6cd@cbx-nt>
Source record: 18295

Like Duh.......

You can receive this pricing or BETTER anywhere.

The key word is educational.

--
Christopher Cox
KC8FRJ
TRA#4901

Joseph W Walz <jwalz@unique-software.com> wrote in article
<5s793u$lv8@wolf.tela.com>...
> Please forgive me for this e-mail, but I felt I just had to let more
> people know about this and get in on the ground floor!
>
> Microsoft Educational Price Software
>
> Students and Faculty Members Only (ID or Fee Statement Req)
>
> Microsoft Office Pro 97 $179.95
> Visual Basic 5.0 $99.00
> Visual C++ $99.00
> Visual Studio $229.00
>
> Memory 16 MB 72-Pin $58
> 32 MB 72-Pin $139
>
> Don't miss this opportunity, email me for more details. (webmaster@
> unique-software.com)
>
> Thanks
>
>
>

2181. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.space
Date: 1997-08-06 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bca239$3c419da0$f9915cc1@dummy.forthnet.gr>
Source record: 18296

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS. OPEN FROM 14/April/97
TO 31/October/97. FOR INFORMATIONS
CONTACT:SV9ANJ QRA MANOS VIA
EMAIL OR FAX AT ++30 81 761382

2182. MIR packet was up 8/06

Newsgroup: rec.radio.amateur.space
Date: 1997-08-07 00:00:00 UTC
From: glueck@saturn.caps.maine.edu
Message-ID: <5sbgcg$2lss$2@sol.caps.maine.edu>
Source record: 18297

Just for your general information, MIR was putting out some solid packet this evening. I heard it around 23:15 EDST, on 145.985 simplex. FOr a power-starved station, she's talking up a storm!

Dick, N1MDZ

2183. Macintosh Ham Radio Users Group

Newsgroup: rec.radio.amateur.space
Date: 1997-08-07 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0708970734130001@wd1v.mv.com>
Source record: 18298
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

There is an informal group of amateur radio operators that use Macintosh computers called "Macnet" with > 800 members world-wide.

We stay in touch with each other via packet & Internet and we have a HyperCard stack that tells the story of each of us called "Macnet Roster" that list

o CALL SIGN @ HOME PBBS
o FULL NAME
o Street ADDRESS
o CITY, STATE, ZIP
o INTERNET ADDRESS
o MACS USED
o RADIOS USED
o SOFTWARE USED
o PASSIONS
o COMMENTS

Macnet members can then communicate with one another directly or use our Macnet Moderated Mailing List to pose comments or questions to all of us on the Net.

To join Macnet, put YOUR INFO (via EMAIL or via disk using TEACH TEXT on a formatted disk in a self addressed and stamped disk mailer that is in a large envelope clearly marked "ROSTER").

http://www.mv.com/ipusers/wd1v/Page2.html

-------<sent to all new Macnet Subscribers & Macnet Roster Updates>---------

Welcome to Macnet!

A trip to my home page also reveals there are many superb files and programs for amateur radio operators that want to use Mac computers. See more details in January 1997 QST, page 100. http://www.mv.com/ipusers/wd1v/

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Email Reflector - send an Email to all Macnet users on the Internet.

* Macnet Roster - a virtual "Who's Who" HyperCard stack with > 800 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and

their passions and put a design on your Mac Radio future. See what neat things are being done with Macs and Ham Radio!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get your new programs with just a click.

* Ham Radio.FAQ - compiled on a Mac with a lots of links to great Mac FTP sites for radio, electronic engineering, and similar data.

73,

2184. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.space
Date: 1997-08-07 00:00:00 UTC
From: nocsage@aol.com
Message-ID: <19970807162901.MAA25723@ladder02.news.aol.com>
Source record: 18299

So.. by looking at the topic.. Mc'Donalds uses 170.245 Mhz for there drive-thru windows?? If anybody has the schematics for that broadcaster/receiver I would be most appreciative if you could E-mail them to me.. Thanks

Nocturnal Sage

2185. Radio Meteor Obs. Bull. July 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-08-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.132.33E9E6F9@vvs.innet.be>
Source record: 18300

Radio Meteor Observation Bulletin No. 48 August 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Enric Fraile Algeciras
Location: Barcelona, Spain (41 21' N, 01 59' E)
Frequency: 48.250 MHz
Transmitter location: most likely Czech television C2 C. Budejovica,
100 kW, Horizontal polarisation.
Antenna: 6-element Yagi 617-6B, 14 dBd gain.
Antenna: astronomical azimuth 215 deg (=NE), elevation 0 deg.
Receiver: home made converter 20 dB gain, 1 dB noise and Kenwood TS-830S.
Sensitivity: 0.25 uV for 10 dB S/N
Observing method: the audio signal of the video carrier is received using
a narrow CW filter (100 Hz) and fed into the PC in real time.
Data sampling system: using a super 14 bits A/D card to PC/XT and
"Data Capture" software with 9 second/18 sampling interval to store all
the > 0.5 s signal increases.

Introduction:
I started in "Meteor Scatter" in 1982 doing a lot of tests and contacts on
28 MHz, 50 MHz and 144 MHz. All my activity in MS is taking place in my home
town Torrelles de llobregat. During these years I saw sporadic-E TV of Norge,
Sverige, Czech, Danmark.
During the august 1994 with the GET (Group of Telecommunications Study),
we put on the air the 144 MHz beacon. This beacon was running about one year.
I made a study about the "back scatter" reflections and actually I am study
the possibility of putting the beacon on again.
Also since 1994 I do a lot of MS lectures in radioclubs and Universities to
promote Meteor Burst Communications.
For the 1995 Geminids I built a 48.250 MHz converter to 28 MHz I.F. I received
a lot of reflections with it!
A big problem is to identify the TV signals, which can only be done during an
opening of sporadic E. I can see the unidentified Program C2 TV at the same
time that I receive continuous signal in my receiver.

I am looking for help to identify beyond doubt meteors (eliminating sporadic-E,
tropo etc.).

Counts of audio signals of >0.6 mV lasting for at least 0.5 s
(not necessarily meteors!). Only the overall trend is significant.

Jul	UT													
1997	0h	1	2	3	4	5	6	7	17	18	19	20	21	22	23
1	52	45	51	76	74	107	103	?	79	107	60	60	14	42	70

```
2 | 60 70 72 65 68 94 130 115 | 91 77 48 32 38 33 66
3 | ? ? 77 51 99 119 137 122 | 58 ? 8 19 28 23 28
4 | 28 17 26 39 64 54 67 50 | 26 15 13 13 23 54 53
5 | 43 24 31 48 43 45 34 40 | 21 13 19 45 18 25 35
6 | 34 19 30 48 70 60 50 46 | 21 10 84 11 10 24 29
7 | 29 23 20 44 47 36 31 48 | 32 16 51 17 25 20 19
8 | 18 34 24 23 70 21 34 39 | 15 22 58 41 11 16 26
9 | 32 30 21 31 21 54 51 38 | 44 18 12 15 12 28 17
10 | 19 18 28 28 ? 49 53 40 | 78? 37 11 13 7 14 15
11 | 23 40 27 30 19 29 53 31 | 47 27 24 10 21 13 24
12 | 19 24 38 43 31 35 55 39 | 25 29 22 19 16 11 29
13 | 19 26 22 23 16 29 46 30 |
...
21 | 64 61 76 77 94 74 107 87 | 42 28 32 31 37 39 49
22 | 70 51 47 73 97 137 82 93 | 37 32 26 34 47 49 51
23 | 58 54 57 78 81 95 88 50 | 45 27 29 43 33 51 72
24 | 85 147 98 75 95 ? 112 98 | 88 295 76 32 41 33 59
25 | 84 71 91 59 48 100 116 74 | 41 50 32 38 27 37 55
26 | 71 87 80 63 62 ? 95 ? | 47 27 26
27 | |102 88 125 111 171 200 229
28 | 223 283 295 333 351 330 289 123 |111 191 152 120 151 199 234
29 | 381 404 268 290 392 401 278 247 |120 116 110 116 107 176 198
30 | 211 292 269 232 276 334 275 196 |154 98 75 117 131 161 251
31 | 230 243 279 287 273 320 325 260 |254 209 110 152 163 185 322
-----+---------------------------------|----------------------------
1997 | 0h 1 2 3 4 5 6 7 | 17 18 19 20 21 22 23
Jul | UT
```

. ? probably affected by sporadic-E, direct reception

Enric Fraile Algeciras

```
Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elevation 27 deg.
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB
```

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

July 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Jul	UT										
1997	20h	21	22	23	00	01	02	03	04	05	06
1- 2	33	45	60	92	96	92	107	164?	135?	134?	98
2- 3	21	54	45	92	76	95	123	158	121	97	117
3- 4	25	29	?	91	104	105	125	116	146	94	109
4- 5	29	38	71	84	68	94	100	119	110	139	81
5- 6	34	47	68	83	88	81	99	105	111	107	78
6- 7	36	70	60	96	115	119	137	153	140	124	94
7- 8	32	69	84	94	127	138	132	141	130	129	138
8- 9	36	83	95	108	139	126	133	171	190	123	&
9-10											
10-11	50	64	97	99	90	139	132	139	143	122	83
11-12	43	79	90	94	92	123	119	134	146	&	&
12-13	71	72	?	95	111	124	126	139	108	154	115
13-14	41	104	86	92							
14-15	54	?	101	?	?	?	?	?	?	128	
15-16	63	74	110	127	92	125	110	123	115	117	92
16-17	64	66	126	98	118	107	201	133	143	&	&
17-18											
18-19	41	46	48	86	93	98	82	108	109	139	85
19-20	51	68	116	103	134	95	142	145	127	121	100
20-21	28	46	78	103	81	97	105	104	121	87	&
21-22	-	43	69	95	102	124	128	128	121	115	76
22-23											
23-24											
24-25	45	91	106	120	124	168	170	173	131	116	60
25-26	49	70	109	158	159	172	213	158	188	147	97
26-27	67	226	89	139	190	180	178	187	203	136	100
27-28	57	88	150	161	230	241	235	236	210	180	107
28-29	46	79	143	178	224	260	242	237	219	166	122
29-30	44	87	114	180	194	209	248	216	176	156	193
30-31	75	106	147	189	176	206	237	228	215	141	83
31-01	61	104	99	156	167	189	235	246	142	116	95
1997	20h	21	22	23	00	01	02	03	04	05	06
Jul	UT										

Notes:
. & sporadic-E, direct reception.
. ? probably affected by sporadic-E, direct reception

. no observations on July 14, 17, and 18 because of thunderstorms.
. delta Aquarids and alpha Capricornids activity between July 27-31.
. local time = UT + 2 hours.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 20 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

| Jul 1997 | 10x % reflec. time | horiz: day | vert: time |

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	17	26	11	21	13	23	25	22	22	49	38	42	29	36	42
1	42	28	18	20	23	14	33	30	25	72?	57	51	43	41	62
2	44	47	33	33	50	25	72	53	58	100?	71	61	60	80	73
3	58	49	51	49	44	68	63	46	104?	95	82	74	81	79	
4	72	68	56	49	38	45	51	79	115	55	55	99	69		
5	133?	46	33	29	65	19	26	51	65	88	122	32	55	63	
6	153?	81	38	27	65	43	47	42	39	47	100	50	34	51	
7	68	67	45	48	48	55	60	63	97	50	74	16			
8	55	52	37	33	36	34	58	44	53	58	46	35			
9	41	42	35	25	56	39	46	33	64	52	32	57			
10	78	26	38	29	48	24	33	22	55	39	25	56			
11	32	31	20	15	24	20	25	23	32	44	44				
12	14	23	10	12	17	23	9	26	35	19	34	39	19		
13	16	8	8	6	7	15	6	11	8	14	18	15	9		
14	9	9	28	6	13	10	7	6	17	17	16	26	11		
15	12	10	7	15	9	9	25	12	24	18	16	37	17		
16	13	15	11	17	10	21	18	13	12	22	17	22	12		
17	12	11	4	9	9	6	23	8	14	16	27	11	4		

```
18 | 17 17 8 6 8 4 7 9 13 11 55 17 14
19 | 14 4 8 14 4 7 7 7 18 18 6 15 19 9
20 | 16 7 7 18 14 5 12 13 20 17 15 18 17 23 20
21 | 22 14 15 12 10 10 13 31 34 29 25 21 45 38 13
22 | 29 18 13 8 8 18 13 31 24 37 25 29 27 54 16
23 | 12 10 14 11 14 9 16 21 40 29 22 24 22 32 24
---+------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

------------------------------------------------------------
| Jul 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+---------------------------------------------------------------
0 | 47 40 42 53 51 41 42 42 62 67 78 63 129 89 96 109
1 | 29 90 40 60 55 81 64 37 80 92 72 91 105 103 104 97
2 | 52 55 66 88 62 68 92 91 103 112 138 125 136 129 115
3 | 59 50 64 93 86 74 151?106 113 116 113 145 151 168 161 174
4 | 73 59 49 90 91 84 122? 75 88 88 99 147 135 115 110 126
5 | 55 94 58 55 83 38 95 37 100 99 79 102 179 71 72 63
6 | 54 47 62 114 49 58 25 69 73 73 83 77 77
7 | 52 81 37 94 41 47 37 73 56 53 55 28 71
8 | 32 42 39 127 29 72 67 74 65 51 58
9 | 45 63 21 60 97 25 28 82 72 37 36 58
10 | 40 19 45 50 28 64 49 53 42 51 52 56
11 | 43 16 31 31 33 37 47 21 35 41 15 42
12 | 7 24 31 36 16 22 24 21 28 13 18 9 32
13 | 11 20 24 40 14 5 12 12 14 38 19 16 15 11
14 | 21 7 26 21 24 19 48 7 19 13 12 18 12 21 13
15 | 8 24 21 15 21 8 49 36 17 32 20 12 8 9 36
16 | 39 16 12 26 19 8 8 33 17 11 16 17 12 16 11
17 | 32 14 18 12 13 19 13 20 14 27 13 34 30 9 50 14
18 | 12 26 19 16 15 8 13 12 19 15 17 33 15 20 18
19 | 28 13 27 21 18 27 10 25 16 17 17 38 14 24 27 35
20 | 51 17 37 17 38 84 28 29 22 26 29 84 33 28 36 25
21 | 27 23 28 22 30 13 24 30 33 27 109 45 29 39 84 48
22 | 36 28 46 34 31 28 25 34 45 38 38 43 39 78 67 66
23 | 24 29 31 24 33 48 26 34 38 44 47 55 71 62 81 44
---+---------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

Notes:
. ? probably affected by sporadic-E.
. delta Aquarids and alpha Capricornids activity between July 27-31.
. July 10: sporadic-E. Jim Smith (G0OFE) <jimsmith@lds.co.uk> writes on the vhf-dx-discuss@blacksheep.org discussion list: "Probably the best day of the year for Sp. E".
. local time = UT + 2 hours.

Pierre De Groote / comments by Chris Steyaert

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitter: 30 kW TV video carrier near Bari, Italy, distance 700 km,
direction south. Several high mountains in transmitter
direction prevent direct and tropospheric reception.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record
the audio signal. 20 channels of 2 Hz width are used for meteor
identification, pictures with interference, sporadic-E, E-layer
and FAI propagation are manually rejected.
More details see <http://www.net4you.co.at/user/kuneth/info.html>

All meteor counts below are corrected for a full hour observing time. If
the recording duration is 20-40 minutes, a dot is shown after the value.
Data for less than 20 minutes observing time are not shown here.

Meteor counts of reflections longer than 6.5 seconds: assumed
to be overdense.

Single transmitter until July 12, 1997

| Jul 1997
UT | 1 2 3 4 5 6 7 8 9 10 11 12
---+---
0 | 0 6 8 8 0 4 7 3 4 8 7
1 | 2 14 9 4 1 10 14 6 5 7 5
2 | 2 10 9 3 8 7 6 5 5 13
3 | 7 4 20 15 11 9 7 1 8 16
4 | 2 10 13 6 10 11 6 6 6 10
5 | 3. 10 16 11 10 4 4 2 2. 10 12
6 | 11 10 4 6 6 1 4 8 11.
7 | 8 7 6 8 26. 3. 1 6 9
8 | 5. 17 4 6. 10. 10. 8 3 7
9 | 15. 21 4 8 22. 4 3 6 6
10 | 10 6 6 1 2 16. 3. 4 8. 2. 0.
11 | 6 15. 2. 4 2 6 1 1
12 | 13. 5. 0. 9. 0. 1 2
13 | 2 0. 1 2.
14 | 1 4. 0. 0. 7
....
20 | 3 1 0. 0. 3 3 0 1 2. 2.
21 | 1 2. 0 0. 3 0 0 0 1 3
22 | 5 4 2 2 4 0 0 1 4 5
23 | 1 10. 3 0 2 3 0 4 3 1
----+---
UT | 1 2 3 4 5 6 7 8 9 10 11 12
| Jul 1997

From July 13 onwards, a second transmitter from Italy (also south
direction) showed up on the same frequency, so the counts are higher.

Meteor counts of reflections longer than 6.5 seconds: assumed
to be overdense.

Two transmitters from July 13, 1997

```
| Jul 1997
UT| 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
--+-----------------------------------------------------------------------
0| 8 22. 21 12 20 31 7 9 8 4 12 22 63 36 34 43 44
1| 6 16. 15 16 18 15 8 13 14 8 21 16 50 28 33 40 54
2| 5 18 20 8 25 23 18 16 12 8 14 20 55 30 36 49
3| 8 26 25 18 10 14 14 10 16 7 18 22 37 41 41 32
4| 4 6 16 13 17 17 14 8 12 11 17 11 18 33 29 17
5| 10 13 16 9 17 26 15 21 14 10 11 13 13 21 6. 23 15
6| 22 13 13 15 18 15 7 14 3 12 16 16. 23 12 16 14
7| 13 12. 11 19 6 8 3 4 19 16 11
8| 10. 12. 22. 5 9 6 7 4 21. 7. 5 14 14 11. 14
9| 13 9. 8. 11 5. 3 3 2 1 12 8 10 10 10
10| 5 1 8 4 0. 0. 1 10. 4. 0 5 8
11 11| 4 4 8 2. 2. 3. 3 12 1
8 4 12| 10. 10 3. 1 3 2 10
5 13| 7 6 3 0 4 3. 1 5
4 14| 7. 3. 4. 3 1 3 3 4
0 ...
20| 0. 10. 4 3 4 3. 3 2 3. 4 13.
21| 7 11 10 4 8 0 3 3 7 4. 4 19
22| 4 11 13 11 5 1 2 2 5 5 6 26 13 14 47
23| 9 13 7 15 4 3 11 5 10 14 44 25 27 45
--+-----------------------------------------------------------------------
- UT| 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29
30 31
| Jul 1997
```

Notes:
. blank value means either few or no data available, interference,
sporadic-E or or offline during thunderstorms.

. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)

Werfried Kuneth

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

```
July | UT
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
```

```
-----+-------------------------------------------------+-----------
1 | 10 19 16 21 17 17 22 22 29 30 40 18 | 16.7 26.8
2 | 11 13 19 28 25 26 20 26 26 29 28 19 | 20.3 24.7
3 | 18 21 17 22 23 28 30 30 19 | 18.7 25.3
4 | 16 21 18 30 30 24 21 20 25 31 31 26 | 23.2 25.7
5 | 6 16 17 14 15 16 20 32 24 28 34 19 | 14.0 26.2
6 | 14 20 27 21 25 16 19 23 25 15 | 20.5 20.5
7 | 12 19 27 32 26 22 27 35 28 25 19 19 | 23.0 25.5
8 | 14 20 21 25 19 20 22 16 18 18 16 18 | 19.8 18.0
9 | 4 21 19 29 34 19 25 31 28 26 28 29 | 21.0 27.8
10 | 8 15 17 34 35 30 14 20 26 21 27 17 | 23.2 20.8
11 | 7 17 22 14 18 18 26 19 25 27 26 34 | 16.0 26.2
12 | 18 16 28 24 16 27 24 19 21 25 26 15 | 21.5 21.7
13 | 11 13 30 31 24 20 22 26 18 18 23 21 | 21.5 21.3
14 | 10 21 20 28 31 23 23 29 17 23 22 16 | 22.2 21.7
15 | 14 24 23 29 28 28 27 31 26 30 23 19 | 24.3 26.0
16 | 9 16 20 20 21 29 19 22 21 27 21 24 | 19.2 22.3
17 | 5 12 15 14 12 | 11.6
18 | 19 28 34 12 | 23.3
19 | 8 29 27 25 28 25 37 25 30 25 21 17 | 23.7 25.8
20 | 14 21 27 23 35 36 30 29 29 | 26.0 29.3
21 | 17 16 37 34 33 31 28 26 34 24 29 19 | 28.0 26.7
22 | 6 17 23 27 22 26 26 39 40 32 19 20 | 20.2 29.3
23 | 11 23 34 30 43 37 33 25 33 23 18 10 | 29.7 23.7
24 | 10 28 35 37 60 30 42 42 36 28 18 18 | 33.3 30.7
25 | 19 18 42 40 50 50 55 48 48 46 30 15 | 36.5 40.3
26 | 10 21 58 47 54 46 39 62 41 24 37 31 | 39.3 39.0
27 | 14 17 51 50 46 49 46 36 35 11 | 37.8 32.0
28 | 22 39 32 58 45 52 46 50 31 23 21 | 39.2 37.2
29 | 9 14 36 49 41 40 42 32 41 28 34 15 | 31.5 32.0
30 | 13 23 37 53 40 44 40 36 37 26 14 10 | 35.0 27.2
31 | 15 18 29 41 36 47 32 34 26 29 23 22 | 31.0 27.7
-----+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
July | UT
```

* (1) average hourly rate between 11 h -17 h UT
**(2) average hourly rate between 17 h -23 h UT

. local time = JST = UT + 9 hours

Chikara Shimoda

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations

to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. ANNOUNCEMENTS

Bernd Gapinsky (gap@mail.ilk.de, AmateurRadio DK3XT in Germany, AB7IY in the US) runs a webpage ("Make More Miles On VHF" <http://www.ilk.de/sites/gap/>, <http://www.qsl.net/dk3xt/>) that deals mainly with the amateur radio
aspect of meteorscatter, but it has also the largest number of hyperlinks to other meteor scatter pages.

Anthony Mallama <tmallama@ccmail.stx.com> communicates that his document "A Radio/Computer System for Automated Detection of Meteors" is now on-line in the AMS (American Meteor Society) Web Site,
at http://www.serve.com/meteors/mallama/mallama1.html

4. CONTRIBUTORS / USEFUL ADDRESSES

Enric Fraile Algeciras (EA3BTZ)
Frederic Corominas 58, Torrelles de llobregat, E-08629 Barcelona
E-mail: EA3BTZ@mx3.redestb.es

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK

E-mail: kuneth@net4you.co.at

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

--
Christian Steyaert (RMOB9707) 7 August 1997
--

2186. Albuquerque, NM Hamfest (8/23-24)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: n5zgt@swcp.com
Message-ID: <5sdv9c$io9$1@sloth.swcp.com>
Source record: 18301
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.space

```
**************************************************
* *
* D U K E C I T Y H A M F E S T *
* *
**************************************************

WHEN: 23-24 August 1997
Saturday 7:30 AM - 5:00 PM
Sunday 7:30 AM - 1:00 PM

WHERE: National Guard Armory
600 Wyoming Blvd. NE
Albuquerque, New Mexico USA

ADMISSION: ** FREE **

SWAP/VENDOR TABLES: $12 each
$17 w/electrical power

Tailgate Space: $5 each

RV Parking: $10 / weekend

PRIZES: GRAND PRIZE
Icom 706 Mk II

SECOND PRIZE
MFJ-259 Antenna Analyzer

PRE REGISTRATION PRIZE
Alinco DJ-S41 70 cm HT

Plus HOURLY door prizes

Prize Tickets $2 ea or 3/$5

TALK IN: 147.06+ / 444.0+ 100hz PL

---------------TEAR HERE----------------------------------

DUKE CITY HAMFEST REGISTRATION FORM

Mail this form with remittance to:

Duke City Hamfest
P.O. Box 30394
Albuquerque, NM 87190

Name: _____
```

Call: _____

Address: _____

_____

City: _____ State: _____

Zip : _____

Phone: (_____) _____ - _____

_____ Indoor Swap/Vendor Table(s) @ $12 ea _____

_____ Table with electrical power @ $17 ea _____

_____ Outdoor tailgate spaces @ $5 ea _____

_____ RV weekend RV parking @ $10 ea _____

_____ Registration Prize Tickets
@ $2 ea or 3/$5 _____

TOTAL ENCLOSED _____

Paid registrations received by 22 August will be eligible
for pre registration drawing to be held at opening of
hamfest on 23 August.

Winners of Grand Prize, Second Prize and Pre Registration
prize need not be present to win.

Winners of hourly door prizes must be present to win.

Members of the New Mexico Hamvention Inc board are NOT
eligible to win prizes.

See you there!
73,
Brian, N5ZGT

_____
Boy Scouts of America Amateur Radio - N5ZGT
Eagle Scout (12-6-96) ARRL QRP: NorCal# 1700 QRP-L# 580 AK/QRP # 125
JASM - Troop 41 Author of Worldradio's "Youth Forum" Column
Albuquerque, N.M. Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NOAM
O.A. Lodge 66 <-W-W-W-<< Internet: n5zgt@swcp.com
_____

2187. Re: easy money

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970808034101.XAA11838@ladder02.news.aol.com>
Source record: 18302

>article similar to this that said you could make thousands of
>dollars within weeks with only an
>initial investment of $5.00!

If you got $5.00 to throw away, Just send it to me.
At least you won't feel so cheated, because if you send
it to me, you know you won't get anything back.

Same same as this scam.

73

2188. Re: FS: 28 MHz and 144 MHz Preamps

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: Mike Lamanna <mustang@kickit.pgh.net>
Message-ID: <33EAF2E1.23B3@kickit.pgh.net>
Source record: 18303

William Shell wrote:
>
> Thanks for reading this posting.
>
> I have 2 Hamtronics preamps for sale.
>
> P30 - 28-30 MHz $25
>
> LNG-144 - 144-148 MHz GaAs FET $35
>
> Asking $55 for both, and I will pay shipping.
>
> Please respond via email to:
> shell@callamer.com
>
> TU es 73, Bill
> N6WS ex-WA6IET
do you still have them?? let me know
thanks
MIKE (wa3o)

2189. STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: cyber357 <cyber357@nwol.net>
Message-ID: <33EB0E9C.78EC@nwol.net>
Source record: 18304

I'm using STSPLUS ver. 9650 tracking program. How do
I display the Mir Space Station and Shuttle Discovery
tracking at the sametime? I can only display the Mir
or Discovery, but not both.

Thanks,

Steve Baker

2190. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: MAILER-DAEMON@netium.COM.BR
Message-ID: <199708081334.GAA23111@mailbox2.ucsd.edu>
Source record: 18305

An error occured while delivering this message.The error is stated below:
550 <jrayol@amsat.org>... User unknown
Excerpt of original message:
To: jrayol@amsat.org

From: Ham-Space@ucsd.edu
To: jrayol@amsat.org
Date: 8 Aug 1997 09:12:14 EDT
Subject: Ham-Space Digest V97 #264

Ham-Space Digest Fri, 8 Aug 97 Volume 97 : Issue 264

Today's Topics:
170.245 MHz transmitter schematics
Military SATCOM Web page
Phase IIID Launch Problems
RS10

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 Aug 1997 16:29:19 GMT
From: nocsage@aol.com (NocSage)
Subject: 170.245 MHz transmitter schematics

So.. by looking at the topic.. Mc'Donalds uses 170.245 Mhz for there
drive-thru windows?? If anybody has the schematics for that
broadcaster/receiver I would be most appreciative if you could E-mail them
to me.. Thanks

Nocturnal Sage

Date: Sat, 02 Aug 1997 11:57:09 -0500
From: Brandon and Kristin <illusions@enterprise.net>
Subject: Military SATCOM Web page

I have just completed a project for work and have posted it on my
server to get some feedback. If you would be kind enough to take a
quick look and drop me an email with your suggestions, critiques, and/or
comments, I'd be most appreciative. Also, If you have any questions, I
will be glad to answer them.

Thank you!
~Brandon

http://homepages.enterprise.net/illusions/main.html

Date: 5 Aug 1997 03:27:45 GMT
From: "Christopher Cox" <cobox@netexp.net>
Subject: Phase IIID Launch Problems

--
Christopher Cox
KC8FRJ
TRA#4901

Rob Janssen <rob@pe1chl> wrote in article <EEC3Fr.G89@pe1chl>...
> In <Pine.OSF.3.96.970731153712.5513A-100000@internet.oit.edu> Dan
O'Connell <oconneld@OIT.EDU> writes:
>
>
>
> >> Yes, it is VERY disturbing, after all the blood, time and treasury
that
> >> has gone into this satellite. If the 502 should end up going up
without
> >> Phase IIID, I think AMSAT should work a campaign to ask ESA to put us
up
> >> on the next Arianne 4 that they can, stressing that the delay on OUR
> >> part was caused by a last minute change in flight specifications on
> >> THEIR part.
>
> > Is it possible we can work something out with the Russians who HAVE
> >a
> >launch vehicle that actually works????? IMO Arianne has HORRIBLE
"success"
> >rate. It's junk! Dan WA7TDZ
>
> That is your opinion. In reality, the success rate is not so bad.
> Of course not on Ariane 5 (1 launch, 1 failure), but on Ariane 4 it's OK.

I believe that is what is being inferred here. The Engineers do not seem to
even have a fix on the performance of the propulsion plant in the Ariane 5
bird, sounds like too much of a gamble. This is quickly moving from opinion
to fact. Why not push for a Ariane 4 or some other tried and true bird for
the launch.

>
> BTW: why is it that Americans can's spell Ariane?
> Do you expect Europeans to write NASSA when naming your space agency?
>

I dont know, does it really matter?

> Rob
> --
>
+----------------------------------+--------------------------------------+
> | Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/
|
> | AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU
|
>
+----------------------------------+--------------------------------------+
>

Christopher Cox
Cobox
KC8FRJ
TRA#4901 L2

Date: Wed, 06 Aug 1997 07:30:04 -0400
From: Jeff Griffin <kb2wqm@amsat.org>
Subject: RS10

Mike Lamanna wrote:

> Does anyone know what happened to rs-10 i have not been able to hear
> the
> beacon for days???
> Mike (wa3o)

Mike RS-10 has been dead since May 25. There is a slight chance that
it can be revived. See amsat.org's weekly status on all amateur
satellites for more info.

Jeff kb2wqm@amsat.org

End of Ham-Space Digest V97 #264
****

2191. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: jkmckay@mindspring.com
Message-ID: <5sfe84$b44@camel1.mindspring.com>
Source record: 18306

cyber357 <cyber357@nwol.net> wrote:

>I'm using STSPLUS ver. 9650 tracking program. How do
>I display the Mir Space Station and Shuttle Discovery
>tracking at the sametime? I can only display the Mir
>or Discovery, but not both.

Steve, on mine I select from the main menu F6 Set/Read/Save TDRS and
Realtime Satallites. Then to F1 Display/Modify Satallite Assignments.
Enter the information in the appropriate places save and it should
display both.

John McKay

2192. Returned mail: <jrayol@amsat.org>... User unknown

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: MAILER-DAEMON@amsat.ORG
Message-ID: <199708081334.GAB21679@amsat.org>
Source record: 18307

```
This is a MIME-encapsulated message

--GAB21679.871047250/amsat.org

The original message was received at Fri, 8 Aug 1997 06:34:07 -0700 (PDT)
from wg.netium.com.br [200.241.125.3]

----- The following addresses had permanent fatal errors -----
<jrayol@amsat.org>

----- Transcript of session follows -----
<<< RCPT TO:<jrayol@amsat.org>
550 <jrayol@amsat.org>... User unknown
421 amsat.org Lost input channel from wg.netium.com.br [200.241.125.3]
amsat.org Lost input channel from wg.netium.com.br [200.241.125.3]

--GAB21679.871047250/amsat.org
Content-Type: message/delivery-status

Reporting-MTA: dns; amsat.org
Received-From-MTA: dns; wg.netium.com.br
Arrival-Date: Fri, 8 Aug 1997 06:34:07 -0700 (PDT)

Final-Recipient: rfc822; jrayol@amsat.org
Action: failed
Status: 5.1.1
Last-Attempt-Date: Fri, 8 Aug 1997 06:34:10 -0700 (PDT)

--GAB21679.871047250/amsat.org--
```

2193. Re: ***LOOKING TO BUY A CHEAP HT***

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <33EB83E9.5421@ibag.com>
Source record: 18308

EugeneD wrote:
>
> Hello hams,
>
> I am getting my ham ticket soon, and I am looking for a cheap HT. I can
> spend $100 (I know it's not much, but I'm only 14 years old) (Don't worry,
> my dad can make all the transactions). I am looking for a 2 meter HT, and
> it would be a *big* plus if the radio if the radio is wide-band transmit,
> or a mod that allows it. I live in the Philadelphia, PA area. Please
> e-mail me if you have anyting.
>
> Thanks in advance, 73's,
> EugeneD@aol.com

Eugene,

Three young people in the Phoenix area now have felony records because they used their "wideband", (opened up) ham HT's to transmit on police channels. The local authorities, the FBI, and the FCC agents, were not amused. I recommend that you purchase an HT with only wideband RECEIVE capability, and that you do not open it up for wideband transmit. In the local Explorer Post I work with, widebanding a loaned Post radio is forbidden and grounds for revocation of membership.

There are a number of older synthesized 2 meter HT's on the market for between $100 and $150. Be sure that it has programmable PL (CTCSS sub-audible squelch) built-in, or you may find the radio is not too useful in your area, depending on which of your repeaters also have PL.

Good Luck with your new ticket! I hope you explore many of the areas of the hobby besides 2 meter repeater/autopatch operation. There are many more areas such as satellites, packet, HF DX'ing, ATV, etc. Although somewhat more expensive, I'm sure there are radio clubs in your area that would be willing to help you get started.

Rick Tannehill, W7RT
Committee Chair,
Explorer Post 599 (W7BSA)
Phoenix, Arizona

2194. Re: MIR packet was up 8/06

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <33EBF387.1613@muenster.de>
Source record: 18309

Hi,

> Just for your general information, MIR was putting out some solid packet
> this evening. I heard it around 23:15 EDST, on 145.985 simplex. FOr a

and during the last nights, MIR could easily be seen over Europe during
its 20 to 22 h UTC passes. Also the Progress (?) transporter following
in a short (increasing!) distance was visible. No telescope or whatever
neccessary!

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

2195. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: nospam@freemark.com
Message-ID: <33ebaa9d.3045865@news.mia.bellsouth.net>
Source record: 18310

On Fri, 08 Aug 1997 15:33:49 GMT, jkmckay@mindspring.com (John Mckay) wrote:

>cyber357 <cyber357@nwol.net> wrote:
>
>>I'm using STSPLUS ver. 9650 tracking program. How do
>>I display the Mir Space Station and Shuttle Discovery
>>tracking at the sametime? I can only display the Mir
>>or Discovery, but not both.
>
>Steve, on mine I select from the main menu F6 Set/Read/Save TDRS and
>Realtime Satallites. Then to F1 Display/Modify Satallite Assignments.
>Enter the information in the appropriate places save and it should
>display both.
>
>John McKay

Going a little further, you can make one of the satellites a target and then watch how the two interact as you track your main satellite. You can find the function by hitting F10 until it comes up on the menu.

You can also save multiple background satellite configurations. I have several - one for amateur satellites, one from the 100 brightest list and the default...

It is all well documented in the manual file (stsplus.doc)- just DON'T print it! It is 220 pages!!

Regards,

Bruce, WB4YUC

2196. Returned mail: <jrayol@amsat.org>... User unknown

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: MAILER-DAEMON@amsat.ORG
Message-ID: <199708081320.GAB21582@amsat.org>
Source record: 18311

```
This is a MIME-encapsulated message

--GAB21582.871046458/amsat.org

The original message was received at Fri, 8 Aug 1997 06:20:55 -0700 (PDT)
from wg.netium.com.br [200.241.125.3]

----- The following addresses had permanent fatal errors -----
<jrayol@amsat.org>

----- Transcript of session follows -----
<<< RCPT TO:<jrayol@amsat.org>
550 <jrayol@amsat.org>... User unknown
421 amsat.org Lost input channel from wg.netium.com.br [200.241.125.3]
amsat.org Lost input channel from wg.netium.com.br [200.241.125.3]

--GAB21582.871046458/amsat.org
Content-Type: message/delivery-status

Reporting-MTA: dns; amsat.org
Received-From-MTA: dns; wg.netium.com.br
Arrival-Date: Fri, 8 Aug 1997 06:20:55 -0700 (PDT)

Final-Recipient: rfc822; jrayol@amsat.org
Action: failed
Status: 5.1.1
Last-Attempt-Date: Fri, 8 Aug 1997 06:20:58 -0700 (PDT)

--GAB21582.871046458/amsat.org--
```

2197. ham swapage

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33EBE25B.102A@fishnet.net>
Source record: 18312

Ham Swap Page, Buy, Sell, Trade and Wants
Over 180 hits per day
All "Personal Ham" Ads Posted FREE !!

Click Here ----> http://www.fishnet.net/~ko6oy/swapage.htm

"AOL" Users ----> http://www.fishnet.net/~ko6oy/swapage4.htm

73 Danny KO6OY

2198. SMTP Delivery Error

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: MAILER-DAEMON@netium.COM.BR
Message-ID: <199708081321.GAA18080@mailbox1.ucsd.edu>
Source record: 18313

An error occured while delivering this message.The error is stated below:
550 <jrayol@amsat.org>... User unknown
Excerpt of original message:
To: jrayol@amsat.org

From: Ham-Space@ucsd.edu
To: jrayol@amsat.org
Date: 8 Aug 1997 09:12:14 EDT
Subject: Ham-Space Digest V97 #264

Ham-Space Digest Fri, 8 Aug 97 Volume 97 : Issue 264

Today's Topics:
170.245 MHz transmitter schematics
Military SATCOM Web page
Phase IIID Launch Problems
RS10

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 Aug 1997 16:29:19 GMT
From: nocsage@aol.com (NocSage)
Subject: 170.245 MHz transmitter schematics

So.. by looking at the topic.. Mc'Donalds uses 170.245 Mhz for there
drive-thru windows?? If anybody has the schematics for that
broadcaster/receiver I would be most appreciative if you could E-mail them
to me.. Thanks

Nocturnal Sage

Date: Sat, 02 Aug 1997 11:57:09 -0500
From: Brandon and Kristin <illusions@enterprise.net>
Subject: Military SATCOM Web page

I have just completed a project for work and have posted it on my
server to get some feedback. If you would be kind enough to take a
quick look and drop me an email with your suggestions, critiques, and/or
comments, I'd be most appreciative. Also, If you have any questions, I
will be glad to answer them.

Thank you!
~Brandon

http://homepages.enterprise.net/illusions/main.html

Date: 5 Aug 1997 03:27:45 GMT
From: "Christopher Cox" <cobox@netexp.net>
Subject: Phase IIID Launch Problems

--
Christopher Cox
KC8FRJ
TRA#4901

Rob Janssen <rob@pe1chl> wrote in article <EEC3Fr.G89@pe1chl>...
> In <Pine.OSF.3.96.970731153712.5513A-100000@internet.oit.edu> Dan
O'Connell <oconneld@OIT.EDU> writes:
>
>
>
> >> Yes, it is VERY disturbing, after all the blood, time and treasury
that
> >> has gone into this satellite. If the 502 should end up going up
without
> >> Phase IIID, I think AMSAT should work a campaign to ask ESA to put us
up
> >> on the next Arianne 4 that they can, stressing that the delay on OUR
> >> part was caused by a last minute change in flight specifications on
> >> THEIR part.
>
> > Is it possible we can work something out with the Russians who HAVE
> >a
> >launch vehicle that actually works????? IMO Arianne has HORRIBLE
"success"
> >rate. It's junk! Dan WA7TDZ
>
> That is your opinion. In reality, the success rate is not so bad.
> Of course not on Ariane 5 (1 launch, 1 failure), but on Ariane 4 it's OK.

I believe that is what is being inferred here. The Engineers do not seem to
even have a fix on the performance of the propulsion plant in the Ariane 5
bird, sounds like too much of a gamble. This is quickly moving from opinion
to fact. Why not push for a Ariane 4 or some other tried and true bird for
the launch.

>
> BTW: why is it that Americans can's spell Ariane?
> Do you expect Europeans to write NASSA when naming your space agency?
>

I dont know, does it really matter?

> Rob
> --
>
+----------------------------------+--------------------------------------+
> | Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/
|
> | AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU
|
>
+----------------------------------+--------------------------------------+
>

Christopher Cox
Cobox
KC8FRJ
TRA#4901 L2

Date: Wed, 06 Aug 1997 07:30:04 -0400
From: Jeff Griffin <kb2wqm@amsat.org>
Subject: RS10

Mike Lamanna wrote:

> Does anyone know what happened to rs-10 i have not been able to hear
> the
> beacon for days???
> Mike (wa3o)

Mike RS-10 has been dead since May 25. There is a slight chance that
it can be revived. See amsat.org's weekly status on all amateur
satellites for more info.

Jeff kb2wqm@amsat.org

End of Ham-Space Digest V97 #264
****

2199. PH3D On The Way To Kourou?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5sfqm1$m5b$1@tilde.csc.ti.com>
Source record: 18314

Does anyone have an update? Is the satellite
on route to Kourou for launch?
Ken K5MBV

2200. Ham Page

Newsgroup: rec.radio.amateur.space
Date: 1997-08-08 00:00:00 UTC
From: bobjr@rdgsons.com
Message-ID: <33eb52ea.4223097@news.seanet.com>
Source record: 18315

http://www.seanet.com/~bobjr/ham.htm

2201. Re: Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: holford@cnwl.igs.net.nospam
Message-ID: <5sgf8a$lq8$1@news.igs.net>
Source record: 18316
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <john-0708970735380001@wd1v.mv.com>, john@wd1v.mv.com6 says...
>
>Oscilloscope.FAQ is located on
>my home page.
>
>If you'd like an Email version
>sent to you as an attached text
>file (50k), send an Email with
>SCOPE FAQ on the SUBJECT LINE.
>
>73,

Where is your home page?

--
Dave Holford.

2202. Re: WXsat

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970809152001.LAA17908@ladder01.news.aol.com>
Source record: 18317

Hello Bill
Sounds like youve got a major problem, because WXSAt works like a dream and will produce images that look like 35 mm glossy photos, if you do things right!
Your receiver must be set to FM!..The bandwidth of the wx sats is about 40 to 50 khz. If your receiver is set to wide band FM, it will be much too wide and allow too much noise around the signal!..If it is narrow band FM, it will clip off much of the signal data and your images will be poor.
I really suggest that you become knowledgeable about the receiving requirements before you go any further. Many weather satellite enthusiasts just modify a scanner and do just fine. I did this for years before I purchased a commercialy available weather satellite receiver.
You can get a lot of good info from the following web site:

http://members.aol.com/jkktl/ham.htm

Just follow the links to where you need the most info. There is a weather sat FAQ that will help quite a bit.

Good Luck
Jim

2203. Re: Weather Fax frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970809152401.LAA18168@ladder01.news.aol.com>
Source record: 18318

>Can anyone point me to a listing of weather sat. fax frequencies (in
>VHF range) for the NOAA or meteor sat series. After reading this
>months QST about a new fax program, I;d like to try it out, but the
>article only says 131.xx or 137.xx MHz.
>
>Thanks
>
>Brett WA6SXU

Go to
http://members.aol.com/jkktl/ham.htm
Lots of weather sat info, including a good FAQ link!

2204. Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: Brian Gibbs <Brian@brimar.demon.co.uk>
Message-ID: <gmoN4CAYiO7zEwLW@brimar.demon.co.uk>
Source record: 18319

During a visual observation of the MIR this evening, 22:22 hours local,Sat 9th Aug, I spotted an object apparently tracking some distance behind. Could this have been a Progress vessel about to dock, or is there some other activity going on at present? Any information gratefully received. I have an avid band of sky-watchers waiting to find out more.

There was also a very bright shooting star crossing the orbit track. Nice bonus!

For those interested, I have plotted a few forthcoming visual orbits for the MIR from the U.K. They are listed below:-

MIR Visual Orbits, AUG 1997
``````````````````````````

9th 2218

10th 2120 2257

11th 2200

12th 2103

13th 2140

14th 2043

All times are local (utc + 1 hour), and are when Mir rises above the horizon in the U.K.

Allow appx 4 mins or so after given time for sighting.

Happy sky watching! 73...Brian...g3mbn

Brian Gibbs EMail brian@brimar.demon.co.uk
Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
``````````````````````````

2205. ARLK061 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk061.1997@arrl.org>
Source record: 18320
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK061
ARLK061 Keplerian data

ZCZC SK61
QST de W1AW
Keplerian Bulletin 61 ARLK061
From ARRL Headquarters
Newington, CT August 9, 1997
To all radio amateurs

SB KEP ARL ARLK061
ARLK061 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-85
1 24889U 97039A 97220.85976571 -.00001774 10369-4 42998-5 0 55
2 24889 56.9969 70.8148 0008789 285.1763 46.9719 15.92583855 196
AO-10
1 14129U 83058B 97220.08901270 -.00000017 00000-0 10000-3 0 4963
2 14129 26.0950 133.1629 6053830 141.0237 283.7646 2.05880670 78455
RS-10/11
1 18129U 87054A 97220.00827387 .00000015 00000-0 33669-7 0 04029
2 18129 82.9208 200.4225 0013377 77.4941 282.7710 13.72380716507344
UO-11
1 14781U 84021B 97220.46156928 .00000037 00000-0 14179-4 0 9926
2 14781 97.8396 199.6151 0011129 191.4078 168.6877 14.69569753718937
RS-12/13
1 21089U 91007A 97220.57395057 .00000045 00000-0 31471-4 0 9986
2 21089 82.9216 239.7877 0029489 148.5124 211.7807 13.74084464326356
UO-14
1 20437U 90005B 97220.15750360 -.00000027 00000-0 61370-5 0 02970
2 20437 98.5159 300.6948 0011923 55.4659 304.7650 14.29966903393644
RS-15
1 23439U 94085A 97220.04780396 -.00000039 00000-0 10000-3 0 02455
2 23439 64.8175 68.9850 0147733 122.4851 239.0456 11.27528390107788
AO-16
1 20439U 90005D 97220.73025217 .00000006 00000-0 18991-4 0 842
2 20439 98.5350 304.3056 0012184 55.9132 304.3209 14.30014376393748
```

```
RS-16
1 24744U 97010A 97220.17083961 .00002250 00000-0 76106-4 0 00874
2 24744 97.2707 124.2486 0005438 270.9558 89.1063 15.31639343024043
DO-17
1 20440U 90005E 97220.15122678 .00000124 00000-0 64447-4 0 00948
2 20440 98.5357 304.6311 0012189 58.2407 301.9966 14.30157914393693
WO-18
1 20441U 90005F 97220.77996835 -.00000016 00000-0 10661-4 0 895
2 20441 98.5381 305.1408 0012724 53.9157 306.3203 14.30124502393783
LO-19
1 20442U 90005G 97220.25332147 -.00000023 00000-0 77243-5 0 875
2 20442 98.5425 305.3242 0013406 56.5215 303.7249 14.30239745393735
FO-20
1 20480U 90013C 97219.87835045 -.00000044 00000-0 -18855-4 0 09907
2 20480 99.0485 171.7526 0540049 260.4171 93.5537 12.83237891351334
AO-21
1 21087U 91006A 97219.95428333 .00000094 00000-0 82657-4 0 08511
2 21087 82.9384 13.2563 0036209 122.5064 237.9600 13.74584435327265
UO-22
1 21575U 91050B 97220.11723130 .00000012 00000-0 18007-4 0 08074
2 21575 98.2970 278.8197 0008498 93.0194 267.1968 14.37078902317948
KO-23
1 22077U 92052B 97220.53683882 -.00000037 00000-0 10000-3 0 6812
2 22077 66.0877 35.6309 0006550 198.7233 161.3541 12.86303096234489
KO-25
1 22828U 93061F 97220.19052449 -.00000034 00000-0 36551-5 0 05589
2 22828 98.5386 293.5927 0011039 73.1567 287.0806 14.28185956169638
IO-26
1 22826U 93061D 97220.16871713 -.00000017 00000-0 10387-4 0 05799
2 22826 98.5389 293.4860 0010083 88.7970 271.4352 14.27842279201505
AO-27
1 22825U 93061C 97220.13418882 .00000012 00000-0 22194-4 0 05815
2 22825 98.5413 293.1894 0009457 86.4257 273.8008 14.27732513201482
FO-29
1 24278U 96046B 97220.51169798 -.00000030 00000-0 39384-5 0 980
2 24278 98.5349 254.5917 0352323 50.6802 312.5019 13.52632865 48199
Mir
1 16609U 86017A 97220.78468624 .00013879 00000-0 17663-3 0 5102
2 16609 51.6524 181.6195 0004455 3.4917 356.6112 15.59649708655239

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
August 12, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2206. WXsat

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: ron.hauger@sourcebbs.com
Message-ID: <8DD54D5.0391000835.uuout@sourcebbs.com>
Source record: 18321

On 08/08/97 WILLIAM F ERHARDT wrote to ALL...

WF> I tried the NOAA and Meteor WX satellites according to the artice in
WF> August
WF> QST and have only limited success with Meteor Sat and pictures are so
WF> so.
WF> On the meteor, I am using my sat antennas, a FGR 9600 receiver, and
WF> computer with sound card set according to specs (mono, 8bit 11.025 hz)
WF> I have program set to fm and receiver to am in order to get a so so
WF> copy.
WF> On the NOAA sats, I cannot get anything to print live copy. I did
WF> record
WF> the wav and got only a white screen with some black splatter is best
WF> way to
WF> describe it.
WF> Can any help me on what I am doing wrong.

The frg-9600 should be set to fm wide. Use tracksat 2.8 to track
the satellites.

RON.HAUGER@NFX.NET*****KC4KNA*VBARC*AMSAT*RTTY*PACKET*SWL*ATV
HF+VHF WEFAX*TVRO*SCPC*FM2*EXTRATERRESTRIAL*WATCHEROFTHESKIES

---
* OFFLINE 1.58

2207. Mir Packet

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: PTamm <Ptamm@worldnet.att.net>
Message-ID: <33EC03DE.BEF@worldnet.att.net>
Source record: 18322

Hi all..Mir Packet was active tonite...!!! going strong at my qth Staten Island,NYC
orbit #65529 0430-0440UTC....
good luck to all...!!! Pete N2OIJ

2208. Re: Subject: Phase IIID Launch Problems

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: jleikhim@nettally.COM
Message-ID: <33EC08B4.74D2@nettally.com>
Source record: 18323

ESA needs to be convinced that a sucessful launch resulting in the orbit
of an operational payload has a lot more PR value to potential customers
than the launch of an inert block of concrete.

--
Joe Leikhim KE4TZH
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

2209. Re: RS10

Newsgroup: rec.radio.amateur.space
Date: 1997-08-09 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5sidai$h15$1@news.mhv.net>
Source record: 18324

In article <33E852D9.4AAC@kickit.pgh.net>, Mustang@kickit.pgh.net wrote:
>Does anyone know what happened to rs-10 i have not been able to hear the
>beacon for days???
>Mike (wa3o)

It's creator is doing experiments, it's been down for quite a while now. No promises it'll be back they say.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2210. * SpaceNews 11-Aug-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0811.1997@ampr.org>
Source record: 18178
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0811
* SpaceNews 11-Aug-97 *

BID: $SPC0811

=========
SpaceNews
=========

MONDAY AUGUST 11, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
The following messages were downloaded by Claudio Ariotti, IK1SLD, in Italy
from Mike Foale, KB5UAC onboard the Mir space station:

Stat : PR
Posted : 08/02/97 22:57
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir status

TNC lost pwr again. We are getting ready for Anatoli and Pasha to dock with
us on 7th August. Vassily and Sasha leave on their Soyuz on 14th August.
Mike remains during the first of 2 eva's to do repairs after the collision.
on shuttle, sts-86, in the middle of October. Greenhouse space plants, 2
of them, are showing cotyledons, and the earth seeds are doing even better.
Mike. kb5uac.

====

Stat : PR
Posted : 08/08/97 12:04
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir Status

Mir 24 with the crew of Rodnik successfully docked, and we are enjoying
the company of Anatoli Solovev and Pavel Vinogradov. Anatoli and Pasha

are settling in and we have already moved my seat and spacesuit over to their Soyuz have a big bag of baggage in the seat where my suit lay, in their Soyuz. We are conducting handover activites now, and then will prepare for EVA in the node on the 20th, and outside on Spektr, to do initial repairs, on the 3r be with Anatoli for the node eva, and I will be with Anatoli, for the Spektr EVA. Lots to do Here, so forgive us if we cannot reply to you and all your very welcome good wishes. I try to monitor each day, and pass on your mecrew members. I think Pasha and Anatoli will be active on the radio, once they are settled in.
Mike.

The following Keplerian data for Mir was provided by Ron Parise, WA4SIR, at the Goddard Space Flight Center:

Mir
1 16609U 86017A 97221.29728613 0.00003652 00000-0 51235-4 0 5120
2 16609 51.6534 179.0470 0004810 5.5587 354.5438 15.59640980655318

Satellite: Mir
Catalog number: 16609
Epoch time: 97221.29728613 (09 AUG 97 07:08:05.52 UTC)
Element set: NORAD-512
Inclination: 51.6534 deg
RA of node: 179.0470 deg Mir Space Station
Eccentricity: 0.0004810 Orbital Elements
Arg of perigee: 5.5587 deg
Mean anomaly: 354.5438 deg
Mean motion: 15.59640980 rev/day Semi-major Axis: 6766.8275 Km
Decay rate: 0.37E-04 rev/day*2 Apogee Alt: 391.69 Km
Epoch rev: 65531 Perigee Alt: 385.18 Km

* HOUSTON AMSAT NET NEWS *
==========
The Houston AMSAT Net is reaching another milestone in its history. In the next few weeks, Internet users will be able to hear the Houston AMSAT Net live on the World Wide Web using Real Audio. Scott at North American Internet, who had been digitizing the Houston net from commercial satellite, will no longer be able to do it. Last week Bruce Paige, KK5DO, digitized the net to Real Audio, and found it worked just fine.

Scott will have a live stream available for the Houston people at the beginning of September. What this means to you, is that you can now hear the Houston AMSAT Net live as it is happening anywhere in the world via Real Audio. You can participate in the Net by calling in, checking in, or asking a question which will be answered live, or you can check in via email or use the IRC where a group from the net chat while the net is in progress. Houston AMSAT Net audio via the Real Audio can be fed into repeater systems allowing repeater users to hear net audio on their transceivers.

The other important feature of the use of the digitized Real Audio feed is that if a particularly interesting event should develop during the week when the net is not in progress, the Real Audio feed can be updated by

appending to the end of the net. What Bruce plans on doing is making a note on his web page (http://www.phoenix.net/~paigecom) that particular minutes (51:01.3 to 53:03.4, for example) were added on August 9 to the digitized audio file.

The Houston group also plans to carry their net over the 50 minutes allocated on the satellite feed (Tuesday, 8PM CDT on SBS 6, T13B, 6.2 MHz at 74 degrees). This means if there is an especially heavy news week, they can continue the net locally and continue the feed over the Internet.

The satellite transponder time used to relay the Houston AMSAT Net is generously donated by the W0KIE Network, and space for the Real Audio feed is donated by North American Internet.

[Info via Bruce Paige, KK5DO]

* MARS PATHFINDER NEWS *
========================
NASA's Mars Pathfinder spacecraft has successfully concluded its primary science mission and fulfilled all of its objectives by returning a wealth of new information about the planet Mars. The robotic lander, which continues to explore an ancient outflow channel in Mars' northern hemisphere, completed its milestone 30-day mission on 03-Aug-97, and has captured far more data on the atmosphere, weather and geology of Mars than scientists expected. In all, Pathfinder returned 1.2 gigabits of data and 9,669 images of the Martian landscape.

The rover's performance easily surpassed its designers' minimum expectations. Engineers designed the roving vehicle's electronics, battery power and hazard avoidance features to see it through at least a week of safe roving, not knowing beforehand what conditions it might encounter on Mars. After 30 days, the rover is still healthy and has clocked 52 meters (171 feet) distance, circumnavigated the lander and taken 384 spectacular views of rocks and the lander.

Atmospheric-surface interactions, measured by a meteorology package onboard the lander, are confirming some conditions observed by the Viking landers 21 years ago, while raising questions about other aspects of the planet's global system of transporting volatiles such as water vapor, clouds and dust, said Science Team Leader Dr. Timothy Schofield. The meteorology mast on the lander has observed a rapid drop-off in temperatures just a few feet above the surface, and one detailed 24-hour measurement set revealed temperature fluctuations of 30-40 degrees Fahrenheit in a matter of minutes.

Pathfinder landed within 20 kilometers (13 miles) of the targeted landing site on 04-Jul-97. The landing site coordinates in Ares Vallis were later identified as 19.33 degrees north latitude, 33.55 degrees west longitude.

Pathfinder's performance in the Martian atmosphere will be of great value to Mars Global Surveyor, which will aerobrake through the Martian atmosphere to circularize its orbit when it reaches Mars on 11-Sep-97. The Pathfinder navigation team, led by Peter Kallemyn of JPL, estimated horizontal wind velocities in the upper atmosphere, which accelerated the spacecraft's

descent velocity by about 13 meters per second (20 to 25 miles per hour).

After being suspended from a 20-meter (65-foot) bridle and firing its retro rockets, a 5.8-meter (19-foot) diameter cluster of airbags softened Pathfinder's landing, marking the first time this airbag technique has been used. The spacecraft hit the ground at a speed of about 18 meters per second (40 miles per hour) and bounced about 16 times across the landscape before coming to a halt. The airbag seems to have performed perfectly and sustained little or no damage. To top it off, the spacecraft even landed on its base petal, consequently allowing its thumb-sized antenna to communicate the successful landing to a jubilant team on Earth only three minutes after touch down.

Science data from the surface of Mars will continue to be collected and transmitted to Earth, then analyzed by scientists, as Pathfinder enters its extended mission. The lander was placed in a two-day hibernation period to recharge its battery after the conclusion of the primary mission, and the flight team will begin to power the lander battery off each Martian night now to conserve energy. The rover's batteries remain in good condition, but are not rechargeable.

[Info via the Mars Pathfinder Web Page]

* THANKS! *
==========
Thanks to all those who sent messages of appreciation to SpaceNews, especially:

Claudio Ariotti, IK1SLD Rick Walter, WB3CSY

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

2211. Mars Global Surveyor Page

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: Dan Hicks Jr <dan@kb8uyz.com>
Message-ID: <33EE2060.15C7@kb8uyz.com>
Source record: 18179

rec.radio.amateur.space

First of all, I want to thank everyone that visited my Mars Pathfinder Site, at http://dhcom.com/astronomy/pathfinder.htm. This site continues to do very well, and is updated at least once a day.

We are approaching September 12, 1997, which will mark the next Mars Mission, the Mars Global Surveyor will enter orbit around the red planet. We have posted a site dedicated to this next mission, which you can find at http://dhcom.com/mars. In the next coming weeks, we will begin to update this site with the very latest news, information and photos.

Thanks again for all your visits, and please, let me know what you think of the new site!

73's
Dan KB8UYZ
dan@kb8uyz.com

2212. QST & Wxsat - Mod for Pro2022?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: paulegan@interlog.com
Message-ID: <33ededa3.1548761@news.interlog.com>
Source record: 18180

This article in QST has got me interested in wxsats again. I have a Pro-2022 and wonder if anyone has sucessfully modified one of these radios for WXsat reception. I was reading around on the web and found the mod for the 2006 but it discusses more ceramic filters than my little 2022 has. Also of interest was the article by Geoff Chester "BUILDING A TOTALLY PORTABLE A.P.T GROUND STATION" in which he states:

"Modification is very simple: near the top center of the main board is an MC3359P IC chip, and just below pins 3 and 5 is a small orange rectangular device. This is the ceramic lattice 455kHz IF narrowband filter, in this case a Murata SFR-450D, labeled FT-2 on the circuit board. It has 5 pins: viewed from the component side there are 4 on the right and 1 on the left. Remove the filter and solder in a 0.01 mfd capacitor between the solitary left pinhole and the upper right pinhole (between pins 3 and 5 of the IC). Next you need to re-align the radio, which I did by connecting a sweep generator to the antenna lead-in and an oscilloscope to pin 5 of the MC3359P. I adjusted the IF tuning coils L5 and L6 until I got a flat response over the new bandwidth. This adjustment was fairly minimal, and the scanner would have worked just fine had I left the coils alone"

My Pro-2022 has a MC3361 and the filter (pcb part CF1) is marked LF-B15 91. It has only 3 pins that go to the IC's pins 3,4 and 5. Is there any chance of opening up the FM bandwidth of this radio?
Thanks.
Paul Egan VE3GFY

2213. Re: Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: "g.hansen" <grhansen@usa.net>
Message-ID: <33EE33E2.6C7E2FEE@usa.net>
Source record: 18181

Richard Glueck wrote:
>
> Brian Gibbs (Brian@brimar.demon.co.uk) wrote:
> : During a visual observation of the MIR this evening, 22:22 hours
> : local,Sat 9th Aug, I spotted an object apparently tracking some distance
> : behind. Could this have been a Progress vessel about to dock, or is
> : there some other activity going on at present? Any information
> : gratefully received. I have an avid band of sky-watchers waiting to find
> : out more.
>
> Brian:
> Your bonus sighting was the Soyuz passenger spacecraft which is
> chasing MIR for a docking. THere is an undocking of a Progress M-25
> coming as well. Maybe you just saw another piece of the space station
> breaking off.....!
> I find it fascinating that during a power shortage, the ham radio
> link is being maintained.

We watched the 0500 UTC passing of MIR Sunday (UTC) morning near Tacoma, WA. Nice bright object followed by another somewhat dimmer object 3 to 4 minutes later. It certainly was the same orbital path but seemed quite a ways behind MIR. It still was an impressive sight seeing MIR pass by with its friend(s?) following behind.

2214. Re: Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5skfmg$h5o$1@news.mhv.net>
Source record: 18182

In article <5sk53i$2n1i$1@sol.caps.maine.edu>, glueck@saturn.caps.maine.edu (Richard Glueck) wrote:
>Brian Gibbs (Brian@brimar.demon.co.uk) wrote:
>: During a visual observation of the MIR this evening, 22:22 hours
>: local,Sat 9th Aug, I spotted an object apparently tracking some distance
>: behind. Could this have been a Progress vessel about to dock, or is
>: there some other activity going on at present? Any information
>: gratefully received. I have an avid band of sky-watchers waiting to find
>: out more.
>
>Brian:
> Your bonus sighting was the Soyuz passenger spacecraft which is
>chasing MIR for a docking. THere is an undocking of a Progress M-25
>coming as well. Maybe you just saw another piece of the space station
>breaking off.....!
> I find it fascinating that during a power shortage, the ham radio
>link is being maintained.
>
> Dick, N1MDZ

I understand they undocked progress before the soyuz arrived. The new crew arrived Thursday, he's talking Saturday so I'll bet it's progress he's seen.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2215. Startling New Evidence!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: rvleonlove@aol.com
Message-ID: <19970810063800.CAA22066@ladder02.news.aol.com>
Source record: 18325

See new information about the Hale-Bopp comet and the spaceship following it. Learn who our alien visitors really are. Mars Landing - fact or fiction?

Learn the truth!

http:/members.aol.com/RvLeonLove/

2216. Re: Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-10 00:00:00 UTC
From: glueck@saturn.caps.maine.edu
Message-ID: <5sk53i$2n1i$1@sol.caps.maine.edu>
Source record: 18326

Brian Gibbs (Brian@brimar.demon.co.uk) wrote:
: During a visual observation of the MIR this evening, 22:22 hours
: local,Sat 9th Aug, I spotted an object apparently tracking some distance
: behind. Could this have been a Progress vessel about to dock, or is
: there some other activity going on at present? Any information
: gratefully received. I have an avid band of sky-watchers waiting to find
: out more.

Brian:
Your bonus sighting was the Soyuz passenger spacecraft which is
chasing MIR for a docking. THere is an undocking of a Progress M-25
coming as well. Maybe you just saw another piece of the space station
breaking off.....!
I find it fascinating that during a power shortage, the ham radio
link is being maintained.

Dick, N1MDZ

2217. for sale,trade

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33EF50CC.2C93@fishnet.net>
Source record: 18183

Ham Swap Page, Buy, Sell, Trade and Wants
Over 200 hits per day
All "Personal Ham" Ads Posted FREE !!

Click Here ----> http://www.fishnet.net/~ko6oy/swapage.htm

"AOL" Users ----> http://www.fishnet.net/~ko6oy/swapage4.htm

73 Danny KO6OY

2218. Re: PH3D On The Way To Kourou? (News Update)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5snpfq$1g0_004@blpm01-239.mcn.net>
Source record: 18184
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <5sfqm1$m5b$1@tilde.csc.ti.com>, mbv@ti.com (Ken Durham) wrote:
> Does anyone have an update? Is the satellite
>on route to Kourou for launch?
> Ken K5MBV
>

Unfortunately Ken, Phase 3D is not going anywhere anytime soon. It is still under construction in Orlando. The ESA wanted Phase 3D in Kourou August 10th, but that didn't happen. So now, in place of our satellite, the ESA wants us to ship them the Phase 3D mass simulator (a concrete block), and they will launch that into space in place of our satellite.
What this all means is that AMSAT paid the ESA over a MILLION dollars to put a block of concrete in orbit. If you donated any money to the Phase 3D project, then you got screwed by the ESA (just like the rest of us.) The truth is that we don't know when P3D is going to be launched or even what rocket it will be riding on. If I sound pissed... you're right.

73 de KB7ADL
Vince

P.S. There is still a possibility that Phase 3D could be launched on 502, but that possibility looks remote at this time.

2219. Re: PH3D On The Way To Kourou? (News Update)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: rlong@magnus.acs.ohio-state.edu
Message-ID: <rlong-1108972102080001@ts6-9.homenet.ohio-state.edu>
Source record: 18185
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <5snpfq$1g0_004@blpm01-239.mcn.net>, fiscus@mcn.net (Vince Fiscus, KB7ADL) wrote:

> In article <5sfqm1$m5b$1@tilde.csc.ti.com>, mbv@ti.com (Ken Durham) wrote:
> > Does anyone have an update? Is the satellite
> >on route to Kourou for launch?
> > Ken K5MBV
> >
>
> Unfortunately Ken, Phase 3D is not going anywhere anytime soon. It is still
> under construction in Orlando. The ESA wanted Phase 3D in Kourou August 10th,
> but that didn't happen. So now, in place of our satellite, the ESA wants us
> to ship them the Phase 3D mass simulator (a concrete block), and they will
> launch that into space in place of our satellite.
> What this all means is that AMSAT paid the ESA over a MILLION dollars to
> put a block of concrete in orbit. If you donated any money to the Phase 3D
> project, then you got screwed by the ESA (just like the rest of us.) The
> truth is that we don't know when P3D is going to be launched or even what
> rocket it will be riding on. If I sound pissed... you're right.
>
> 73 de KB7ADL
> Vince
>
> P.S. There is still a possibility that Phase 3D could be launched on 502, but
> that possibility looks remote at this time.

All of us who donated to P3D knew, or should have known, that we were supporting the development of a very high risk project. I think that it will eventually be launched. But will it work as planned. Again a high risk. If it doesn't there will be lots of people who will say we should have done something else that they just KNEW would work. Second guessing.

Vince, you have made your point so many times. Your attitude is not helpful and if I may say so is kind of immature.

ron w8gus.

2220. Re: PH3D On The Way To Kourou? (NEWS FLASH)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5snnvv$1g0_002@blpm01-239.mcn.net>
Source record: 18186

In article <5sfqm1$m5b$1@tilde.csc.ti.com>, mbv@ti.com (Ken Durham) wrote:
> Does anyone have an update? Is the satellite
>on route to Kourou for launch?
> Ken K5MBV
>

Unfortunately Ken, Phase 3D is not going anywhere any time soon. It is still under construction in Orlando. The ESA wanted Phase 3D in Kourou August 10th, but that didn't happen. So now, instead of the Satellite, the ESA wants us to ship them Phase 3D's mass simulator (a concrete block) and they will launch that into space, in place of our satellite.
What all this means is that AMSAT paid the ESA over a MILLION dollars to have a block of concrete put in orbit. If you donated any money to the Phase 3D project, then you got screwed by the ESA (just like the rest of us.) The truth is that we don't know when P3D will be launched, or even what rocket it will ride on. If I sound pissed... you're right.

73 de KB7ADL
Vince

P.S. There is still a possibility that P3D could get a ride on 502, but that possibility looks remote at this time.

2221. F.S. 1296 MHz RX Converter/LNA for Phase 3D

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: paul.a.papavero@boeing.com
Message-ID: <33EF981A.6ABD@boeing.com>
Source record: 18187

For sale: Microwave Modules Receive converter with LNA, 28 MHz IF, for $60.00 delivered CONUS.

Call John at 714.993.0435 eves (if no answer, please leave message...I will return the call.

Thanks

2222. NORAD Two-Line Orbital Element Sets (TLE042)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5so5gq$b1r@blackbird.afit.af.mil>
Source record: 18188

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

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- Current Two-Line Element Sets #042 -
Alouette 1
1 00424U 62049A 97221.53139477 .00000044 00000-0 40710-4 0 3090
2 00424 80.4630 230.9509 0024380 39.9463 320.3470 13.67900473739538
ATS 1
1 02608U 66110A 97218.61670940 -.00000038 00000-0 10000-3 0 313
2 02608 14.4756 348.3618 0007238 113.9948 246.1375 1.00297916 29030
ATS 3
1 03029U 67111A 97222.26896581 -.00000114 00000-0 10000-3 0 6771
2 03029 14.8787 355.2826 0013148 264.4835 50.5584 1.00273020108967
Starlette
1 07646U 75010A 97223.25562402 -.00000060 00000-0 64372-4 0 764
2 07646 49.8263 291.0513 0205002 177.8134 182.3700 13.82193599137066
LAGEOS
1 08820U 76039A 97219.91987248 .00000005 00000-0 00000+0 0 3087
2 08820 109.8171 168.7687 0041533 37.4662 322.8805 6.38664670240442
GOES 2
1 10061U 77048A 97222.45265602 .00000053 00000-0 10000-3 0 8627
2 10061 12.8847 32.2970 0010164 136.1327 138.7147 1.00250140 18641
IUE
1 10637U 78012A 97218.77920706 -.00000078 00000-0 10000-3 0 4041
2 10637 36.1346 76.9564 1371099 68.3696 161.6446 1.00054853 24096
GOES 3
1 10953U 78062A 97223.27521656 -.00000084 00000-0 10000-3 0 8309
2 10953 11.9137 35.4177 0002624 79.7439 194.2944 1.00270951 23263
SeaSat 1
1 10967U 78064A 97221.19639431 -.00000074 00000-0 19938-4 0 5953
2 10967 107.9929 319.7440 0001575 257.8312 102.2653 14.38180905 1544

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Nimbus 7
1 11080U 78098A 97219.56577217 -.00000017 00000-0 22245-4 0 6883
2 11080 98.8921 66.3806 0008372 289.2512 70.7862 13.83678589948758
GOES 5
1 12472U 81049A 97219.51825593 -.00000173 00000-0 10000-3 0 115
2 12472 8.8482 46.1041 0006074 81.7871 278.3721 1.00338719 17272
Cosmos 1383
1 13301U 82066A 97221.07931482 .00000022 00000-0 83505-5 0 6048
2 13301 82.9302 187.3842 0027252 164.8021 195.3959 13.68084222754516
LandSat 4
1 13367U 82072A 97220.58604376 .00000019 00000-0 13941-4 0 890
2 13367 98.0183 263.4073 0005539 285.6565 74.4023 14.57206152801322
DMSP B5D2-1
1 13736U 82118A 97222.94336198 .00000028 00000-0 30267-4 0 2888
2 13736 98.6210 50.5323 0007589 244.3875 115.6522 14.25846968760882
IRAS
1 13777U 83004A 97222.52480161 .00000155 00000-0 13623-3 0 7413
2 13777 98.9714 45.2374 0013988 20.5327 339.6393 13.99285573412014
Cosmos 1447
1 13916U 83021A 97221.54343610 .00000045 00000-0 31206-4 0 6982
2 13916 82.9429 241.5955 0039587 66.1113 294.4186 13.74358387721202
TDRS 1
1 13969U 83026B 97222.05577917 -.00000298 00000-0 10000-3 0 7790
2 13969 9.5647 39.6118 0004118 89.4062 161.0033 1.00276892 25581
GOES 6
1 14050U 83041A 97219.49666400 .00000065 00000-0 10000-3 0 6946
2 14050 7.7036 49.8248 0003754 68.6975 241.8687 1.00271473110362
AO-10
1 14129U 83058B 97222.03058725 .00000054 00000-0 10000-3 0 4979
2 14129 26.0983 132.8393 6053089 141.6209 282.7852 2.05879938 78493
LandSat 5
1 14780U 84021A 97223.21571482 .00000033 00000-0 17505-4 0 6353
2 14780 98.2800 285.6571 0003606 69.0129 291.1455 14.57078143715128
UO-11
1 14781U 84021B 97220.46156928 .00000037 00000-0 14179-4 0 9926
2 14781 97.8396 199.6151 0011129 191.4078 168.6877 14.69569753718937
Cosmos 1574
1 15055U 84062A 97220.26142795 .00000015 00000-0 -27614-7 0 8973
2 15055 82.9579 298.3438 0026073 261.4016 98.4185 13.73650610658245
Cosmos 1602
1 15331U 84105A 97221.53960598 .00000248 00000-0 26181-4 0 5809
2 15331 82.5331 81.0455 0020895 9.3663 350.7936 14.84910985695058
ERBS
1 15354U 84108B 97219.91271469 -.00000220 00000-0 15242-5 0 2959
2 15354 56.9962 152.7096 0003610 156.9486 203.1686 14.95058197699162
NOAA 9
1 15427U 84123A 97222.79979797 .00000124 00000-0 88713-4 0 2477
2 15427 98.9005 292.7880 0014375 201.2760 158.7816 14.13873271652923
Mir
1 16609U 86017A 97223.09137285 .00003404 00000-0 48170-4 0 5140
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Cosmos 1766
1 16881U 86055A 97219.27139851 .00000133 00000-0 12997-4 0 4952
2 16881 82.5197 140.7385 0020978 46.1966 314.0981 14.83868219595548
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2 16908 50.0111 151.8433 0011310 355.3836 4.6892 12.44416468168451
NOAA 10
1 16969U 86073A 97222.80220490 .00000068 00000-0 47277-4 0 1764
2 16969 98.5473 214.4099 0012103 206.4388 153.6176 14.25050662566362
MOS-1
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2 17527 98.8934 280.2318 0017453 242.6562 117.2824 14.00483478533708
GOES 7
1 17561U 87022A 97212.89160272 -.00000136 00000-0 10000-3 0 3703
2 17561 3.8557 66.6982 0002634 321.9922 140.3087 1.00252378 21419
Kvant-1
1 17845U 87030A 97222.89914613 .00001227 00000-0 21448-4 0 936
2 17845 51.6510 170.9954 0005419 11.0114 349.0754 15.59649618589678
DMSP B5D2-3
1 18123U 87053A 97222.69736915 .00000017 00000-0 30916-4 0 112
2 18123 98.7620 51.9667 0014455 133.6827 226.5546 14.15486002523845
RS-10/11
1 18129U 87054A 97218.03978396 .00000035 00000-0 21260-4 0 3848
2 18129 82.9248 201.8795 0013356 81.2590 279.0074 13.72380986507076
Meteor 2-16
1 18312U 87068A 97222.82112880 .00000017 00000-0 18315-5 0 5836
2 18312 82.5491 19.2275 0013692 118.7798 241.4739 13.84101920504226
Meteor 2-17
1 18820U 88005A 97222.55372799 .00000055 00000-0 35347-4 0 3304
2 18820 82.5413 73.4982 0015900 185.1011 174.9992 13.84779395481560
DMSP B5D2-4
1 18822U 88006A 97222.89804562 .00000041 00000-0 36416-4 0 5958
2 18822 98.3839 40.9551 0005484 210.7632 149.3230 14.23235528494272
Glonass 34
1 19163U 88043A 97220.69902278 -.00000013 00000-0 10000-3 0 2066
2 19163 65.4231 71.7802 0003907 191.5828 168.5097 2.13102392 71132
Glonass 36
1 19165U 88043C 97220.75678993 -.00000013 00000-0 10000-3 0 6108
2 19165 65.4034 71.7212 0003165 25.0972 334.9355 2.13101720 71755
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1 19215U 88051A 97222.33399952 -.00000149 00000-0 00000+0 0 3285
2 19215 4.0990 65.5839 0004989 131.6870 228.4883 0.96948779 21247
OKEAN 1
1 19274U 88056A 97220.56047617 .00000210 00000-0 23077-4 0 1949
2 19274 82.5120 240.8711 0019067 185.6701 174.4301 14.82642341491219
Meteor 3-2
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1 19336U 88064A 97220.54987600 .00000051 00000-0 10000-3 0 5926
2 19336 82.5388 231.0791 0015886 273.9907 85.9399 13.16982965434415
Glonass 39
1 19503U 88085C 97222.19551204 -.00000038 00000-0 10000-3 0 4964
2 19503 65.4290 310.5526 0007778 136.3967 223.7199 2.13101930 69279
NOAA 11
1 19531U 88089A 97222.82123926 -.00000015 00000-0 16868-4 0 662
2 19531 99.1475 257.0628 0012175 138.6735 221.5357 14.13139934457712
TDRS 3
1 19548U 88091B 97218.74716799 -.00000203 00000-0 10000-3 0 2948
2 19548 3.3111 69.6583 0004017 328.8081 271.2788 1.00270221 19692
Glonass 40
1 19749U 89001A 97219.88649954 -.00000015 00000-0 10000-3 0 7022
2 19749 65.3638 71.3027 0009535 257.9470 102.0203 2.13101407 66738
Glonass 41
1 19750U 89001B 97221.81815851 -.00000007 00000-0 10000-3 0 6155
2 19750 65.4057 71.3091 0008428 253.4661 106.5208 2.13101643 66792
GPS BII-01
1 19802U 89013A 97220.94953295 -.00000032 00000-0 00000+0 0 4560
2 19802 55.4751 93.9867 0012982 182.1305 177.9266 2.00578273 62092
Akebono
1 19822U 89016A 97222.16274011 .00005470 00000-0 25245-3 0 9672
2 19822 75.0680 238.9915 3714357 147.8480 241.5951 7.99200521200014
Meteor 2-18
1 19851U 89018A 97220.29462765 .00000036 00000-0 19482-4 0 5792
2 19851 82.5205 308.4947 0012788 246.5726 113.4086 13.84436270426543
MOP-1
1 19876U 89020B 97221.55915547 -.00000066 00000-0 00000+0 0 2739
2 19876 2.8268 70.2299 0018163 293.2303 66.8025 0.97109189 10685
TDRS 4
1 19883U 89021B 97218.27239100 -.00000278 00000-0 10000-3 0 3503
2 19883 0.7296 85.8116 0001902 75.0361 210.9880 1.00267194203270
GPS BII-02
1 20061U 89044A 97222.29231058 .00000013 00000-0 10000-3 0 4416
2 20061 53.9386 269.0702 0175552 225.5155 133.1036 2.00563078 59867
Nadezhda 1
1 20103U 89050A 97219.93271944 -.00000011 00000-0 -27707-4 0 1437
2 20103 82.9603 161.3295 0037453 335.3879 24.5466 13.73880496405907
GPS BII-03
1 20185U 89064A 97222.99268393 -.00000029 00000-0 00000+0 0 4686
2 20185 55.3473 94.2919 0049982 57.3576 303.1972 2.00565585 58457
GMS 4
1 20217U 89070A 97223.23013688 -.00000371 00000-0 10000-3 0 6139
2 20217 2.6235 73.0407 0001087 228.1026 221.5951 1.00268136 29632
INTERCOSMOS 24
1 20261U 89080A 97222.49664348 .00000208 00000-0 57390-4 0 6098
2 20261 82.5923 2.8743 1242265 168.0693 195.2974 12.47428601358188
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2 20302 53.1614 208.7384 0049643 195.7284 164.1356 2.00557553 57238
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Meteor 3-3
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2 20305 82.5512 194.6903 0006867 17.2758 342.8595 13.04423880372869
COBE
1 20322U 89089A 97220.50571090 -.00000180 00000-0 -87341-4 0 3262
2 20322 98.9294 234.3675 0008782 320.8800 39.1732 14.03466964395463
Kvant-2
1 20335U 89093A 97222.89914613 .00001227 00000-0 21448-4 0 9822
2 20335 51.6510 170.9954 0005419 11.0114 349.0754 15.59649618438680
GPS BII-05
1 20361U 89097A 97220.18213011 -.00000053 00000-0 00000+0 0 2522
2 20361 56.2272 36.8262 0095891 144.5963 216.1455 2.00568301 46671
COSMOS 2054 (Altair-1)
1 20391U 89101A 97212.36315385 -.00000177 00000-0 00000+0 0 5473
2 20391 4.6028 60.8834 0001368 52.0685 308.0139 1.00260058 28107
SPOT 2
1 20436U 90005A 97222.94562712 -.00000044 00000-0 00000+0 0 2606
2 20436 98.7229 296.8949 0000970 110.9137 249.2403 14.20029664391415
UO-14
1 20437U 90005B 97223.23625485 .00000016 00000-0 22850-4 0 2898
2 20437 98.5160 303.7072 0011908 48.4486 311.7716 14.29967455394084
AO-16
1 20439U 90005D 97220.73025217 .00000006 00000-0 18991-4 0 842
2 20439 98.5350 304.3056 0012184 55.9132 304.3209 14.30014376393748
DO-17
1 20440U 90005E 97219.24171660 .00000060 00000-0 39817-4 0 831
2 20440 98.5357 303.7389 0012151 60.9863 299.2525 14.30157378393563
WO-18
1 20441U 90005F 97220.77996835 -.00000016 00000-0 10661-4 0 895
2 20441 98.5381 305.1408 0012724 53.9157 306.3203 14.30124502393783
LO-19
1 20442U 90005G 97220.25332147 -.00000023 00000-0 77243-5 0 875
2 20442 98.5425 305.3242 0013406 56.5215 303.7249 14.30239745393735
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1 20452U 90008A 97222.07704203 .00000004 00000-0 10000-3 0 3559
2 20452 54.0561 149.7052 0051174 90.5690 270.0189 2.00568886 55214
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1 20478U 90013A 97220.22413235 -.00000044 00000-0 00000+0 0 681
2 20478 99.0874 289.5783 0005285 184.5962 175.5155 13.93978113302657
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1 20479U 90013B 97221.36499669 .00000018 00000-0 11992-3 0 836
2 20479 99.0499 173.2364 0539664 256.2674 97.7816 12.83353489351547
FO-20
1 20480U 90013C 97218.94275146 -.00000024 00000-0 26347-4 0 9850
2 20480 99.0476 170.9914 0540013 262.5263 91.4194 12.83238165351210
MOS-1B R/B
1 20491U 90013D 97221.08038917 .00000332 00000-0 68469-3 0 3680
2 20491 99.0274 250.3717 0470766 35.3621 327.7779 13.02994899356284
LACE
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2 20508 82.9549 295.5203 0043372 286.3644 73.2742 13.73524227373141
OKEAN 2
1 20510U 90018A 97221.44852473 .00000135 00000-0 15179-4 0 6032
2 20510 82.5227 197.1678 0020541 32.9301 327.3187 14.78703871401489
GPS BII-07
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2 20533 54.2877 270.9859 0027531 28.0260 332.1866 1.91042731 53740
PegSat
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2 20546 94.1061 231.1543 0050875 182.6445 177.4465 15.52666151409650
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MACSAT 2
1 20608U 90043B 97218.92655462 .00000150 00000-0 22765-4 0 2869
2 20608 89.9240 169.7463 0108275 42.9800 317.9806 14.65016167387157
Glonass 44
1 20619U 90045A 97218.37543591 -.00000037 00000-0 10000-3 0 4181
2 20619 65.0016 309.7079 0026010 212.4332 147.4638 2.13102523 56158
Glonass 45
1 20620U 90045B 97220.37106701 -.00000038 00000-0 10000-3 0 3959
2 20620 65.0136 309.6336 0008756 36.6748 323.4445 2.13102729 56231
Glonass 46
1 20621U 90045C 97223.25387687 -.00000035 00000-0 10000-3 0 127
2 20621 65.0124 309.5950 0013885 195.9415 164.0607 2.13103294 56292
Kristall
1 20635U 90048A 97222.89914613 .00001227 00000-0 21448-4 0 7746
2 20635 51.6510 170.9954 0005419 11.0114 349.0754 15.59649618409513
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1 20638U 90049A 97223.09449979 -.00000372 00000-0 -53531-5 0 6796
2 20638 52.9900 207.7084 0010966 330.2838 29.7527 15.07655315395651
Meteor 2-19
1 20670U 90057A 97222.82790547 .00000002 00000-0 -11708-4 0 3628
2 20670 82.5426 14.5749 0016234 151.7945 208.4098 13.84129062359792
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1 20712U 90065A 97221.62994928 .00000077 00000-0 96870-4 0 4726
2 20712 17.9075 78.5974 7186393 334.5317 3.0134 2.35937494 52998
GPS BII-08
1 20724U 90068A 97222.79998329 -.00000030 00000-0 00000+0 0 2688
2 20724 55.1928 91.7983 0135611 193.4205 166.3129 2.00563915 49861
Feng Yun1-2
1 20788U 90081A 97222.55338811 .00000182 00000-0 14831-3 0 4197
2 20788 98.8237 219.7635 0016376 44.9066 315.3421 14.01422927354833
Meteor 2-20
1 20826U 90086A 97223.27152177 .00000079 00000-0 57581-4 0 915
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GPS BII-09
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2 20959 55.3583 93.9674 0098278 241.4887 117.5148 2.00573204 49094
DMSP B5D2-5
1 20978U 90105A 97222.82310571 .00000047 00000-0 32337-4 0 1805
2 20978 98.5547 295.4804 0079752 11.6969 348.6046 14.32766420349800
Glonass 47
1 21006U 90110A 97222.80855797 -.00000001 00000-0 10000-3 0 9706
2 21006 65.3544 70.5243 0056722 189.5940 170.3714 2.13102306 51958
Glonass 48
1 21007U 90110B 97220.65626748 -.00000013 00000-0 10000-3 0 1020
2 21007 65.3857 70.6897 0031287 172.6653 187.4596 2.13101308 51896
Glonass 49
1 21008U 90110C 97219.14778093 -.00000016 00000-0 00000+0 0 3664
2 21008 65.3478 70.6628 0008333 268.9076 91.0778 2.13098667 51853
AO-21
1 21087U 91006A 97221.84683606 .00000094 00000-0 82657-4 0 8417
2 21087 82.9383 11.8549 0036455 117.2676 243.2201 13.74584466327525
RS-12/13
1 21089U 91007A 97220.57395057 .00000045 00000-0 31471-4 0 9986
2 21089 82.9216 239.7877 0029489 148.5124 211.7807 13.74084464326356
MOP-2
1 21140U 91015B 97219.43529990 -.00000089 00000-0 00000+0 0 3646
2 21140 1.3763 78.7275 0002261 111.8730 272.6541 1.00274212 25786
Nadezhda 3
1 21152U 91019A 97219.03608844 .00000055 00000-0 43349-4 0 8303
2 21152 82.9240 197.7575 0040553 266.9327 92.7185 13.73549834320836
Glonass 50
1 21216U 91025A 97220.47927944 -.00000038 00000-0 10000-3 0 6325
2 21216 64.7462 309.0438 0009943 201.5004 158.5181 2.13103309 49416
Glonass 51
1 21217U 91025B 97221.49152980 -.00000038 00000-0 10000-3 0 288
2 21217 64.7267 309.0023 0009528 206.2081 153.8095 2.13102112 49420
Glonass 52
1 21218U 91025C 97221.60050126 -.00000038 00000-0 10000-3 0 5006
2 21218 64.7329 308.9738 0005016 0.9610 359.0565 2.13102750 49437
GRO
1 21225U 91027B 97222.23198557 .00000632 00000-0 19830-4 0 4893
2 21225 28.4590 166.2518 0005174 113.5211 246.5926 15.19294034234531
Meteor 3-4
1 21232U 91030A 97220.54166473 .00000050 00000-0 10000-3 0 9998
2 21232 82.5387 77.7275 0012605 196.8021 163.2685 13.16477454302458
NOAA 12
1 21263U 91032A 97222.79567192 .00000098 00000-0 62699-4 0 4816
2 21263 98.5372 235.3878 0013219 129.9807 230.2533 14.22739320324121
OKEAN 3
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2 21397 82.5258 112.4727 0024069 107.4379 252.9467 14.76600522333131
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ERS-1
1 21574U 91050A 97222.55991561 .00000016 00000-0 22035-4 0 5222
2 21574 98.5468 296.5811 0001437 73.1661 286.9680 14.32251233317479
UO-22
1 21575U 91050B 97221.57937534 .00000028 00000-0 23635-4 0 7912
2 21575 98.2972 280.2300 0008533 89.0073 271.2092 14.37079238318155
ORBCOMM-X
1 21576U 91050C 97219.20047111 .00000006 00000-0 16183-4 0 8875
2 21576 98.2946 275.3065 0004499 100.9523 259.2169 14.36499607317672
TUBSAT-A
1 21577U 91050D 97221.66184813 -.00000001 00000-0 13787-4 0 7850
2 21577 98.2929 278.3199 0007058 90.7676 269.4318 14.36556216318067
SARA
1 21578U 91050E 97222.22658795 .00000141 00000-0 59013-4 0 9891
2 21578 98.3377 290.5836 0005963 83.0628 277.1238 14.39409547318610
TDRS 5
1 21639U 91054B 97222.55375498 .00000078 00000-0 10000-3 0 1911
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Meteor 3-5
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MINISAT 01
1 24779U 97018A 97223.19231707 .00001474 00000-0 47881-4 0 312
2 24779 150.9739 125.3822 0014184 41.3225 318.8513 14.98365061 16776
CELESTIS
1 24780U 97018B 97221.56664636 .00001217 00000-0 24560-4 0 352
2 24780 150.9736 116.3040 0019754 24.5008 335.6530 14.99625850 16544
GOES 10
1 24786U 97019A 97222.87761038 -.00000102 00000-0 00000+0 0 933
2 24786 0.2694 276.4495 0001459 33.5378 221.2561 1.00272606 1100
Feng Yun 2B
1 24834U 97029A 97222.13747685 -.00000333 00000-0 00000+0 0 496
2 24834 1.1040 263.6232 0000437 214.9328 353.6823 1.00267269 605
Progress M-35
1 24851U 97033A 97223.09237125 .00000288 00000-0 10000-4 0 538
2 24851 51.6530 170.0358 0005162 27.5232 332.6098 15.59320936 5774
Iridium 15
1 24869U 97034A 97222.67732818 -.00007659 00000-0 -27414-2 0 660
2 24869 86.3997 171.3782 0006290 53.1673 306.9880 14.34280424 4699
Iridium 17
1 24870U 97034B 97223.22925500 -.00001582 00000-0 -57145-3 0 626
2 24870 86.4011 171.1491 0005664 80.8750 279.3066 14.34285467 4771
Iridium 18
1 24871U 97034C 97223.24183740 -.00000674 00000-0 -24745-3 0 688
2 24871 86.4135 171.1347 0003739 94.2950 265.8674 14.34285717 4774
Iridium 20
```

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1 24872U 97034D 97222.89941419 .00000157 00000-0 48815-4 0 638
2 24872 86.4001 171.2828 0006869 75.6633 284.5321 14.34275642 4728
Iridium 21
1 24873U 97034E 97221.39280049 .00000188 00000-0 22423-4 0 459
2 24873 86.3994 171.7688 0013746 126.5935 233.6551 14.77855745 4557
1997034F
1 24874U 97034F 97223.19127902 .00024335 -76462-6 16406-3 0 262
2 24874 82.7320 153.5306 0257383 232.4353 125.3304 15.41497554 5022
GPS BIIR-02
1 24876U 97035A 97220.80000000 .00000010 00000-0 00000+0 0 192
2 24876 54.9610 151.4880 0019873 243.8830 242.4690 2.00479875 376
1997035B
1 24877U 97035B 97222.85751105 .00149974 22315-5 33945-3 0 299
2 24877 37.6936 54.1559 0779508 308.6962 44.6510 14.42518634 2698
1997035C
1 24878U 97035C 97223.02239634 .00034001 -20823-6 80652-3 0 181
2 24878 38.9798 133.4633 6048741 210.6944 92.8657 4.05166535 747
Superbird C
1 24880U 97036A 97222.46478531 -.00000220 00000-0 00000+0 0 59
2 24880 3.0258 153.8315 2069439 179.5444 0.3601 0.70488900 90
1997036B
1 24881U 97036B 97208.38275017 -.00000700 00000-0 10000-4 0 14
2 24881 25.5468 147.4949 8707330 181.0048 173.5058 0.75212061 06
1997034G
1 24882U 97034G 97223.25410228 .00219669 00000-0 22072-1 0 217
2 24882 86.3038 170.6100 0078273 72.0589 289.0146 14.87876069 4850
OrbView 2
1 24883U 97037A 97221.57010761 .00051457 36878-5 19117-3 0 193
2 24883 98.2775 316.6454 0016099 217.2922 142.7232 15.88098735 1224
1997037B
1 24884U 97037B 97222.63604303 .00085221 53801-5 27682-3 0 101
2 24884 98.2758 317.9530 0011122 245.5043 114.5112 15.90763003 1397
1997034H
1 24885U 97034H 97221.92956780 .00056495 00000-0 76343-2 0 71
2 24885 86.3725 171.4728 0022825 92.0918 268.2917 14.78586488 3454
Soyuz TM-26
1 24886U 97038A 97222.89914613 .00001227 00000-0 21448-4 0 163
2 24886 51.6510 170.9954 0005419 11.0114 349.0754 15.59649618 837
1997038B
1 24887U 97038B 97220.57925646 .41560137 12671-4 26332-3 0 224
2 24887 51.6127 181.7271 0010058 230.2547 130.0191 16.53248678 484
1997038C
1 24888U 97038C 97219.24678963 .08698103 12165-4 15600-2 0 203
2 24888 51.6098 189.2396 0040438 83.4272 276.8999 16.29030627 268
STS 85
1 24889U 97039A 97222.89311473 -.00001775 10381-4 41979-5 0 104
2 24889 56.9963 61.3907 0008629 300.0778 176.3051 15.93073692 511
CRISTA-SPAS
1 24890U 97039B 97223.18671748 .00173015 21750-4 48615-3 0 169
2 24890 56.9976 60.0366 0007622 286.0110 74.0127 15.93275284 538
```

PAS 6
1 24891U 97040A 97221.74685525 -.00000921 10966-5 00000+0 0 76
2 24891 7.0227 234.7461 7310912 179.0797 113.9360 2.28263711 32
1997040B
1 24892U 97040B 97220.35922454 -.00000910 95027-6 00000+0 0 12
2 24892 7.1120 234.7565 7380576 178.8845 51.4323 2.19100067 01
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2223. NORAD Two-Line Orbital Element Set: Space Shuttle (97222.89311473)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-11 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5so4ri$at5@blackbird.afit.af.mil>
Source record: 18189

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 85
1 24889U 97039A 97222.89311473 -.00001775 10381-4 41979-5 0 104
2 24889 56.9963 61.3907 0008629 300.0778 176.3051 15.93073692 511
CRISTA-SPAS
1 24890U 97039B 97223.18671748 .00173015 21750-4 48615-3 0 169
2 24890 56.9976 60.0366 0007622 286.0110 74.0127 15.93275284 538
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2224. Re: Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: martin@tvl.com
Message-ID: <33eff699.1746477@news.helix.net>
Source record: 18190

I also saw the object tracking some distance behind on 9-Aug. However, didn't the Soyuz dock with Mir on 7-Aug??

Martin

On 10 Aug 1997 10:28:02 GMT, glueck@saturn.caps.maine.edu (Richard Glueck) wrote:

>Brian Gibbs (Brian@brimar.demon.co.uk) wrote:
>: During a visual observation of the MIR this evening, 22:22 hours
>: local,Sat 9th Aug, I spotted an object apparently tracking some distance
>: behind. Could this have been a Progress vessel about to dock, or is
>: there some other activity going on at present? Any information
>: gratefully received. I have an avid band of sky-watchers waiting to find
>: out more.
>
>Brian:
> Your bonus sighting was the Soyuz passenger spacecraft which is
>chasing MIR for a docking. THere is an undocking of a Progress M-25
>coming as well. Maybe you just saw another piece of the space station
>breaking off.....!
> I find it fascinating that during a power shortage, the ham radio
>link is being maintained.
>
> Dick, N1MDZ
>

2225. OH0-Exp on RS12

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: Anders W&#65533;ndahl <aw@lib.kth.se>
Message-ID: <33F0204E.62D@lib.kth.se>
Source record: 18191

```
Aland Island Expedition on RS12 - OH0/SM0HPL
--------------------------------------------

I will be active from OH0 (Aland Isl) on RS12 Aug 14th to 17th.
We will work some shorwave also, but I intend to try to be active
as many passages as possible.

The QTH is near the village Geta in the northern part of the island.
(60.40N 19.79E, QTH Loc JP90VJ).

Rig to be used: Index QRP+ running about 3 Watts to a dipole (21.2 Mhz)
Icom R71E and a Turnstyle (29.4 Mhz)

QSL 100% sure via buro

73's /See u

Anders OH0/SM0HPL
```

2226. MIR amateur radio page

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: Keith Zimmermann <keithz@austin360.com>
Message-ID: <33F0D6EE.66C83D8@austin360.com>
Source record: 18192

If you want to keep up with the latest on 2 meter packet activities
on-board the MIR,
then check out:
http://members.aol.com/k5wx/

Latest info is posted regularly.

73,

Keith, K5WX

2227. ARLK062 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk062.1997@arrl.org>
Source record: 18193
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK062
ARLK062 Keplerian data

ZCZC SK62
QST de W1AW
Keplerian Bulletin 62 ARLK062
From ARRL Headquarters
Newington, CT August 12, 1997
To all radio amateurs

SB KEP ARL ARLK062
ARLK062 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-85
1 24889U 97039A 97224.25000000 -.00001680 10394-4 43544-5 0 139
2 24889 56.9948 55.0995 0008889 307.3554 35.0598 15.93582345 732
CRISTA/SPAS
1 24890U 97039B 97224.69226116 .00172107 21717-4 47041-3 0 202
2 24890 56.9961 53.0546 0007665 292.6642 67.3460 15.93799364 775
AO-10
1 14129U 83058B 97223.00124903 .00000075 00000-0 10000-3 0 04983
2 14129 26.1012 132.6740 6052826 141.8919 282.2077 2.05879952078512
RS-10/11
1 18129U 87054A 97224.09106628 .00000014 00000-0 -92678-6 0 03887
2 18129 82.9227 197.4055 0013375 68.5287 291.7293 13.72380739507906
UO-11
1 14781U 84021B 97224.47878041 .00000094 00000-0 23757-4 0 9934
2 14781 97.8395 203.4727 0011439 177.9610 182.1645 14.69570972719529
RS-12/13
1 21089U 91007A 97224.57888058 .00000025 00000-0 96729-5 0 9995
2 21089 82.9215 236.8172 0030073 137.6452 222.7033 13.74084407326906
UO-14
1 20437U 90005B 97223.72605615 .00000014 00000-0 21919-4 0 02911
2 20437 98.5160 304.1861 0011910 46.9317 313.2857 14.29967496394150
RS-15
1 23439U 94085A 97224.03901731 -.00000039 00000-0 10000-3 0 02478
2 23439 64.8172 62.5310 0147752 121.6189 239.9249 11.27528432108239
```

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AO-16
1 20439U 90005D 97224.15874658 .00000027 00000-0 27289-4 0 01128
2 20439 98.5343 307.6656 0012087 46.8697 313.3501 14.30015101394236
RS-16
1 24744U 97010A 97224.09073773 .00001803 00000-0 61460-4 0 00857
2 24744 97.2703 128.0927 0005383 250.8450 109.2227 15.31651944024641
DO-17
1 20440U 90005E 97223.15960700 -.00000043 00000-0 21495-6 0 01576
2 20440 98.5392 307.5840 0011972 51.8443 308.3829 14.30157048394125
WO-18
1 20441U 90005F 97224.13823549 -.00000006 00000-0 14371-4 0 01094
2 20441 98.5379 308.4349 0012720 45.1616 315.0587 14.30124800394266
LO-19
1 20442U 90005G 97224.17098324 .00000004 00000-0 18340-4 0 01125
2 20442 98.5424 309.1700 0013346 44.9062 315.3201 14.30240319394297
FO-20
1 20480U 90013C 97223.93263111 -.00000027 00000-0 19872-4 0 09885
2 20480 99.0500 175.0474 0539943 251.2070 102.9732 12.83237962351856
AO-21
1 21087U 91006A 97223.95775921 .00000094 00000-0 82657-4 0 08660
2 21087 82.9381 10.2916 0036364 111.2742 249.2308 13.74584556327817
UO-22
1 21575U 91050B 97224.15553397 .00000028 00000-0 23512-4 0 08151
2 21575 98.2966 282.7130 0008665 81.8726 278.3438 14.37079605318528
KO-23
1 22077U 92052B 97223.95783978 -.00000037 00000-0 10000-3 0 07156
2 22077 66.0860 28.4661 0006222 197.1806 162.9003 12.86303054234920
KO-25
1 22828U 93061F 97224.18387709 .00000003 00000-0 18365-4 0 05578
2 22828 98.5382 297.4968 0011045 62.1588 298.0718 14.28186566170207
IO-26
1 22826U 93061D 97224.16303181 .00000003 00000-0 18583-4 0 05770
2 22826 98.5390 297.3910 0010054 78.1329 282.0990 14.27842721202076
AO-27
1 22825U 93061C 97224.19889235 -.00000017 00000-0 10618-4 0 05835
2 22825 98.5414 297.1637 0009583 75.9954 284.2283 14.27732509202060
FO-29
1 24278U 96046B 97224.13609811 -.00000057 00000-0 -23480-4 0 01190
2 24278 98.5340 257.7180 0352320 41.2820 321.4391 13.52632528048682
MO-30
1 24305U 96052B 97224.33041407 .00000204 00000-0 20364-3 0 1303
2 24305 82.9401 313.0988 0031375 52.1778 308.2207 13.73094891 46761
Mir
1 16609U 86017A 97224.18062817 .00003803 00000-0 53048-4 0 05209
2 16609 51.6526 164.5551 0004532 17.1976 342.9171 15.59664794655763

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
August 16, 1997, at 2230z on Baudot and AMTOR.
NNNN
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/EX

2228. NORAD Two-Line Orbital Element Set: Space Shuttle (97224.25000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5sqp1p$hou@blackbird.afit.af.mil>
Source record: 18194

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 85
1 24889U 97039A 97224.25000000 -.00001680 10394-4 43544-5 0 139
2 24889 56.9948 55.0995 0008889 307.3554 35.0598 15.93582345 732
CRISTA-SPAS
1 24890U 97039B 97224.00228045 .00175151 22080-4 48459-3 0 187
2 24890 56.9974 56.2558 0007666 289.2162 70.7947 15.93563895 661
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2229. Re: Object following Mir?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: dj0my@aol.com
Message-ID: <19970812191801.PAA25790@ladder02.news.aol.com>
Source record: 18195

Im Artikel <33eff699.1746477@news.helix.net>, martin@tvl.com (Martin Ortmayr) schreibt:

>I also saw the object tracking some distance behind on 9-Aug. However,
>didn't the Soyuz dock with Mir on 7-Aug??
>
>Martin

Yes it did !!! The object you can actually see following the MIR spacestation
is the old SOYUZ-TM wich was used by the previous crew. They had to remove it from the docking port to make place for the new crew with their SOYUS ship.

Best 73,

Oscar

2230. FS: For Sale Brand New 2M HTX-242

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bca743$e7647860$23022389@GGHERB.MONSANTO.COM>
Source record: 18196
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I am selling a brand new Radio Shack 2M Mobile unit, model HTX-242, cat#
19-1126. This unit only been turned on to be sure everything is fully
function. I anticipated getting my Tech License but have been unable to
motivate myself to do so. My attention is being focused on SWL. The price
is $200.00 and I will pay all shipping cost. I will accept Money Orders,
Bank Check, or sned COD if you prefer.

Gary-

Views expressed are my opinion and do not reflect those of my employeer

2231. FS: For Sale Brand New PRO-2045 inbox

Newsgroup: rec.radio.amateur.space
Date: 1997-08-12 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bca743$505f46c0$23022389@GGHERB.MONSANTO.COM>
Source record: 18197
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I have for sale a brand new PRO-2045 Scanner from Radio Shack in the box. I thought I'd be able to hook it all up but do not have the time and prefer to focus on SWL. The price is $200.00 and I will pay the shipping. I will accept a Money Order, Bank Check, or COD if your prefer.

Thanks,

Gary-

Views expressed are my opinion and do not reflect those of my employeer

2232. Re: moon landings

Newsgroup: rec.radio.amateur.space
Date: 1997-08-13 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <33F26405.32EA@iu.net>
Source record: 18198

Phil wrote:
> Probably saw the video "Capricorn One". I think that was the name of it.

with O. J. Simpson...

>
> The film actually showed how easy it was to fake something like that. I am sure
> with technology nowadays it would be very simple to do.

it's always been possible to fake it -- but if it was fake, there should
be a lot more proof around and a lot of people to keep quiet...

2233. KR500 Rotor problem

Newsgroup: rec.radio.amateur.space
Date: 1997-08-14 00:00:00 UTC
From: Henk-PA3GUO <pa3guo@amsat.org>
Message-ID: <33F31E0A.3BB@amsat.org>
Source record: 18199
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

My KENPRO KR500 (elevation) rotator normally stops turning/moving
at 0 and 180 degrees, the maximums.

Last week I was only able to move it from 30-60 degrees, since
yesterday it is even stucked at 35 degrees. I can hear the motor
being mechanically blocked.

It looks like a mechanical (brake?) problem.

Is this a know problem of the rotator ?
Does anyone know how to repair it ?

Please any reactions to : pa3guo@amsat.org

Many thanks,

Henk / PA3GUO

2234. ARLS027 SAREX team wins award

Newsgroup: rec.radio.amateur.space
Date: 1997-08-14 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls027.1997@arrl.org>
Source record: 18200
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS027
ARLS027 SAREX team wins award

ZCZC AS27
QST de W1AW
Space Bulletin 027 ARLS027
From ARRL Headquarters
Newington, CT August 14, 1997
To all radio amateurs

SB SPACE ARL ARLS027
ARLS027 SAREX team wins award

The Shuttle Amateur Radio EXperiment, or SAREX, program has won a NASA Group Achievement Award based on SAREX activities during the recent STS-94 shuttle Columbia mission. SAREX Principal Investigator Matt Bordelon, KC5BTL, received the award on behalf of the SAREX Working Group and others who supported the SAREX payload during the mission. These include AMSAT school mentors, ham volunteers who staffed the Johnson Space Center Customer Support Room during the mission (Will Marchant, KC6ROL, and Charles Sufana, AJ9N), the ARRL Educational Activities Department staff and other HQ staff members (Jennifer Gagne, N1TDY, and Rick Lindquist, N1RL), and ham volunteers from Johnson Space Center and the Johnson Space Center Amateur Radio Club.

JSC Director George Abbey presented the award during the STS-94 mission debriefing session at Johnson Space Center on August 12. Individual members of the SAREX team and those who helped support the SAREX mission will receive certificates for their role in the flight activity.

Three hams were among the members of the Columbia crew for STS-94: Jim Halsell, KC5RNI, the mission commander, Janice Voss, KC5BTK, and Donald Thomas, KC5FVF. The crew nominated the SAREX team for the award in recognition of ''all the planning, preparation, and execution required to perform these missions'' and ''to thank the people who made it happen,'' Bordelon said.

The citation reads: ''For your outstanding support during STS-94 that allowed us to contact 17 schools around the world and make multiple contacts with Mike Foale aboard the space station Mir.''

All 17 scheduled SAREX school contacts were successful, including the first-ever SAREX contact with students in the People's Republic

of China. In addition to contacting Foale aboard Mir, the hams aboard Columbia also made several random contacts with earthbound hams.

STS-94, the 24th SAREX mission, flew from July 1 until July 17. It was a ''refly'' of the aborted STS-83 mission in April.
NNNN
/EX

2235. ARLS028 KB5UAC/Mir activity

Newsgroup: rec.radio.amateur.space
Date: 1997-08-14 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls028.1997@arrl.org>
Source record: 18201
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS028
ARLS028 KB5UAC/Mir activity

ZCZC AS28
QST de W1AW
Space Bulletin 028 ARLS028
From ARRL Headquarters
Newington, CT August 14, 1997
To all radio amateurs

SB SPACE ARL ARLS028
ARLS028 KB5UAC/Mir activity

US astronaut Mike Foale, KB5UAC, continues to be sporadically active on Amateur Radio from the Russian Mir space station. Foale has been using 145.985 MHz while over the US, and the 145.200/800 MHz split pair elsewhere.

In a recent packet bulletin, Foale also said he expects his new Mir 24 crewmates, Anatoli Solovev and Pavel ''Pasha'' Vinogradov, to be active on the radio ''once they are settled in.''

The new crew members arrived August 7 aboard the ailing Mir to replace the Mir 23 contingent of Vasily Tsibliev and Alexander Lazutkin, who returned to Earth August 14. Foale will remain aboard Mir until September. ''We are conducting handover activities now,'' Foale related in his message. He said the team will prepare for a so-called ''internal space walk'' on August 20 to relocate power cables from the damaged Spektr module to Mir's Core module. A decision on whether Foale would get a chance to participate in a later space walk in September was pending this week. The Mir crew has been attempting to clear up vexing problems with its onboard oxygen-generation system.

''Lots to do here,'' Foale said in his hurried posting. ''I try to monitor each day.'' Foale has been experiencing problems with his TNC, which has been losing messages. A new TNC was to have been delivered along with the Mir 24 crew members, but that did not happen.

NASA, meanwhile, reports that Foale's scheduled replacement, astronaut Dave Wolf, KC5VPF, is undergoing intensive training in Russia in preparation for swapping places with Foale in late September.
NNNN

/EX

2236. callsign database

Newsgroup: rec.radio.amateur.space
Date: 1997-08-14 00:00:00 UTC
From: James Sawle <qmation@dial.pipex.com>
Message-ID: <01bca905$f1d797a0$6ff682c1@default>
Source record: 18202

Can anyone out there help me!

I have been trying to compile (as near as dam'it) a callbook on PC formatted CD-ROM.

This has been a very large task with around 70% of theUK entered and most USA states entered, but with the ever growing numbers of operators, etc, it will continue to be an ongoing project, so far 3 years down the line I have a CD-ROM with access to over 7.8 Million operators world wide.

I now wish to get this to a stage nearer publishing.

IF ANYONE CAN GET ME ANY CALLSIGN DATABASES IN DBASE3/4 FORMAT (PC BASED).

In return I will mail them (NOT E-mail but land mail, as it is TOO big) the curent version free of charge, and the finished version, later this year when it goes to press (FREE OF CHARGE), with a mention of your name and callsign (if applicable) for the help that you have given me to complete this task.

If anyone can help, please e-mail me on qmation@dial.pipex.com

All the best

James Sawle

2237. mode s dwncnvrtr ???'s

Newsgroup: rec.radio.amateur.space
Date: 1997-08-15 00:00:00 UTC
From: haydons@capstonebank.com
Message-ID: <871606899.29850@dejanews.com>
Source record: 18203

Have been browsing the internet looking for a Mode S downconverter.

HAs anyone built one of the down east uwave kits? Your impressions are
welcome, also anyone using a turnkey mode s converter please tell me
who
made it, where you got it and what you think of it.

Thank You!

Mike

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

2238. WTB: M^2 Oscar Beams

Newsgroup: rec.radio.amateur.space
Date: 1997-08-15 00:00:00 UTC
From: "Thom J." <n2rif@kwiknet.net>
Message-ID: <01bca996$0a84dfc0$e78d56cf@Kwiknet.ppp>
Source record: 18204

Hello All;
I am looking to purchase a good used - like new - set of satellite
beams. They are the M^2 2mtr 2MCP14 & M^2 70cm 436CP30
circular polarized oscar beams. If anyone has these antennas
please re me at n2rif@amsat.org
Best Regards.. From Thom J -73

2239. NORAD Two-Line Orbital Element Set: Space Shuttle (97227.35281399)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-15 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5t2l5fiqj1@blackbird.afit.af.mil>
Source record: 18205

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 85
1 24889U 97039A 97227.35281399 -.00001434 10413-4 48242-5 0 268
2 24889 56.9984 40.6939 0008540 309.3754 206.2277 15.94400902 1228
CRISTA-SPAS
1 24890U 97039B 97227.32582834 .00164037 20815-4 42854-3 0 339
2 24890 56.9959 40.8338 0007738 299.7902 60.2428 15.94663179 1191
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2240. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: chilinmex@aol.com
Message-ID: <19970816083601.EAA18772@ladder02.news.aol.com>
Source record: 18206

Hi. I was sondering if you could tell me where to get the stsplus v.9650 tracking program you mentioned, and what the system reqs. are. Any info would be appreciated. Thanks.

2241. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5t41rs$me8$1@news.mhv.net>
Source record: 18207

In article <19970816083601.EAA18772@ladder02.news.aol.com>, chilinmex@aol.com (CHILINMEX) wrote:
>Hi. I was sondering if you could tell me where to get the stsplus v.9650
>tracking program you mentioned, and what the system reqs. are. Any info
>would be appreciated. Thanks.

Go to http://www.dransom.com

For the latest version of the program and the latest orbital elements.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2242. IC-820H 9600bps

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: fiorito <fiorito@unikey.com.br>
Message-ID: <5t497c$fhl@ax.apc.org>
Source record: 18208

I need help to modificate my ICOM IC820H for 9600 bps reception in the
subband
to allow 9600 operation whith ko-23, k0-25 etc.
tks in advance
J. M. FIORITO (PY1WOO)

2243. $50,000 In 90 Days !!

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: wtcjr@inreach.net
Message-ID: <33f5b18c.0@news.inreach.com>
Source record: 18209

----------TO REPLY:----------
See bottom of this public notice for details....

*****ARE YOU READY AND WILLING TO MAKE OVER $50,000*****
**********DOLLARS IN THE NEXT 90 DAYS ????**********

You are about to witness, first hand, the most unique
and revolutionary money making program ever offered to
the general public !! This PROVEN business opportunity
offers the most POWERFUL and AFFORDABLE method of making
CASH MONEY from the comfort of your own home.

A MARKETING OPPORTUNITY LIKE THIS DOES NOT COME TO
EVERYONE IN A LIFETIME !!

CALL IT LUCK, CALL IT FATE, CALL IT ANYTHING YOU WANT,
THE FACT IS THAT YOU ARE NOW IN CONTROL OF YOUR FINANCIAL
FUTURE !!

IT IS TOTALLY UP TO YOU, AND ONLY YOU, WHETHER YOU WILL
MAKE THE FINANCIAL DECISION THAT WILL CHANGE THE WAY
YOU LIVE YOUR LIFE !!

IS THIS THE KIND OF OPPORTUNITY YOU'VE BEEN LOOKING FOR ?

TO FIND OUT, ANSWER THESE QUESTIONS :

1. Are you tired of your job, boss and the same old work ?

2. Would you like more money-to pay off debt, save, spend
any way you want, or to give to others ?

3. Would you like to be in business for yourself-to be your
own boss, better job, success, freedom ?

4. Would you like more leisure time-to travel, rest, play,
have time for yourself and your family ?

5. Would you like to work from home-at your own pace, with
no one telling you what to do ?

6. Would you like FINANCIAL FREEDOM ???

7. WOULD YOU LIKE TO GET STARTED WITH THE REST OF YOUR LIFE
IN A WAY THAT YOU NEVER DREAMED POSSIBLE !!

If you answered yes to the above seven questions you owe it
to your self and family to take advantage of this opportunity.

To receive additional information send e-mail to
autoresponder: carproinc@answerme.com
Type "info" in SUBJECT and TEXT.

2244. ARLK063 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk063.1997@arrl.org>
Source record: 18210
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK063
ARLK063 Keplerian data

ZCZC SK63
QST de W1AW
Keplerian Bulletin 63 ARLK063
From ARRL Headquarters
Newington, CT August 16, 1997
To all radio amateurs

SB KEP ARL ARLK063
ARLK063 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-85
1 24889U 97039A 97227.91666667 -.00001380 10424-4 48606-5 0 283
2 24889 56.9936 38.0868 0008856 301.2750 212.4339 15.94826364 1316
CRISTA/SPAS
1 24890U 97039B 97227.76461974 .00155433 19775-4 40345-3 0 356
2 24890 56.9941 38.7921 0008875 306.4470 53.5639 15.94785479 1260
AO-10
1 14129U 83058B 97223.00124903 .00000075 00000-0 10000-3 0 04983
2 14129 26.1012 132.6740 6052826 141.8919 282.2077 2.05879952078512
RS-10/11
1 18129U 87054A 97228.24676404 .00000027 00000-0 13084-4 0 3865
2 18129 82.9235 194.3349 0013399 56.9916 303.2524 13.72380992508473
UO-11
1 14781U 84021B 97226.99804630 .00000129 00000-0 29663-4 0 00084
2 14781 97.8398 205.8928 0011513 169.7971 190.3471 14.69571999719891
RS-12/13
1 21089U 91007A 97227.12747177 .00000021 00000-0 56044-5 0 00145
2 21089 82.9214 234.9267 0030128 130.6710 229.7072 13.74084368327255
UO-14
1 20437U 90005B 97228.20423873 -.00000006 00000-0 14329-4 0 2901
2 20437 98.5163 308.5677 0011946 34.3712 325.8247 14.29967783394796
RS-15
1 23439U 94085A 97227.05460141 -.00000039 00000-0 10000-3 0 02412
2 23439 64.8158 57.6529 0147674 120.9103 240.6433 11.27528386108570
```

```
AO-16
1 20439U 90005D 97227.16742597 -.00000010 00000-0 12926-4 0 00953
2 20439 98.5337 310.6142 0012112 37.8311 322.3721 14.30014970394669
RS-16
1 24744U 97010A 97227.16128853 .00002446 00000-0 82437-4 0 00736
2 24744 97.2697 131.1049 0005355 237.5015 122.5712 15.31668996025116
DO-17
1 20440U 90005E 97227.84708211 .00000016 00000-0 22710-4 0 840
2 20440 98.5344 312.1792 0011983 37.1732 323.0479 14.30158328394790
WO-18
1 20441U 90005F 97227.14668231 .00000009 00000-0 20176-4 0 01028
2 20441 98.5375 311.3851 0012652 38.0710 322.1370 14.30125216394691
LO-19
1 20442U 90005G 97227.17918603 .00000026 00000-0 26668-4 0 00999
2 20442 98.5416 312.1203 0013324 35.6664 324.5410 14.30240975394721
FO-20
1 20480U 90013C 97227.44117120 .00000005 00000-0 91270-4 0 9879
2 20480 99.0501 177.8967 0539827 243.2146 111.2769 12.83238229352301
AO-21
1 21087U 91006A 97228.25239221 .00000094 00000-0 82657-4 0 8431
2 21087 82.9388 7.1141 0036525 99.3710 261.1547 13.74584628328403
UO-22
1 21575U 91050B 97227.14944837 -.00000002 00000-0 13495-4 0 07977
2 21575 98.2961 285.5989 0008725 74.1164 286.0990 14.37079561318951
KO-23
1 22077U 92052B 97226.91233809 -.00000037 00000-0 10000-3 0 06966
2 22077 66.0881 22.2817 0006435 195.9982 164.0835 12.86303352235305
KO-25
1 22828U 93061F 97227.26646374 .00000001 00000-0 17523-4 0 5546
2 22828 98.5378 300.5097 0011070 54.9575 305.2644 14.28186836170641
IO-26
1 22826U 93061D 97228.22741973 .00000002 00000-0 18307-4 0 5757
2 22826 98.5396 301.3652 0010142 67.2461 292.9790 14.27843130202652
AO-27
1 22825U 93061C 97228.19351430 .00000005 00000-0 19268-4 0 5780
2 22825 98.5415 301.0694 0009735 67.3236 292.8986 14.27732696202631
FO-29
1 24278U 96046B 97227.09478324 -.00000087 00000-0 -53643-4 0 01132
2 24278 98.5335 260.2706 0352315 33.6132 328.6827 13.52631976049088
Mir
1 16609U 86017A 97228.21716891 -.00004945 00000-0 -54247-4 0 5229
2 16609 51.6542 144.2718 0005037 28.2185 331.9099 15.59733062656399

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
August 19, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2245. Re: ***LOOKING TO BUY A CHEAP HT***

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33f60b00.899705@news1.sympatico.ca>
Source record: 18211
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur,rec.radio.amateur.misc

On Fri, 08 Aug 1997 13:39:05 -0700, "Richard L. Tannehill, P.E."
<rickw7rt@ibag.com> wrote:

>> I am getting my ham ticket soon, and I am looking for a cheap HT. I can
>> spend $100 (I know it's not much, but I'm only 14 years old) (Don't worry,
>> my dad can make all the transactions). I am looking for a 2 meter HT, and
>> it would be a *big* plus if the radio if the radio is wide-band transmit,
>> or a mod that allows it. I live in the Philadelphia, PA area. Please
>> e-mail me if you have anyting.

>Three young people in the Phoenix area now have felony records because
>they used their "wideband", (opened up) ham HT's to transmit on police
>channels. The local authorities, the FBI, and the FCC agents, were not
>amused. I recommend that you purchase an HT with only wideband RECEIVE
>capability, and that you do not open it up for wideband transmit.

I always set my transceiver so that when you push PTT at outside hand
band, you transmit within the ham band. Just set your tranceiver so
that it transmits to the packet freqs or something.

>There are a number of older synthesized 2 meter HT's on the market for
>between $100 and $150. Be sure that it has programmable PL (CTCSS
>sub-audible squelch) built-in, or you may find the radio is not too
>useful in your area, depending on which of your repeaters also have PL.
>
>Good Luck with your new ticket! I hope you explore many of the areas of
>the hobby besides 2 meter repeater/autopatch operation. There are many
>more areas such as satellites, packet, HF DX'ing, ATV, etc. Although
>somewhat more expensive, I'm sure there are radio clubs in your area
>that would be willing to help you get started.
>
>Rick Tannehill, W7RT
>Committee Chair,
>Explorer Post 599 (W7BSA)
>Phoenix, Arizona

I was interested in wide band RX/TX transceiver, but no more. I get
too much intermods in big city. Radio Shack's HTX-202 and 404 are
some good choices. They don't get interfered much... well...
cheap HT ? you can buy a ADI's AT-600 dualband at $269 US or so at
present.

M@S@
Montreal, Quebec, Canada
E-mail : Masa@WriteMe.NOSPAMcom
URL : http://www.geocities.com/~masataka (General)
http://www.geocities.com/~masataka/main.htm (Radio)

2246. TEST TEST TEST TEST TEST

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <33f6305f.390579@news1.sympatico.ca>
Source record: 18212
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur

Please reply to me if you see this message. It seems my messages are
not going through the newsgroups.

Thanks in advance.

M@S@
McGill University Science Student
Montreal, Quebec, Canada
E-mail : Masa@WriteMe.NOSPAMcom
URL : http://www.geocities.com/~masataka (General)
http://www.geocities.com/~masataka/main.htm (Radio)

Remove "NOSPAM" to reply.

2247. * SpaceNews 18-Aug-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-16 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0818.1997@ampr.org>
Source record: 18213
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0818
* SpaceNews 18-Aug-97 *

BID: $SPC0818

=========
SpaceNews
=========

MONDAY AUGUST 18, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* RS-12 NEWS *
==============
Rusty, NM1K, reports that HK1HHX (Columbia, South America) and YV1DIG
(Venezuela) have been on RS12 mostly working CW for the past two weeks.
HK1HHX has also been heard on SSB, and some stations have attempted
SSB/CW cross-mode contacts, including VY1DIG. K2BSA was also heard
on RS12 from the recent Boy Scout Jamboree in Virgina.

* 9600 BAUD SATELLITE NEWS *
============================
UoSAT-5/OSCAR-22 is performing well in 9600 baud digital mode carrying a
great deal of packet gateway traffic. OSCAR-22 is currently transmitting
on a downlink frequency of 435.120 MHz using FSK modulation. Uplinks are
on 145.900 MHz and 145.975 MHz FSK. Raw telemetry captured from UO-22 by
KD2BD in New Jersey on 13-Aug-97 at 00:01:15 UTC using a homebrew 9600 baud
modem reads as follows:

UOSAT5-11>TLM:
19 20 49 1C 4D 1C 39 1C 58 1C 52 1C 5D 1C 00 10 00 10 39 1C 40 1C
48 1C 4E 0C 1A 20 06 00 00 00 0D 04 B2 06 55 04 04 06 0F 00 9E 03
1A 06 EC 09 07 0C B9 08 60 07 58 06 28 00 05 00 23 07 3E 08 75 00
00 09 1A FF

Frames containing ASCII status information captured from UO-22 on 13-Aug-97
include:

UOSAT5>QST:
TST: LF=TS970812,C IF=U5IW105A,C TN=0 DASH=UP FR=1468 HC=5 EC=8 MR=8,6

UOSAT5>QST:
SCTE : WAITARM.

UOSAT5>HITVER:
HIT V2.3 SYNC V1.2

UOSAT5>QST:
OAKX E:1 M:0 C:1 R:62 P:14 Y:-1364 YR:598 OX:-99 OY:-173 OZ:153 TX:0 TY:0 TZ:0

UOSAT5>SKED:
Sked 1.3 file:61be8 next:Wed Aug 13 12:00:00 1997

KITSAT-OSCAR-23 is also performing well in "Pacsat" duty. KO-23 has a
9600 baud FSK downlink on 435.175 MHz, and uplinks on 145.850 MHz and
145.900 MHz. Raw telemetry captured by KD2BD in New Jersey on 14-Aug-97
at 20:44:21 UTC reads as follows:

HL01-11>TLM:
2E 20 79 0A 2E 08 00 00 7B 00 7D 0C EC 09 0D 0E 19 0A 04 00 24 08
28 00 67 09 00 00 00 00 48 07 EE 07 02 00 ED 04 00 0E 48 05 08 05
04 05 92 04 18 07 88 07 00 05 00 02 00 02 00 08 00 0E 80 00 00 00
00 0F 00 00 10 D0

Frames containing ASCII status information that were also captured on
14-Aug-97 read as follows:

HL01>QST:
CPE:<33f36d46> [s4] ExpNo:62 FrameNo:7

HL01>HITVER:
HIT V2.17 PBP V2.06 DBP V1.01

HL01>QST:
EIS:<33f36e1e> [s4] Timer:0 TxEnable:1

HL01>QST:
SPIN9.98X4973.Z4100.H20.K1I1I5M0.L39.5W93.4E-7.52G-11.

HL01>QST:
DIST:|34|16|16|13|10|6.|2.9|1.4|0.23|5.85e-002|5.85e-002|0.|0.|0.|0.

HL01>QST:
DASHPRO v1.03 <33f36e2f> S-[00] D-[04]

The following birthday announcement was uploaded to KO-23 by HL0ENJ last
week:

From : HL0ENJ
To : All
Title : Happy birthday to KO-23!!!
==
Hello everyone

Yesterday was KO-23 5th birthday (Aug. 11th 1997yr).
Though the predicted lifetime of KO-23 is 5 years, her health is good so far!!
I congratuate her birthday and hope to be loved from many ham continuously.

73

From HL0ENJ

KITSAT-OSCAR-25 is performing well in "Pacsat" duty. KO-25 has a 9600 baud FSK downlink on 436.500 MHz, and an uplink on 145.980 MHz. Raw telemetry captured on 14-Aug-97 at 02:01:15 by KD2BD in New Jersey reads as follows:

HL02-11>TLM:
00 20 05 00 6C 08 E4 03 C8 01 B8 06 ED 05 07 04 7D 06 D9 05 E7 0A
78 00 DE 03 BD 06 33 04 0F 20 DE 06 06 00 70 0C 42 04 28 07 9B 06
36 04 73 00 68 0C 84 04 2D AF

Other captured frames containing ASCII status information include:

HL02>QST:
LEED:<33f266f2> Auto:Disabled, Exp.:OFF [s1] ExpNo:0 in Process

HL02>QST:
SPIN5.73X478.Z3805.H20.K1I1I5M0.L44.W61.8E-1.22G3.86

HL02>QST:
DIST:|79|16|4.7|0.|0.|0.|0.|0.|0.|0.|0.|0.|0.

HL02>QST:
DASHPRO:<33f10ac3> HIT M-[29] Normal:CCD I/F

HL02>HITVER:
HIT V2.17 PBP V2.06 DBP V1.01

HL02>QST:
EIS:<33f2670e> [s4] Timer:0 TxEnable:1

HL02>QST:
DASHPRO v1.03 <33f26736> S-[00] D-[04]

FUJI-OSCAR-29 was active in Mode JD last week at 9600 baud, but some of the beacon frames transmitted contained partial BBS directory listings. Beacon frames captured last week read as follows:

8J1JCS>BEACON <UI C>:

Total 6 File(s)

No. Date UTC To From Size Subject
0013 08/07 23:44 ALL LU1HKO 67 hello !!
0012 08/07 1
8J1JCS>BEACON <UI C>:
back, jas-2!!

8J1JCS>BEACON <UI C>:

JAS-2 '97/08/12 22:55:29
AC 03 63 28 00 F8 00 00 00 00
00 00 93 A0 6C 61 60 93 90 B0
AA 52 A8 01 EF A2 A8 A7 A5 A6

8J1JCS>BEACON <UI C>:
D5 02 00 09 00 00 DA 40 00 00

9C 3D 3E 50 74 AC AF 81 7D 80
00 00 00 98 82 B3 F7 00 00 00

8J1JCS>BEACON <UI C>:

User not connect.

* MIR NEWS *
============
Orbital Report On-Line reports that the Soyuz TM26 spacecraft was
successfully launched to the Mir space station on August 5 and docked
with the station two days later. The two-man crew (Solovyov and Vinogradov),
the 24th to take over permanent occupation of Mir, will be in charge of
performing an intravehicular activity (IVA) inside the depressurized Spektr
module on August 20 to reconnect electric supply cables to restore 70% of
the station's electrical power. An extravehicular activity (EVA) is
planned on September 3 to examine the exterior of the damaged Spektr module.
Possible repair of the breach in the module's hull will be assessed after
this EVA but will most probably be performed by Mir's 25th crew. The
23rd crew (Tsibliyev and Lazutkin) safely returned to Earth on August 14.
NASA's Space Shuttle Atlantis will be launched to Mir on September 27.
She will carry a replacement US crewmember (David Wolf) and logistics
to Mir.

* FEEDBACK/INPUT WELCOMED *
===========================
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-=-= Linux: The OS of global cooperation =-=-=-=-=-=-=-=-=-=-=-

2248. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33f6795e.40373299@news.capital.net>
Source record: 18214

On 16 Aug 1997 08:36:41 GMT, chilinmex@aol.com (CHILINMEX) wrote:

>Hi. I was sondering if you could tell me where to get the stsplus v.9650
>tracking program you mentioned, and what the system reqs. are. Any info
>would be appreciated. Thanks.

The information you require can be found at http://www.dransom.com/

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

2249. Thee Callsign Database

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: James Sawle <qmation@dial.pipex.com>
Message-ID: <01bcaaf1$35654200$e8f582c1@default>
Source record: 18215

Hello there,

Is there anyone out there that can help me with collecting callsign databases from around the world for a project that I have been doing for the last three years.

I have at the moment a database of Ham Radio Callsigns from the following areas:

UK about 60-70% complete
Northern USA about 30% complete
Southern USA about 40% complete
Europe about 40% complete
Asia about 20% complete
Australia about 5% complete

This database is in (PC Formatted) dBase 4 format and currently holds over 7.8 Million callsigns, names, addresses, locations, and notes if applicable.

What I am after is more information to enter into this database, If anyone can either e-mail a database with callsign information in dBase 3 or 4, or ASCII Text delimited. so that I can add the information to my database, in return I will send them the database as I have it so far (on CD-ROM), and when hopefully I can get to a stage where I can publish it, which I am aiming at later this year, I will send the the finished article FREE OF CHARGE later this year.

I look forward to hearing from you

All the best

James sawle
e-mail: qmation@dial.pipex.com

2250. transverter /HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: dic <dic@cdo.weblinq.com>
Message-ID: <33F6F249.7F0A@cdo.weblinq.com>
Source record: 18216

Hi fellow ham,

I'm gathering informations on how to work with uo-22. buying an all mode dual band transceiver is very expensive. I'm planning to purchase a transverter for either VHF and UHF. I have a two HF transceiver . One is Icom-721 and kenwood ts-430s. I need transverter which could be use in this HF rigs.
Anybody who could help me what transceiver should i buy. I need the brand and manufacturer.
Hope you could help.

73's dic..du9xa

2251. Re: ***LOOKING TO BUY A CHEAP HT***

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33fa0aaa.2496067@news.capital.net>
Source record: 18217
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur,rec.radio.amateur.misc

On Sat, 16 Aug 1997 20:19:39 GMT, masa@writemeNOSPAM.com (M@s@) wrote:

>M@S@
>Montreal, Quebec, Canada
>E-mail : Masa@WriteMe.NOSPAMcom
>URL : http://www.geocities.com/~masataka (General)
> http://www.geocities.com/~masataka/main.htm (Radio)
>_____

Look out! He's back, and probably still missed off.

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

2252. Doppler Shift Math

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcab23$69fc9fe0$6c60b6cd@cbx-nt>
Source record: 18218

What would the equation be to determine the radio frequency Doppler shift expected given a velocity and frequency and atmosphere. I am sure the Air we breath has a velocity factor. :-)

Thanks in advance.

--
Christopher Cox
KC8FRJ
TRA#4901

2253. Re: PH3D On The Way To Kourou? (News Update)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-17 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcab22$e052ece0$6c60b6cd@cbx-nt>
Source record: 18219
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy

Then might I say in a very mature way that you have a very socialist tone.

I think that the correct capitalist thing to do would be perhaps to let the organization bankrupt itself. I think the remarks being given are very deserved. When you spend money on something or someone that does not deliver, a bad reputation will come of it. Who wants to invest on a loser. 3D maybe a heck of a bird, but it needs wings. They trusted someone who did not come through.

On a subjective note, I would have told the ESA to build there own mass simulator. If they cannot work out the engineering in the first place to hand Amsat for a successful launch, what makes Amsat think they can be trusted at all..... Bad business.....

BTW I am not out any money myself, or if so very little. I joined Amsat but I hardly qualify as a major or minor contributor.

--
Christopher Cox
KC8FRJ
TRA#4901

2254. EZSATS?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: gsmith@michiana.org
Message-ID: <5ta6mv$14i$1@news.michiana.org>
Source record: 18220

The used to be a satellite schedule that was posted generally every
two weeks on packet called EZSATS. Is that still available, or is the
same data in a similar format available elsewhere?

EZSATS also had the Mir schedule.

Ttul, tnx es 73 de
Gary - KD6RXT
South Bend, IN - EN61vq
kd6rxt@juno.com
-k-

2255. Mir's in trouble again

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: KD1YV <jimkd1yv@eat_spam.and_die.ix.netcom.com>
Message-ID: <33F89297.36B0@eat_spam.and_die.ix.netcom.com>
Source record: 18221

I was about to ask the NG why I didn't hear Mir passes today, but when I logged on, there was a news article from the news feed that the main computer aboard Mir has shut down, and they are flying manually. They have cut power to all non-essential services, so it's a safe bet that includes the ham station.

Do you suppose it's time that they cut their losses and abandon ship?

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
With all of the problems Y2K is causing, we had better start now working on Y10K.
To reply to this e-mail, remove the eat_spam.and_die part of the address.

2256. Re: Mir's in trouble again

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: "Jim, KD1YV" <jimkd1yv@eat_spam.and_dir.ix.netcom.com>
Message-ID: <33F8D963.7A93@eat_spam.and_dir.ix.netcom.com>
Source record: 18222

Alan Biddle wrote:
>
> Lets see what a new fresh crew can do first. Keeping an old house, or
> old space station, operational takes a lot of TLC.
>
> Having said that, I am still chuckling over the latest MIR joke:
> There is good news, and bad news. The good news is that they located
> the parts to repair MIR. The bad news is that the Yugo factory sent
> them by UPS.
>
> For E-mail reply, change the .com at the
> end of the address given to .net

Alan,

I believe that this is more recent. The new crew arrived last week, but
the problem that I mentioned in my earlier post just occurred this
morning (Monday, 18 AUG 1997.)

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
With all of the problems Y2K is causing, we had better start now working
on Y10K.
To reply to this e-mail, remove the eat_spam.and_die part of the
address.

2257. NORAD Two-Line Orbital Element Set: Space Shuttle (97230.20833333)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5taj1e$b5j$1@blackbird.afit.af.mil>
Source record: 18223

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 85
1 24889U 97039A 97230.20833333 .00001262 10722-4 58553-5 0 365
2 24889 56.9957 27.3829 0009043 282.9594 102.5954 16.06870534 1681
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2258. NORAD Two-Line Orbital Element Sets (TLE047)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5tak0qbam1@blackbird.afit.af.mil>
Source record: 18224

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #047 -
Alouette 1
1 00424U 62049A 97226.06624793 .00000037 00000-0 32684-4 0 3108
2 00424 80.4618 226.4739 0024302 28.5411 331.7055 13.67900597740152
ATS 1
1 02608U 66110A 97229.58350521 -.00000032 00000-0 10000-3 0 326
2 02608 14.4701 348.2444 0007210 110.5330 249.6216 1.00299890 29141
ATS 3
1 03029U 67111A 97228.52856249 -.00000119 00000-0 10000-3 0 6813
2 03029 14.8779 355.2122 0011923 268.1507 146.6087 1.00273071109033
Starlette
1 07646U 75010A 97227.59355584 -.00000266 00000-0 -97765-4 0 778
2 07646 49.8254 273.9361 0205969 192.2313 167.3537 13.82191495137668
LAGEOS
1 08820U 76039A 97228.84558573 -.00000004 00000-0 00000+0 0 3118
2 08820 109.8174 171.8229 0042465 35.9452 324.3957 6.38664400241017
GOES 2
1 10061U 77048A 97228.51659144 .00000045 00000-0 10000-3 0 8652
2 10061 12.8938 32.2388 0010133 136.4938 166.9478 1.00252424 18706
IUE
1 10637U 78012A 97223.82845228 -.00000032 00000-0 10000-3 0 4059
2 10637 36.1396 76.8703 1368882 68.2959 180.5849 1.00055076 24143
GOES 3
1 10953U 78062A 97226.27617887 -.00000087 00000-0 10000-3 0 8329
2 10953 11.9173 35.3851 0003282 74.6890 202.6804 1.00271208 23295
SeaSat 1
1 10967U 78064A 97229.47353721 -.00000031 00000-0 34106-4 0 5976
2 10967 107.9948 336.8740 0001658 263.4691 96.6261 14.38182476 2731

```
Nimbus 7
1 11080U 78098A 97229.11072742 -.00000046 00000-0 -45726-5 0 6904
2 11080 98.8923 75.4089 0008235 261.5017 98.5205 13.83678019950070
GOES 5
1 12472U 81049A 97219.51825593 -.00000173 00000-0 10000-3 0 115
2 12472 8.8482 46.1041 0006074 81.7871 278.3721 1.00338719 17272
Cosmos 1383
1 13301U 82066A 97228.90487186 .00000036 00000-0 24593-4 0 6051
2 13301 82.9325 181.6508 0027993 143.3560 216.9598 13.68084691755586
LandSat 4
1 13367U 82072A 97227.93322927 -.00000014 00000-0 65662-5 0 912
2 13367 98.0171 270.4846 0005376 255.0684 104.9937 14.57206547802396
DMSP B5D2-1
1 13736U 82118A 97229.53968274 .00000046 00000-0 37468-4 0 2932
2 13736 98.6211 57.0211 0007714 222.8124 137.2457 14.25848027761829
IRAS
1 13777U 83004A 97230.03274187 -.00000057 00000-0 -89821-5 0 7482
2 13777 98.9725 52.5924 0013896 359.6143 0.5002 13.99284489413060
Cosmos 1447
1 13916U 83021A 97229.55166252 .00000008 00000-0 -80324-5 0 7006
2 13916 82.9424 235.6701 0039573 44.8869 315.5476 13.74358172722307
TDRS 1
1 13969U 83026B 97228.55941256 -.00000304 00000-0 10000-3 0 7802
2 13969 9.5741 39.5464 0004116 90.5879 347.6747 1.00274319 25650
GOES 6
1 14050U 83041A 97229.43316804 .00000058 00000-0 10000-3 0 7001
2 14050 7.7199 49.7377 0003804 80.5926 217.0445 1.00275270110466
AO-10
1 14129U 83058B 97229.79648762 -.00000085 00000-0 10000-3 0 4992
2 14129 26.1189 131.5466 6051151 143.7502 278.6430 2.05882285 78659
LandSat 5
1 14780U 84021A 97227.54198923 .00000001 00000-0 10364-4 0 6360
2 14780 98.2794 289.9549 0003659 58.2816 301.8741 14.57078505715751
UO-11
1 14781U 84021B 97228.49598772 .00000139 00000-0 31347-4 0 9945
2 14781 97.8387 207.3282 0011414 164.8761 195.2789 14.69572743720113
Cosmos 1574
1 15055U 84062A 97226.67132977 .00000043 00000-0 29812-4 0 8985
2 15055 82.9517 293.6064 0025964 242.1189 117.7541 13.73651363659120
Cosmos 1602
1 15331U 84105A 97229.62587391 .00000259 00000-0 27562-4 0 5821
2 15331 82.5323 73.4650 0020182 343.3131 16.7415 14.84913671696250
ERBS
1 15354U 84108B 97228.80576758 -.00000025 00000-0 19202-4 0 2970
2 15354 56.9951 117.1616 0002154 137.5492 222.5706 14.95061065700492
NOAA 9
1 15427U 84123A 97229.87651927 .00000074 00000-0 62295-4 0 2555
2 15427 98.9000 299.8306 0014667 180.7499 179.3645 14.13874448653920
Mir
1 16609U 86017A 97230.13927675 .00034032 00000-0 42070-3 0 5304
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2 16609 51.6540 134.6121 0004806 39.0681 321.0684 15.59781764656697
SPOT 1
1 16613U 86019A 97229.86746668 -.00000044 00000-0 00000+0 0 1025
2 16613 98.7907 301.9254 0002705 114.4752 245.6708 14.19997896280860
Cosmos 1766
1 16881U 86055A 97228.23996708 .00000237 00000-0 25601-4 0 4973
2 16881 82.5194 132.3323 0020442 18.7137 341.4830 14.83871818596878
EGP
1 16908U 86061A 97229.23532371 -.00000083 00000-0 10000-3 0 2012
2 16908 50.0111 127.1513 0011546 16.3688 343.7518 12.44416854169458
NOAA 10
1 16969U 86073A 97229.89371160 .00000049 00000-0 39328-4 0 1847
2 16969 98.5475 221.3177 0012395 184.3198 175.7877 14.25051977567379
MOS-1
1 17527U 87018A 97226.68339124 -.00000043 00000-0 00000+0 0 5777
2 17527 98.8926 284.1240 0017602 230.8495 129.1101 14.00483035534267
GOES 7
1 17561U 87022A 97212.89160272 -.00000136 00000-0 10000-3 0 3703
2 17561 3.8557 66.6982 0002634 321.9922 140.3087 1.00252378 21419
Kvant-1
1 17845U 87030A 97229.88300005 -.00011319 00000-0 -13246-3 0 1040
2 17845 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740590769
DMSP B5D2-3
1 18123U 87053A 97229.90741879 .00000068 00000-0 57209-4 0 196
2 18123 98.7622 59.0554 0015002 114.3131 245.9615 14.15487136524868
RS-10/11
1 18129U 87054A 97228.24676404 .00000027 00000-0 13084-4 0 3865
2 18129 82.9235 194.3349 0013399 56.9916 303.2524 13.72380992508473
Meteor 2-16
1 18312U 87068A 97222.82112880 .00000017 00000-0 18315-5 0 5836
2 18312 82.5491 19.2275 0013692 118.7798 241.4739 13.84101920504226
Meteor 2-17
1 18820U 88005A 97229.56241704 .00000023 00000-0 73383-5 0 3367
2 18820 82.5408 67.9202 0016379 164.4976 195.6686 13.84779344482530
DMSP B5D2-4
1 18822U 88006A 97229.50648709 .00000028 00000-0 30728-4 0 6004
2 18822 98.3842 47.2515 0005637 190.2226 169.8839 14.23236297495218
Glonass 34
1 19163U 88043A 97228.20719173 .00000033 00000-0 10000-3 0 2084
2 19163 65.4308 71.5258 0003688 187.6745 172.4230 2.13102412 71293
Glonass 36
1 19165U 88043C 97224.51096410 .00000013 00000-0 10000-3 0 6114
2 19165 65.4098 71.5941 0007301 352.7430 7.3964 2.13101880 71830
METEOSAT 3
1 19215U 88051A 97228.52299547 -.00000080 00000-0 00000+0 0 3296
2 19215 4.1098 65.5385 0005003 131.8874 228.4035 0.96947146 21300
OKEAN 1
1 19274U 88056A 97228.92909530 .00000230 00000-0 25443-4 0 1961
2 19274 82.5102 233.0313 0020240 157.9332 202.2762 14.82645456492456
Meteor 3-2
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1 19336U 88064A 97228.90670899 .00000051 00000-0 10000-3 0 5945
2 19336 82.5381 225.1637 0015693 252.7699 107.1706 13.16983007435519
Glonass 39
1 19503U 88085C 97226.41886688 -.00000023 00000-0 10000-3 0 4986
2 19503 65.4225 310.4068 0007631 139.6197 220.4916 2.13101875 69365
NOAA 11
1 19531U 88089A 97229.90159540 -.00000006 00000-0 21680-4 0 746
2 19531 99.1483 264.2984 0012444 119.3640 240.8776 14.13140421458719
TDRS 3
1 19548U 88091B 97218.74716799 -.00000203 00000-0 10000-3 0 2948
2 19548 3.3111 69.6583 0004017 328.8081 271.2788 1.00270221 19692
Glonass 40
1 19749U 89001A 97226.92546331 .00000030 00000-0 10000-3 0 7048
2 19749 65.3711 71.0648 0009016 251.6715 108.3119 2.13101406 66883
Glonass 41
1 19750U 89001B 97227.44943850 .00000032 00000-0 10000-3 0 6181
2 19750 65.4040 71.1264 0003832 224.5219 135.5306 2.13101729 66916
GPS BII-01
1 19802U 89013A 97223.94081045 -.00000024 00000-0 00000+0 0 4570
2 19802 55.4864 93.8709 0013840 184.0016 176.0833 2.00578593 62157
Akebono
1 19822U 89016A 97230.04853379 .00005306 00000-0 24734-3 0 9724
2 19822 75.0637 234.3458 3713277 141.8369 251.4933 7.99302387200640
Meteor 2-18
1 19851U 89018A 97228.82275820 .00000068 00000-0 47709-4 0 5814
2 19851 82.5192 301.6915 0012804 217.9736 142.0507 13.84437262427729
MOP-1
1 19876U 89020B 97228.76770119 -.00000145 00000-0 00000+0 0 2764
2 19876 2.8473 70.2879 0017158 292.9149 67.1495 0.97110709 10757
TDRS 4
1 19883U 89021B 97228.06415300 -.00000279 00000-0 10000-3 0 3544
2 19883 0.7343 86.8464 0002533 63.5406 156.2760 1.00273943203361
GPS BII-02
1 20061U 89044A 97228.27528641 .00000045 00000-0 10000-3 0 4467
2 20061 53.9339 268.8222 0174933 225.3133 133.3277 2.00562862 59987
Nadezhda 1
1 20103U 89050A 97228.23502957 .00000066 00000-0 54680-4 0 1451
2 20103 82.9625 155.2093 0037017 312.1111 47.6901 13.73881453407048
GPS BII-03
1 20185U 89064A 97229.97228437 .00000005 00000-0 00000+0 0 4724
2 20185 55.3411 94.0104 0035326 46.9610 313.4751 2.00565753 58594
GMS 4
1 20217U 89070A 97229.47534345 -.00000383 00000-0 10000-3 0 6165
2 20217 2.6364 73.1886 0000964 224.7536 319.1005 1.00264753 29699
INTERCOSMOS 24
1 20261U 89080A 97226.82830230 .00000251 00000-0 69881-4 0 6102
2 20261 82.5939 0.1056 1242108 158.2225 207.6816 12.47430935358727
GPS BII-04
1 20302U 89085A 97229.13775382 .00000038 00000-0 10000-3 0 4734
2 20302 53.1603 208.4461 0051151 195.6802 164.1636 2.00557146 57375
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Meteor 3-3
1 20305U 89086A 97229.43741472 .00000044 00000-0 10000-3 0 8780
2 20305 82.5456 189.8696 0008710 359.0509 1.0595 13.04436229373777
COBE
1 20322U 89089A 97228.84682040 -.00000310 00000-0 -16991-3 0 3284
2 20322 98.9294 242.5542 0008412 297.2481 62.7829 14.03461706396637
Kvant-2
1 20335U 89093A 97229.88300005 -.00011319 00000-0 -13246-3 0 9902
2 20335 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740439770
GPS BII-05
1 20361U 89097A 97226.16492569 -.00000023 00000-0 00000+0 0 2553
2 20361 56.2334 36.5914 0096772 144.3539 216.3353 2.00567730 46794
COSMOS 2054 (Altair-1)
1 20391U 89101A 97228.32168051 -.00000174 00000-0 00000+0 0 5491
2 20391 4.6304 60.7686 0001777 73.3788 286.8863 1.00258275 28264
SPOT 2
1 20436U 90005A 97229.21662646 -.00000044 00000-0 00000+0 0 2622
2 20436 98.7231 303.0766 0001183 110.8746 249.2558 14.20029956392302
UO-14
1 20437U 90005B 97228.20423873 -.00000006 00000-0 14329-4 0 2901
2 20437 98.5163 308.5677 0011946 34.3712 325.8247 14.29967783394796
AO-16
1 20439U 90005D 97229.19653414 -.00000001 00000-0 16275-4 0 868
2 20439 98.5329 312.6014 0012070 32.1511 328.0402 14.30015251394957
DO-17
1 20440U 90005E 97227.84708211 .00000016 00000-0 22710-4 0 840
2 20440 98.5344 312.1792 0011983 37.1732 323.0479 14.30158328394790
WO-18
1 20441U 90005F 97229.24559805 -.00000003 00000-0 15735-4 0 914
2 20441 98.5377 313.4442 0012667 31.9625 328.2316 14.30125291394998
LO-19
1 20442U 90005G 97229.20797395 .00000008 00000-0 19804-4 0 891
2 20442 98.5413 314.1105 0013262 30.0851 330.1096 14.30241048395017
GPS BII-06
1 20452U 90008A 97230.05406174 -.00000006 00000-0 10000-3 0 3612
2 20452 54.0669 149.3750 0053651 93.2197 267.3680 2.00569364 55372
MOS-1B
1 20478U 90013A 97228.26306363 -.00000044 00000-0 00000+0 0 709
2 20478 99.0825 297.4770 0005288 161.6082 198.5269 13.93978588303770
DEBUT
1 20479U 90013B 97221.36499669 .00000018 00000-0 11992-3 0 836
2 20479 99.0499 173.2364 0539664 256.2674 97.7816 12.83353489351547
FO-20
1 20480U 90013C 97227.44117120 .00000005 00000-0 91270-4 0 9879
2 20480 99.0501 177.8967 0539827 243.2146 111.2769 12.83238229352301
MOS-1B R/B
1 20491U 90013D 97228.14424785 .00000768 00000-0 15068-2 0 3708
2 20491 99.0255 256.2886 0470639 18.8509 342.9390 13.03007521357204
LACE
1 20496U 90015A 97229.20379995 .00001889 00000-0 58966-4 0 7812
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2 20496 43.1017 289.1039 0012512 307.6866 52.2853 15.37007721419358
Nadezhda 2
1 20508U 90017A 97228.55052811 .00000052 00000-0 39408-4 0 1455
2 20508 82.9538 289.3926 0042957 262.5866 97.0406 13.73525062374287
OKEAN 2
1 20510U 90018A 97230.24538730 .00000144 00000-0 16458-4 0 6050
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2 20580 28.4653 28.2359 0014484 76.1226 284.0968 14.86470248201676
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Kristall
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2 20635 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740410604
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2 20638 52.9884 193.0731 0011198 341.1404 18.9166 15.07659321396141
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2 20670 82.5433 8.9484 0016596 132.2984 227.9586 13.84129650360772
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Glonass 49
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2 21152 82.9257 191.5578 0040354 242.4464 117.2590 13.73549570321986
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Meteor 3-4
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2 21263 98.5377 242.2734 0013567 110.5838 249.6799 14.22740990325135
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TDRS 5
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2 21639 0.0474 102.9271 0003907 85.4759 149.5040 1.00271965 22117
Meteor 3-5
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Glonass 55
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TDRS 6
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2 22446 53.9370 269.6962 0101720 12.8384 347.4864 2.00554187 33064
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Glonass 61
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2 22700 54.1002 210.9402 0062515 9.0369 351.0602 2.00568857 30291
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2 22782 82.5514 13.7305 0020994 238.8949 121.0151 13.83078380199285
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2 22970 82.5587 319.0392 0014652 250.5347 109.4166 13.16829867171263
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Glonass 62
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GOES 8
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STRV-1B
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Nadezhda 4
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2 23549 143.3622 333.4048 0179905 165.1661 195.4421 15.27969257131417
GFZ-1
1 23558U 86017JE 97228.21714532 .00004556 00000-0 50379-4 0 2663
2 23558 51.6497 124.4384 0006072 33.5682 326.5698 15.65308470656516
ERS-2
1 23560U 95021A 97229.49811178 -.00000043 00000-0 10000-6 0 4227
2 23560 98.5450 303.4382 0001291 62.7798 297.3503 14.32248367121591
Spektr
1 23579U 95024A 97229.88300005 -.00011319 00000-0 -13246-3 0 7432
2 23579 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740128082
GOES 9
1 23581U 95025A 97229.43545473 .00000065 00000-0 10000-3 0 5377
2 23581 0.2735 271.8427 0002400 295.3908 140.7844 1.00285793 8192
Helios 1A
1 23605U 95033A 97229.74589628 .00000096 00000-0 27215-4 0 5907
2 23605 98.0837 165.7528 0001900 56.8228 303.3171 14.63861754112960
UPM SAT 1
1 23606U 95033B 97230.19525110 .00000188 00000-0 41814-4 0 2972
2 23606 98.1399 169.2259 0006775 281.0072 79.0382 14.67435053113335
CERISE
1 23607U 95033C 97229.20151514 .00000090 00000-0 24733-4 0 1978
2 23607 98.1410 167.9275 0005579 287.1600 72.9038 14.67040645113191
TDRS 7
1 23613U 95035B 97229.45060556 .00000080 00000-0 10000-3 0 3791
2 23613 1.5518 80.9236 0003636 48.6717 187.3350 1.00265977 7658
Glonass 74
1 23620U 95037A 97230.00156162 .00000029 00000-0 00000+0 0 3285
2 23620 64.8134 189.6977 0017951 173.9178 186.0763 2.13103105 16102
Glonass 75
1 23621U 95037B 97230.18013056 .00000029 00000-0 00000+0 0 3403
2 23621 64.8259 189.6962 0018188 184.9360 175.0194 2.13102329 16106
Glonass 76
1 23622U 95037C 97227.42225798 .00000044 00000-0 00000+0 0 3402
2 23622 64.8188 189.7874 0035957 168.9655 191.0971 2.13102684 16041
Prognoz-M2
1 23632U 95039A 97228.29655790 .00000590 00000-0 00000+0 0 1527
2 23632 70.8130 247.2390 7197854 333.5340 11.4120 0.26357151 1950
SICH-1
1 23657U 95046A 97228.90262202 .00000218 00000-0 29866-4 0 1895
2 23657 82.5343 168.6850 0029111 105.1644 255.2788 14.73570701105524
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RADARSAT
1 23710U 95059A 97226.87305687 .00000114 00000-0 61032-4 0 3032
2 23710 98.5789 233.5257 0001153 61.6256 298.5045 14.29982962 92796
Glonass 79
1 23734U 95068A 97227.54080649 .00000043 00000-0 00000+0 0 3293
2 23734 64.8181 189.7025 0018806 318.2191 41.6162 2.13102128 13014
Glonass 78
1 23735U 95068B 97230.05415264 .00000029 00000-0 00000+0 0 3091
2 23735 64.8116 189.6058 0008399 222.8647 137.0428 2.13124609 13068
Glonass 77
1 23736U 95068C 97227.30588143 .00000045 00000-0 00000+0 0 3046
2 23736 64.8045 189.7076 0008674 209.5612 150.3744 2.13102286 13001
XTE
1 23757U 95074A 97227.67739009 .00000552 00000-0 17103-4 0 1672
2 23757 22.9838 41.8199 0013638 101.9502 258.2505 14.97862978 89183
Polar
1 23802U 96013A 97228.87440844 .00000134 00000-0 00000+0 0 1529
2 23802 86.3823 21.4261 6523802 265.3990 23.1240 1.35670379 7351
1996010E
1 23824U 96010E 97230.05084533 .00007224 00000-0 90212-2 0 3056
2 23824 47.6442 114.4237 6775335 156.0929 262.0100 2.86610984 13535
GPS BIIA-25
1 23833U 96019A 97230.17897992 -.00000060 00000-0 00000+0 0 2211
2 23833 54.5874 330.5920 0025202 154.9003 205.2552 2.00565715 10248
Priroda
1 23848U 96023A 97229.88300005 -.00011319 00000-0 -13246-3 0 4315
2 23848 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740 75172
MSX
1 23851U 96024A 97230.10228441 -.00000047 00000-0 00000+0 0 2605
2 23851 99.4178 225.2245 0008619 65.9641 294.2418 13.97396638 67127
SAX
1 23857U 96027A 97230.18855905 .00001117 00000-0 34984-4 0 916
2 23857 3.9562 232.1280 0013731 84.9815 275.2028 14.91872294 71012
MSTI 3
1 23868U 96031A 97229.14624777 .00001276 00000-0 26786-4 0 1769
2 23868 97.1150 58.2609 0010353 55.1649 305.0567 15.47188988 70657
TOMS-EP
1 23940U 96037A 97228.24539117 .00002472 00000-0 10860-3 0 1404
2 23940 97.4146 134.4725 0011482 298.1083 61.8994 15.22816794 62284
GPS BIIA-26
1 23953U 96041A 97227.11077089 -.00000003 00000-0 00000+0 0 1818
2 23953 55.2291 91.2668 0027184 346.2497 13.7515 2.00577451 7973
ADEOS
1 24277U 96046A 97226.23302453 -.00000043 00000-0 00000+0 0 2108
2 24277 98.5942 302.7562 0002360 72.4599 287.6840 14.27025245 51646
FO-29
1 24278U 96046B 97229.09189061 -.00000063 00000-0 -28570-4 0 1002
2 24278 98.5337 261.9953 0352235 28.4518 333.5365 13.52631989 49359
FAST
1 24285U 96049A 97228.47217053 .00000808 00000-0 81944-4 0 1196
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2 24285 82.9949 10.9476 2204409 246.6844 88.7956 10.82310093 38940
1996049B
1 24286U 96049B 97223.81515097 .00001519 00000-0 15270-3 0 1298
2 24286 83.0094 13.3186 2202860 254.2474 80.6296 10.82772746 38442
Microsat
1 24291U 96050A 97229.27616464 .00040902 65949-5 34382-3 0 2666
2 24291 62.7916 296.0352 0495315 159.1980 202.9915 14.88805712 52029
MO-30
1 24305U 96052B 97228.70255864 .00000204 00000-0 20364-3 0 1313
2 24305 82.9386 309.8668 0031397 39.7641 320.5792 13.73095680 47365
GPS BIIA-27
1 24320U 96056A 97226.47310638 .00000001 00000-0 10000-3 0 979
2 24320 54.5317 271.2519 0048558 94.2948 266.2936 2.00557586 6627
SAC-B/HETE
1 24645U 96061A 97227.19045919 .00000517 00000-0 32939-4 0 880
2 24645 37.9743 229.6667 0047698 40.1209 320.3062 15.15120291 43015
ZEYA
1 24744U 97010A 97229.25185557 .00002744 00000-0 92166-4 0 676
2 24744 97.2692 133.1551 0005480 228.4827 131.5944 15.31682109 25434
DMSP B5D2-9
1 24753U 97012A 97229.78292994 .00000037 00000-0 43802-4 0 1431
2 24753 98.9303 273.9160 0008051 235.5708 124.4701 14.12993243 19082
MINISAT 01
1 24779U 97018A 97227.45539935 .00001490 00000-0 49176-4 0 327
2 24779 150.9722 152.9478 0014679 85.7478 274.4787 14.98369320 17416
CELESTIS
1 24780U 97018B 97226.35858210 .00001349 00000-0 34927-4 0 362
2 24780 150.9742 147.3499 0019935 74.5081 285.7738 14.99629673 17262
GOES 10
1 24786U 97019A 97229.50941723 -.00000115 00000-0 00000+0 0 991
2 24786 0.2547 275.8840 0001240 19.0855 110.2613 1.00272214 1178
Feng Yun 2B
1 24834U 97029A 97228.80237269 -.00000343 00000-0 00000+0 0 534
2 24834 1.0893 263.4047 0001402 279.1218 175.5266 1.00264763 671
Progress M-35
1 24851U 97033A 97230.07532347 .00012253 00000-0 15820-3 0 649
2 24851 51.6494 134.9400 0018162 125.3016 234.9679 15.59236874 6868
GPS BIIR-02
1 24876U 97035A 97229.10197577 -.00000009 00000-0 10000-3 0 239
2 24876 54.9341 151.1789 0023137 250.0276 109.7285 2.00529595 543
1997035B
1 24877U 97035B 97229.84343009 .00265372 29179-5 61976-3 0 386
2 24877 37.6923 16.2413 0763764 359.5201 0.4827 14.45728169 3703
1997035C
1 24878U 97035C 97229.91983082 .00042651 10689-5 10100-2 0 310
2 24878 38.9862 128.7687 6045344 216.7995 80.4977 4.05751439 1027
Superbird C
1 24880U 97036A 97229.53680045 -.00000261 00000-0 00000+0 0 100
2 24880 0.0559 201.0327 0022029 243.8180 218.4063 1.00322940 150
1997036B
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1 24881U 97036B 97212.35098576 .00022731 00000-0 23857-1 0 39
2 24881 25.6330 147.0643 8705992 181.6634 168.5372 0.75347648 26
1997034G
1 24882U 97034G 97230.23769711 .00383923 00000-0 32627-1 0 275
2 24882 86.2791 167.3089 0093991 60.1632 300.8949 14.92637689 5892
SeaStar
1 24883U 97037A 97229.20624969 .00009077 00000-0 14251-3 0 303
2 24883 98.2687 325.7005 0017448 199.0970 160.9641 15.53786224 2426
1997037B
1 24884U 97037B 97229.86651523 .00111280 73088-5 33174-3 0 162
2 24884 98.2744 326.7748 0012156 213.8620 146.1865 15.92366730 2540
1997034H
1 24885U 97034H 97230.25253853 .00026097 00000-0 35002-2 0 159
2 24885 86.3746 167.7157 0025242 70.1071 290.2866 14.79024234 4685
Soyuz TM-26
1 24886U 97038A 97229.88300005 -.00011319 00000-0 -13246-3 0 243
2 24886 51.6543 135.9022 0005015 32.5616 327.5695 15.59737740 1927
1997038B
1 24887U 97038B 97220.57925646 .41560137 12671-4 26332-3 0 224
2 24887 51.6127 181.7271 0010058 230.2547 130.0191 16.53248678 484
1997038C
1 24888U 97038C 97219.24678963 .08698103 12165-4 15600-2 0 203
2 24888 51.6098 189.2396 0040438 83.4272 276.8999 16.29030627 268
STS 85
1 24889U 97039A 97230.20833333 .00001262 10722-4 58553-5 0 365
2 24889 56.9957 27.3829 0009043 282.9594 102.5954 16.06870534 1681
CRISTA-SPAS
1 24890U 97039B 97227.76461974 .00155433 19775-4 40345-3 0 356
2 24890 56.9941 38.7921 0008875 306.4470 53.5639 15.94785479 1260
PAS 6
1 24891U 97040A 97224.90953395 -.00000137 00000-0 00000+0 0 106
2 24891 0.0534 356.5680 0077756 77.0116 170.7868 1.01411141 95
1997040B
1 24892U 97040B 97225.54016030 -.00001008 00000-0 -66462-3 0 33
2 24892 6.8858 233.8843 7337423 181.6457 182.5208 2.19294818 127
Cosmos 2345
1 24894U 97041A 97229.73973756 -.00000006 00000-0 10000-3 0 64
2 24894 0.0864 81.5393 0001674 48.9317 100.6937 1.00424924 109
1997041B
1 24895U 97041B 97228.69703704 .10609446 12619-4 90307-4 0 147
2 24895 53.1697 279.3531 0010433 254.9848 157.0509 16.51264563 301
1997041C
1 24896U 97041C 97227.22665091 .26229078 12362-4 11381-2 0 23
2 24896 53.1594 287.3864 0008292 239.7836 119.9217 16.42901904 34
1997034J
1 24898U 97034J 97229.85558857 .00097016 00000-0 11407-1 0 59
2 24898 86.3363 167.7275 0058112 65.8557 294.8701 14.83155872 5101
1997041E
1 24899U 97041E 97227.59863537 -.00000049 00000-0 00000+0 0 13
2 24899 49.3543 285.9128 7175434 356.4362 0.5829 2.31200202 25
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1997041F
1 24900U 97041F 97227.59864273 -.00000099 00000-0 00000+0 0 19
2 24900 48.8061 287.9372 7242390 352.4255 1.0076 2.31550142 13
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2259. * Amateur CW/Voice Satellite Frequencies for August 18, 1997 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-1808972200250001@cqt-pm3-098.dowco.com>
Source record: 18225
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ08.18
Amateur CW/Voice Satellite Frequencies for August 18, 1997.

BID: $FREQ0818
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CW

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
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use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse. Excellent reports on this satellite lately.

* Radio Sport-10's beacon, ROBOT and transponder remain silent. Bad news to report regarding the satellite:

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

Still no firm information as to what is wrong with the bird and why the problem occured. Let's pray that this report was a 'bad translation' from Russian to English.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater. Recently a station has been heard sending Packet on this satellite. This is frowned upon and not one of the recommended uses of this satellite.

AO-27 TEPR (Timed Eclipse Power Regulation) States are as follows
As of July 6, 1997
TEPR STATE Time TX Status
---

1 n/a OFF
2 n/a OFF
3 --- OFF

4 21 OFF
5 17 ON at Med Power
6 --- OFF

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time) ...

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5) ...

You should note that TEPR states 1,2 and 3 happen during the Night Time passes and TEPR states 4,5 and 6 happen during the Day time passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

The latest FO-29 Schedule:

Aug 1 (Fri) 08:17z JD1200
Aug 8 (Fri) 00:30z JD9600
Aug 15 (Fri) 01:08z JA
Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA

* Mir Simplex - Astronaut Mike Foale has been farily active, making the odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and the 145.985 simplex have been used. Please do not interrupt QSO's already in progress.

* Mir SAFEX Repeater - Not operational at this time.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

2260. rs-16 70cm beacon

Newsgroup: rec.radio.amateur.space
Date: 1997-08-18 00:00:00 UTC
From: shorton@juno.COM
Message-ID: <19970818.112038.4623.0.shorton@juno.com>
Source record: 18226

just tuned in on rs-16 70cm beacon(435.504+-dop.)....signals are
great.....arm chair copy ....pass was east of me over the Atlantic....not
very high above the
horizon.....time was 15:05z 8-18-97
de kd4esv el87rh samuel
bradenton florida 34205

2261. WANTED: 9600 baud mods FT-780R

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: eb5agv@ctv.es
Message-ID: <872001292.32727@dejanews.com>
Source record: 18129
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.space

Hello!

As title says, I'm looking for information about using the YAESU FT-780R
at 9600 baud. I want to use it as a receiver for a backup satellite
station, and perhaps for some terrestrial packet working.

Thanks and best regards.

73 JOSE - EB5AGV / EC5AAU
Valencia - SPAIN
http://www.geocities.com/SiliconValley/6992/

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2262. HAM WEB SITE

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33FA57C0.8A2CE57@cyberramp.net>
Source record: 18130

http://www.cyberramp.net/~rnewland

2263. FS: NOS, New Tubes

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5tdjvcpgq19@ha1.rdc1.occa.home.com>
Source record: 18131

NEW TUBES: New Old Stock (NOS)

1AD4 $2.20
1T4/DF91 $1.60
5R4WGB $4.00
5U4G USA $17.50
5U4G Russian $6.50
5V4G RCA $9.00
6AG7 RCA $4.00
6AS8 $2.50
6AZ8 Phillips $4.50
6BX7GT RCA (black plate)$7.10
6C8G $3.00
6CB6A $2.00
6EW6 $2.50
6F6 $5.00
6H6 RCA $1.25
6J6WB $1.50
6K8 $3.25
6L6WGB Phillips $19.00
6L6GC Russian $6.50
6X9/ECF200 $3.25
12AT7 Sylvania $5.00
12AX7 Westinghouse $9.00
12BA6 GE $2.75
39/44 RCA $2.50
84/6Z4 RCA $4.00
572B/T160L Centron $94.00
572B Chinese $65.00
809 $20.00
1626 Sylvania $3.00
JAN 5687 Tung-Sol $5.00
JAN 5751 GE $5.00
5751WB GE (black plate) $8.50
5829WA $5.00
5844 $2.50
5933(807W) Sylvania $11.00
6082A RCA (black plate) $10.50
JAN 6072 (black plate) $9.50
6146 GE $19.00
6146 Chinese $13.00
JAN 6922 Sylvania $5.00
7062/180CC Amperex $5.00
EL84/6BQ5 Sovtek $4.25

3-500Z Eimac $160.00
3-500Z Penta $105.00
3-500C Chinese $120.00

Shipping in USA, 1 to 6 tubes $4.00, 7 or more tubes free.
****
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
****
TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY,
FREE SHIPPING IN USA.

Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $675 ea

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
TEKTRONIX 465M 100MHz Oscilloscopes, reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $225
Power Design 6050A,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $200

****
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.

For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

2264. Re: Doppler Shift Math

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcacc7$1c0fd400$9860b6cd@cbx-nt>
Source record: 18132

Thanks!!!!

--
Christopher Cox
KC8FRJ
TRA#4901

Harry Kitchen <hkitchen@freenet.columbus.oh.us> wrote in article
<5tcjf2$29s@login.freenet.columbus.oh.us>...
> The change in wavelength divided by the emitted wavelength
> equals the velocity divided by light speed.
>
> There is also a relativistic correction, but I assume your
> source isn't going that fast. Hope this helps.
>
> Harry Kitchen
> hkitchen@netexp.net
> http://www.netexp.net/~hkitchen/
>
>
> Christopher Cox (cobox@netexp.net) wrote:
> : What would the equation be to determine the radio frequency Doppler
shift
> : expected given a velocity and frequency and atmosphere. I am sure the
Air
> : we breath has a velocity factor. :-)
>
>
>
> : Thanks in advance.
>
>
>
> : --
> : Christopher Cox
> : KC8FRJ
> : TRA#4901
> --
> Harry Kitchen <hkitchen@freenet.columbus.oh.us>
>
>

2265. Satallite recption (GOES)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: John Glaveskas <gip@dmv.com>
Message-ID: <33F9F83C.334C@dmv.com>
Source record: 18133

Does anyone know where I can fine a design for a Loop Yagi antenna for GOES 8/9 reception. Also can you obtain enough signal with a 3 foot dish from these new sat's.

Thank in andvance.

2266. Goes Satallite reception

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: John Glaveskas <gip@dmv.com>
Message-ID: <33F9F865.6239@dmv.com>
Source record: 18134

Does anyone know where I can fine a design for a Loop Yagi antenna for GOES 8/9 reception. Also can you obtain enough signal with a 3 foot dish from these new sat's.

Thanks in advance.

2267. Re: Doppler Shift Math

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: hkitchen@freenet.columbus.oh.us
Message-ID: <5tcjf2$29s@login.freenet.columbus.oh.us>
Source record: 18135

The change in wavelength divided by the emitted wavelength
equals the velocity divided by light speed.

There is also a relativistic correction, but I assume your
source isn't going that fast. Hope this helps.

Harry Kitchen
hkitchen@netexp.net
http://www.netexp.net/~hkitchen/

Christopher Cox (cobox@netexp.net) wrote:
: What would the equation be to determine the radio frequency Doppler shift
: expected given a velocity and frequency and atmosphere. I am sure the Air
: we breath has a velocity factor. :-)

: Thanks in advance.

: --
: Christopher Cox
: KC8FRJ
: TRA#4901
--
Harry Kitchen <hkitchen@freenet.columbus.oh.us>

2268. ARLK064 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk064.1997@arrl.org>
Source record: 18136
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK064
ARLK064 Keplerian data

ZCZC SK64
QST de W1AW
Keplerian Bulletin 64 ARLK064
From ARRL Headquarters
Newington, CT August 19, 1997
To all radio amateurs

SB KEP ARL ARLK064
ARLK064 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97229.79648762 -.00000085 00000-0 10000-3 0 4992
2 14129 26.1189 131.5466 6051151 143.7502 278.6430 2.05882285 78659
RS-10/11
1 18129U 87054A 97231.01722809 .00000028 00000-0 14421-4 0 04133
2 18129 82.9241 192.2874 0013403 50.3718 309.8603 13.72381130508851
UO-11
1 14781U 84021B 97230.94716401 .00000096 00000-0 24057-4 0 00111
2 14781 97.8392 209.6831 0011703 156.8161 203.3574 14.69573030720472
RS-12/13
1 21089U 91007A 97231.05957967 .00000054 00000-0 41094-4 0 00214
2 21089 82.9215 232.0112 0030224 119.7902 240.6264 13.74085078327795
UO-14
1 20437U 90005B 97231.21301692 -.00000023 00000-0 77923-5 0 03157
2 20437 98.5162 311.5104 0011825 26.1264 334.0519 14.29967807395221
RS-15
1 23439U 94085A 97231.57797461 -.00000039 00000-0 10000-3 0 2401
2 23439 64.8150 50.3378 0147632 120.0317 241.5341 11.27528447109089
AO-16
1 20439U 90005D 97231.22564329 -.00000051 00000-0 -31193-5 0 00987
2 20439 98.5330 314.5905 0011970 26.8054 333.3742 14.30014838395248
RS-16
1 24744U 97010A 97231.21174888 .00002753 00000-0 92423-4 0 00924
2 24744 97.2689 135.0765 0005714 217.9098 142.1746 15.31693318025736
```

```
DO-17
1 20440U 90005E 97231.20526754 -.00000014 00000-0 11138-4 0 01207
2 20440 98.5353 315.4739 0011916 27.2281 332.9530 14.30158098395277
WO-18
1 20441U 90005F 97231.20458756 -.00000042 00000-0 44160-6 0 01039
2 20441 98.5380 315.3668 0012613 26.4012 333.7824 14.30124863395274
LO-19
1 20442U 90005G 97231.23676076 .00000009 00000-0 20192-4 0 01028
2 20442 98.5414 316.1023 0013221 24.7635 335.4173 14.30241295395304
FO-20
1 20480U 90013C 97231.18364869 -.00000270 00000-0 -52794-3 0 9883
2 20480 99.0469 180.9411 0540404 234.6367 120.3105 12.83234585352783
AO-21
1 21087U 91006A 97231.45516888 .00000094 00000-0 82657-4 0 8445
2 21087 82.9386 4.7427 0036768 90.6899 269.8470 13.74584633328846
UO-22
1 21575U 91050B 97231.18774867 .00000000 00000-0 14115-4 0 07966
2 21575 98.2953 289.4905 0008798 63.0928 297.1157 14.37079980319536
KO-23
1 22077U 92052B 97230.87758745 -.00000037 00000-0 10000-3 0 06945
2 22077 66.0865 13.9793 0006258 195.5147 164.5680 12.86303386235815
KO-25
1 22828U 93061F 97231.18975385 -.00000001 00000-0 16779-4 0 05755
2 22828 98.5383 304.3475 0010973 42.4570 317.7452 14.28187150171205
IO-26
1 22826U 93061D 97231.17059697 -.00000009 00000-0 13876-4 0 05967
2 22826 98.5401 304.2432 0010172 58.5260 301.6920 14.27843197203073
AO-27
1 22825U 93061C 97231.20699676 .00000070 00000-0 45802-4 0 05946
2 22825 98.5415 304.0163 0009642 59.1005 301.1118 14.27733788203067
FO-29
1 24278U 96046B 97231.08899538 -.00000053 00000-0 -18964-4 0 01152
2 24278 98.5337 263.7199 0352228 23.2828 338.3837 13.52631958049623
MO-30
1 24305U 96052B 97231.18010706 .00000204 00000-0 20364-3 0 01447
2 24305 82.9376 308.0366 0031485 32.9968 327.3135 13.73095313047702
Mir
1 16609U 86017A 97231.16439363 .00040031 00000-0 49327-3 0 05364
2 16609 51.6547 129.4633 0005499 35.4619 324.6789 15.59784130656857

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
August 23, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2269. Re: Mir's in trouble again

Newsgroup: rec.radio.amateur.space
Date: 1997-08-19 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5taq6fpls3@news.mhv.net>
Source record: 18227

In article <33F8D963.7A93@eat_spam.and_dir.ix.netcom.com>,
jimkd1yv@eat_spam.and_dir.ix.netcom.com wrote:

>
>Alan,
>
>I believe that this is more recent. The new crew arrived last week, but
>the problem that I mentioned in my earlier post just occurred this
>morning (Monday, 18 AUG 1997.)
>
>--
>73 de Jim, KD1YV

I understand the main computer problem is solved and progress docked today.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2270. Re: PH3D On The Way To Kourou? (News Update)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-20 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <33fb76f1.3743050@news.mindspring.com>
Source record: 18137

rlong@magnus.acs.ohio-state.edu (Ron Long) wrote:

>In article <5snpfq$1g0_004@blpm01-239.mcn.net>, fiscus@mcn.net (Vince
>Fiscus, KB7ADL) wrote:
>
>> In article <5sfqm1$m5b$1@tilde.csc.ti.com>, mbv@ti.com (Ken Durham) wrote:
>> > Does anyone have an update? Is the satellite
>> >on route to Kourou for launch?
>> > Ken K5MBV
>> >
>>
>> Unfortunately Ken, Phase 3D is not going anywhere anytime soon. It is still
>> under construction in Orlando. The ESA wanted Phase 3D in Kourou August
>10th,
>> but that didn't happen. So now, in place of our satellite, the ESA wants us
>> to ship them the Phase 3D mass simulator (a concrete block), and they will
>> launch that into space in place of our satellite.
>> What this all means is that AMSAT paid the ESA over a MILLION dollars to
>> put a block of concrete in orbit. If you donated any money to the Phase 3D
>> project, then you got screwed by the ESA (just like the rest of us.) The
>> truth is that we don't know when P3D is going to be launched or even what
>> rocket it will be riding on. If I sound pissed... you're right.
>>
>> 73 de KB7ADL
>> Vince
>>
>> P.S. There is still a possibility that Phase 3D could be launched on
>502, but
>> that possibility looks remote at this time.
>
>All of us who donated to P3D knew, or should have known, that we were
>supporting the development of a very high risk project. I think that it
>will eventually be launched. But will it work as planned. Again a high
>risk. If it doesn't there will be lots of people who will say we should
>have done something else that they just KNEW would work. Second guessing.
>
>Vince, you have made your point so many times. Your attitude is not
>helpful and if I may say so is kind of immature.
>
>ron w8gus.

It might be a blessing in disguise. We do NOT even know if the rocket
will work. The first one did NOT. Whats makes us believe that the
second one will? I would prefer to go on a bird that works!! The idea
of talking to the Russians is a good one. But I guess we may have paid

already to go. If so we wait till they can get us on the next rocket.
It was THEIR mistake that made us miss this bird NOT OUR FAULT.
Or we could sue to reclaim our money and go to the Russians. If we sue
it will be BAD PUBLICITY for the europeans.

W4SCO
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

2271. Modeling Software

Newsgroup: rec.radio.amateur.space
Date: 1997-08-20 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <33fb6422.2315293@news.mindspring.com>
Source record: 18138

I am looking for computer software that will allow me to design and model an antenna that uses round yagi loops on either 4 or 8 foot booms for satellite work on 2m and 440 (for now) possibly 1.2g and 2.4g later.

Please email me directly if you know of any: sco@sco-inc.com
W4SCO
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

2272. Re: PH3D Launch Schedule

Newsgroup: rec.radio.amateur.space
Date: 1997-08-21 00:00:00 UTC
From: John Mock - KD6PAG <kd6pag@nospam.qsl.net>
Message-ID: <33FC9F6F.7966@nospam.qsl.net>
Source record: 18139

Ken Durham wrote:
>
> Haven't seen anything from AMSAT on this newsgroup
> in a while. Does anyone know if the concrete replacement
> module was delivered on time and what the latest launch
> schedule might be?
> We could have had the satellite carried around the world
> strapped to a 747 for the next five years for the amount
> spent on the launch that never happened.
> I would rather spend money on 6 or 7 AO-27 type
> FM repeater sats than any more of the packet(antique)
> sats too. (1200 baud, 9600 baud ....get real!)
>
> Ken K5MBV

As an avid user of AO-27, i would point out that one conventional transponder will carry alot more traffic than ten AO-27 type satellites. The problem is how to upgrade for a reasonable amount of money. Now, another FM bird or two might be a good thing. And perhaps we'll be lucky enough to have the MIR repeater back if they are successful in recovering solar power from the damaged module on MIR.

I think there may be a very good reason AMSAT is being very quiet about the status of P3D. I've seen that kind of thing happen in other contexts, and it often means that there may be sensitive negotiations going on behind the scenes. That's why city councils and other governmental bodies have to go into closed session to deal with certain issues. So silence at this point may not be a bad thing, and it's MUCH better than an announcement that it won't fly. ESA has been very good to us in the past, and there's no reason to think that they don't want to be that way now. But they are a multi-national organization and the politics, both internal and external, are likely to be quite complex.

I think the point that needs to be made at this point, is how much more beneficial to both organization it would be to deal slightly and fly something real. After all, the problem here is not the fault of either party; it's just something unexpected that came up. It would be truely a shame (and probably not such a good idea from an environmental standpoint) if they flew a block of concrete instead of an amateur satellite as a test payload. But look how much good publicity ESA would get if they flew something real. It would also demonstrate that even the amateurs can deal with the change in vibrations characteristics

on launch and provide additional confidence in their launch vehicle.

Let's cross our fingers (or do whatever rituals you prefer) that this bird will fly (and work) as planned in spite of the last minute complications.

-- KD6PAG (networking old-timer, RF newbie)

2273. RC850 software

Newsgroup: rec.radio.amateur.space
Date: 1997-08-21 00:00:00 UTC
From: Richard Norton <hp1yao@panama.c-com.net>
Message-ID: <01bcae86$6b0a0240$e5835fcc@dialinxx.phoenix.net>
Source record: 18140

Hi, I need the programming software for the RC850 repeater controller
I am on the board of directors for our radio club "Panama Canal Amateur
Radio Association" What we had got misplaced in the club officer shuffle.
Not sure the name of the software, but it is used from computer over phone
line to access system and program, please e-mail to hp1yao@panama.c-com.net
Thank's to all for any help in this area......Rick

2274. Whats the best TNC packet modem to use with WISP ????

Newsgroup: rec.radio.amateur.space
Date: 1997-08-21 00:00:00 UTC
From: Geert <zot@zot.nl>
Message-ID: <01bcae8a$153bed20$76b630ce@pass.glo.be>
Source record: 18141

Hello

Who can tell me whats the best TNC packet modem to use with WISP software ?

ALL INFORMATION IS WELCOM !!!!!!!!!!

Regards

73!

Geert, ONL2057

2275. Re: STSPLUS Tracking

Newsgroup: rec.radio.amateur.space
Date: 1997-08-21 00:00:00 UTC
From: frances@pbx.cised.unina.it
Message-ID: <33fc9a73.0@208.212.139.3>
Source record: 18142

I use LogSat Professional for Windows(http://www.logsat.com), and it's the best satellite tracking program I've ever seen. You can track hundreds of satellites at the same time! With just a couple of clicks you can put the STS and the Mir on the same map and track them.

Francesco

cyber357 <cyber357@nwol.net> wrote:>I'm using STSPLUS ver. 9650 tracking program. How do
>I display the Mir Space Station and Shuttle Discovery
>tracking at the sametime? I can only display the Mir
>or Discovery, but not both.
>
>Thanks,
>
>Steve Baker

2276. help: 2 rotor control questions

Newsgroup: rec.radio.amateur.space
Date: 1997-08-21 00:00:00 UTC
From: David Williams <david.w.williams@trw.com>
Message-ID: <33FCB22B.1C1F@trw.com>
Source record: 18143

I see references to a SASI Sat tracker that hooks to a PC parallel port.
Where might I get more info on this device. Is there an interface spec
available if I wanted to build my own interface that is compatable?

Is there a "standard protocol" for sat tracking programs' output?

Thanks for the help -David KF6IB

2277. Re: Goes Satallite reception

Newsgroup: rec.radio.amateur.space
Date: 1997-08-22 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33FD8060.2D7D@larc.nasa.gov>
Source record: 18144

I have been using a 2.5 foot diameter dish with a Quorum downconverter
for several years. The signals are noise free from GOES 8 or GOES 9,
and typically light 2 of the red signal strength bars (highest level is
red).
John WA4WDL
j.m.franke@larc.nasa.gov

2278. Amateur Radio In Space, Help Wanted!

Newsgroup: rec.radio.amateur.space
Date: 1997-08-23 00:00:00 UTC
From: chull87601@aol.com
Message-ID: <19970823174601.NAA23642@ladder02.news.aol.com>
Source record: 18145

After a break of almost three years from amateur radio activity, my interest is re-kindling and I am in search of new and interesting fields to explore.

I am aware that there is growing interest in space communications and would very much like to find out more. Unfortunately, after contacting my local club,
none pursued this particular area of interest.

I would greatly appreciate some advice, recommendations or directed reading for pursuit of this topic, and any fields of reseach or projects which may be applicable.

Yours faithfully,

Chris Hull, UK
G7 LMK

2279. TS 570

Newsgroup: rec.radio.amateur.space
Date: 1997-08-23 00:00:00 UTC
From: William <ost@ping.be>
Message-ID: <33FF4B00.224862B7@ping.be>
Source record: 18146
Cross-posted to: nl.radio.amateur,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.space,rec.radio.scanner

For the next field-day on 6-7 sept we have a permission to use 150W on
the 160m
Only our new Kenwood TS570 isn't giving that kind of power on 160m

Is anyone know how to modificate the TS570D to have 150W on 160m?

Thanks,

William

--
William Vynck
ONL4021
Secretaris
Unie van de Belgische Amateurzenders
Sectie OST
ost@ping.be - http://www.ping.be/ost

2280. Re: Did Foale make a patch call?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcb0af$5ddc1100$8895f5ce@wa6vse>
Source record: 18147

KD1YV <jimkd1yv@eat_spam.and_die.ix.netcom.com> wrote in article
<3400489F.647A@eat_spam.and_die.ix.netcom.com>...
> Yesterday (Sat, 23 Aug) on the pass over US NE at about 10:50, I caught a
message from
> R0MIR to WF1F. I didn't save the message, but the subject was something
like "Patch,
> ok" and the text something like "Ok, will try it for the pass near 1700
UTC today (2000
> dmt), thanks, Mike."
>
> I listened for the pass then (1218 EDT here), but heard nothing at all,
on either
> 145.985 or anywhere 144.000-146.000. I thought about scanning 440, but
had no idea at
> all where to start.
>
> Are U.S. amateurs conducting phone-patches for Mike Foale? If so, does
anybody have any
> idea what frequency they might use? Where on 440 would be a good place
to listen?

You may have heard a comment WRT their efforts to patch (as in repair)
the leak in MIR's hull caused by the accident a while back ...

Carl - wa6vse
wa6vse@fast.net

2281. what ariel for MIR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-24 00:00:00 UTC
From: Dave@omen.softnet.co.uk
Message-ID: <N.082497.190042.54@n70i173.c1r3.pol.co.uk>
Source record: 18148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Hi Thanks for reading this,
i have a limited amount of space, but would like to build an ariel for
listening to MIR on its passes ,what would be the best size effective ariel to
use ??
any info would be of great help best 73s

P.s please reply to my email address.......

--
it,s good to drink !!

2282. Re: what ariel for MIR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-24 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5tq7genen1@news.mhv.net>
Source record: 18149
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <N.082497.190042.54@n70i173.c1r3.pol.co.uk>, Dave@omen.softnet.co.uk wrote:
> Hi Thanks for reading this,
> i have a limited amount of space, but would like to build an ariel for
>listening to MIR on its passes ,what would be the best size effective ariel to
>use ??
> any info would be of great help best 73s
>
>
>P.s please reply to my email address.......

Almost any antenna will do to listen, even a whip on an HT or the
telescoping type on some scanners. 2 meter verticles work great as does
discones. Be warned that on the amateur radio frequencies you'll most likely
hear packet the vast majority of the time.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2283. Re: KR500 Rotor problem

Newsgroup: rec.radio.amateur.space
Date: 1997-08-24 00:00:00 UTC
From: "P.Jensen" <p.jensen@virgin.net>
Message-ID: <3400A741.7818@virgin.net>
Source record: 18150
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Henk-PA3GUO wrote:
>
> My KENPRO KR500 (elevation) rotator normally stops turning/moving
> at 0 and 180 degrees, the maximums.
>
> Last week I was only able to move it from 30-60 degrees, since
> yesterday it is even stucked at 35 degrees. I can hear the motor
> being mechanically blocked.
>
> It looks like a mechanical (brake?) problem.
>
> Is this a know problem of the rotator ?
> Does anyone know how to repair it ?
>
> Please any reactions to : pa3guo@amsat.org
>
> Many thanks,
>
> Henk / PA3GUOhi henk
i have mine stirpped down at present
i had the same problem it would not move at all
i found that the bearins had collasped
i am wiating to find out where i can get
some new bearings and replace them
it is very easy to strip down and replace them
if you need any more info email me
poul g7btp
p.jensen@virgin.net

2284. Ct17 and Icom transceiver controlled by a pc

Newsgroup: rec.radio.amateur.space
Date: 1997-08-25 00:00:00 UTC
From: massimom@ThePentagon.com
Message-ID: <34035bc2.2337546@news.tin.it>
Source record: 18151

i have to make a program to control my icom transceiver with my pc

i have also a ct 17 interface unit, but i have not any specification
of this unit (address port, what is the way to connect radio with pc
by software ecc.)

might someome help me sending some information or to find
specification and right to make a good software to connect my pc to
icom transceiver with ct-17 ?

thanks in advance , max

2285. NORAD Two-Line Orbital Element Sets (TLE051)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-25 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5tt5n5mto1@blackbird.afit.af.mil>
Source record: 18152

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #051 -
Alouette 1
1 00424U 62049A 97234.91652014 .00000048 00000-0 46500-4 0 3124
2 00424 80.4622 217.7397 0024183 6.1149 354.0288 13.67901278741364
ATS 1
1 02608U 66110A 97229.58350521 -.00000032 00000-0 10000-3 0 326
2 02608 14.4701 348.2444 0007210 110.5330 249.6216 1.00299890 29141
ATS 3
1 03029U 67111A 97236.35445162 -.00000133 00000-0 10000-3 0 6862
2 03029 14.8769 355.1258 0011918 268.6755 91.1905 1.00272760109111
Starlette
1 07646U 75010A 97235.90794536 -.00000088 00000-0 41401-4 0 795
2 07646 49.8258 241.1244 0205917 219.7397 138.8280 13.82193499138811
LAGEOS
1 08820U 76039A 97233.23014427 .00000002 00000-0 00000+0 0 3120
2 08820 109.8179 173.3253 0043059 35.2853 325.0570 6.38664487241298
GOES 2
1 10061U 77048A 97235.51412385 .00000030 00000-0 10000-3 0 8681
2 10061 12.9022 32.1813 0010144 136.4623 172.5659 1.00254722 18770
IUE
1 10637U 78012A 97223.82845228 -.00000032 00000-0 10000-3 0 4059
2 10637 36.1396 76.8703 1368882 68.2959 180.5849 1.00055076 24143
GOES 3
1 10953U 78062A 97236.42744850 -.00000103 00000-0 10000-3 0 8372
2 10953 11.9270 35.3100 0003206 110.9160 230.9047 1.00271331 23391
SeaSat 1
1 10967U 78064A 97233.85555185 -.00000047 00000-0 29078-4 0 5981
2 10967 107.9952 345.9423 0001749 265.8697 94.2244 14.38182981 3364

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1 11080U 78098A 97233.59396729 -.00000041 00000-0 53795-6 0 6916
2 11080 98.8919 79.6484 0008174 250.0975 109.9300 13.83677959950691
GOES 5
1 12472U 81049A 97219.51825593 -.00000173 00000-0 10000-3 0 115
2 12472 8.8482 46.1041 0006074 81.7871 278.3721 1.00338719 17272
Cosmos 1383
1 13301U 82066A 97232.92734988 .00000021 00000-0 65814-5 0 6060
2 13301 82.9324 178.7020 0028128 132.3558 227.9980 13.68084688756132
LandSat 4
1 13367U 82072A 97235.62375362 -.00000044 00000-0 -81029-7 0 931
2 13367 98.0171 277.8892 0005483 224.7219 135.3538 14.57204734803510
DMSP B5D2-1
1 13736U 82118A 97235.57461084 .00000043 00000-0 36236-4 0 2984
2 13736 98.6210 62.9582 0008029 202.3629 157.7201 14.25849130762682
IRAS
1 13777U 83004A 97237.04016369 -.00000232 00000-0 -12940-3 0 7555
2 13777 98.9735 59.4582 0013635 340.1903 19.8726 13.99281080414046
Cosmos 1447
1 13916U 83021A 97233.84697861 .00000028 00000-0 13067-4 0 7019
2 13916 82.9424 232.4923 0039460 33.1992 327.1623 13.74358462722890
TDRS 1
1 13969U 83026B 97236.05920569 -.00000317 00000-0 10000-3 0 7826
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GOES 6
1 14050U 83041A 97234.33899005 .00000049 00000-0 10000-3 0 7016
2 14050 7.7275 49.6931 0003286 95.0254 173.6456 1.00276992110512
AO-10
1 14129U 83058B 97231.73792699 -.00000152 00000-0 10000-3 0 5006
2 14129 26.1266 131.2143 6050746 144.3240 277.5843 2.05882447 78699
LandSat 5
1 14780U 84021A 97235.64516415 .00000042 00000-0 19472-4 0 6386
2 14780 98.2786 298.0053 0003560 42.3140 317.8335 14.57079744716931
UO-11
1 14781U 84021B 97237.00701248 .00000087 00000-0 22589-4 0 9968
2 14781 97.8409 215.5077 0011715 137.0618 223.1505 14.69574031721365
Cosmos 1574
1 15055U 84062A 97234.82938468 .00000089 00000-0 78791-4 0 9004
2 15055 82.9564 287.5950 0025969 219.1581 140.7716 13.73652326660248
Cosmos 1602
1 15331U 84105A 97234.07331456 .00000284 00000-0 30457-4 0 5831
2 15331 82.5320 69.2955 0019681 328.6730 31.3312 14.84915681696916
ERBS
1 15354U 84108B 97233.08512367 -.00000067 00000-0 15422-4 0 2989
2 15354 56.9954 100.0569 0002032 129.6921 230.4287 14.95062501701137
NOAA 9
1 15427U 84123A 97237.09476741 .00000100 00000-0 75977-4 0 2637
2 15427 98.8993 307.0137 0014997 160.2812 199.8944 14.13876164654941
Mir
1 16609U 86017A 97236.09766326 .00003109 00000-0 44297-4 0 5483
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Cosmos 1766
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1 16908U 86061A 97233.33130815 -.00000083 00000-0 10000-3 0 2026
2 16908 50.0124 114.5600 0011315 26.8241 333.3177 12.44416795169960
NOAA 10
1 16969U 86073A 97237.12563883 .00000020 00000-0 26920-4 0 1930
2 16969 98.5472 228.3648 0012831 162.4184 197.7437 14.25052898568407
MOS-1
1 17527U 87018A 97234.68506034 -.00000043 00000-0 00000+0 0 5794
2 17527 98.8900 291.9061 0017711 208.4958 151.5232 14.00481649535389
GOES 7
1 17561U 87022A 97236.49299005 -.00000163 00000-0 10000-3 0 3757
2 17561 3.8994 66.4677 0002961 265.9358 79.3381 1.00277080 21646
Kvant-1
1 17845U 87030A 97236.86649905 -.00002672 00000-0 -26291-4 0 1116
2 17845 51.6533 100.8013 0005160 59.2997 300.9897 15.59812183591853
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1 18123U 87053A 97237.11746079 .00000035 00000-0 40370-4 0 268
2 18123 98.7630 66.1421 0015234 94.5721 265.7189 14.15487723525881
RS-10/11
1 18129U 87054A 97232.40246114 .00000012 00000-0 -39686-5 0 3872
2 18129 82.9243 191.2628 0013384 47.3170 312.9110 13.72380957509041
Meteor 2-16
1 18312U 87068A 97234.96580422 .00000015 00000-0 -42307-6 0 5855
2 18312 82.5577 9.5997 0013916 87.5431 272.7322 13.84102534505903
Meteor 2-17
1 18820U 88005A 97237.07688429 .00000046 00000-0 27516-4 0 3430
2 18820 82.5401 61.9378 0017090 143.1300 217.1025 13.84779873483576
DMSP B5D2-4
1 18822U 88006A 97236.04462397 .00000011 00000-0 23069-4 0 6055
2 18822 98.3847 53.4823 0005942 169.3571 190.7734 14.23236741496147
Glonass 34
1 19163U 88043A 97235.71529079 -.00000011 00000-0 10000-3 0 2102
2 19163 65.4346 71.2737 0003691 183.7820 176.2727 2.13102444 71455
Glonass 36
1 19165U 88043C 97236.71166322 -.00000008 00000-0 10000-3 0 6147
2 19165 65.4097 71.1844 0008093 355.0410 5.0085 2.13101863 72099
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1 19215U 88051A 97234.71179421 -.00000137 00000-0 00000+0 0 3329
2 19215 4.1211 65.5036 0005073 131.5783 228.7378 0.96948296 21369
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1 19274U 88056A 97233.24837427 .00000188 00000-0 20298-4 0 1973
2 19274 82.5117 228.9881 0020731 143.7385 216.5235 14.82646973493090
Meteor 3-2
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1 19336U 88064A 97233.23706885 .00000051 00000-0 10000-3 0 5953
2 19336 82.5383 222.0983 0015596 241.9862 117.9687 13.16983280436088
Glonass 39
1 19503U 88085C 97236.27339123 -.00000052 00000-0 10000-3 0 5015
2 19503 65.4069 310.0751 0006615 140.5943 219.5186 2.13101824 69572
NOAA 11
1 19531U 88089A 97237.12355090 .00000050 00000-0 51388-4 0 833
2 19531 99.1489 271.6797 0012629 100.0895 260.1701 14.13141687459734
TDRS 3
1 19548U 88091B 97235.68333405 -.00000216 00000-0 10000-3 0 2976
2 19548 3.3432 69.5535 0005718 345.1371 248.5704 1.00266959 19864
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2 19749 65.3755 70.8103 0008214 251.0696 108.9006 2.13101371 67046
Glonass 41
1 19750U 89001B 97235.42680870 -.00000012 00000-0 10000-3 0 6211
2 19750 65.4146 70.8522 0005482 235.7363 124.2770 2.13101820 67084
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1 19802U 89013A 97235.90785788 -.00000041 00000-0 00000+0 0 4629
2 19802 55.5490 93.4009 0019622 144.3919 215.8044 2.00549718 62396
Akebono
1 19822U 89016A 97233.42786490 .00003823 00000-0 17690-3 0 9723
2 19822 75.0721 232.3541 3713698 139.2192 255.6164 7.99326211200911
Meteor 2-18
1 19851U 89018A 97233.23136961 .00000012 00000-0 -27025-5 0 5828
2 19851 82.5188 298.1747 0012947 205.5707 154.4811 13.84437008428337
MOP-1
1 19876U 89020B 97230.82895461 -.00000179 00000-0 00000+0 0 2781
2 19876 2.8495 70.3091 0017137 292.9205 67.7460 0.97111142 10770
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1 19883U 89021B 97228.06415300 -.00000279 00000-0 10000-3 0 3544
2 19883 0.7343 86.8464 0002533 63.5406 156.2760 1.00273943203361
GPS BII-02
1 20061U 89044A 97236.25249170 .00000004 00000-0 10000-3 0 4499
2 20061 53.9300 268.4909 0176066 225.2664 133.3381 2.00562773 60147
Nadezhda 1
1 20103U 89050A 97236.68300520 .00000037 00000-0 23753-4 0 1478
2 20103 82.9625 148.9818 0036746 288.3897 71.3265 13.73881329408203
GPS BII-03
1 20185U 89064A 97235.95500179 -.00000042 00000-0 00000+0 0 4772
2 20185 55.3491 93.7711 0032781 45.1725 315.1892 2.00565964 58715
GMS 4
1 20217U 89070A 97236.04615741 -.00000393 00000-0 10000-3 0 6213
2 20217 2.6634 73.4301 0001501 190.2482 205.0610 1.00259292 29764
INTERCOSMOS 24
1 20261U 89080A 97234.84973204 .00000193 00000-0 50676-4 0 6121
2 20261 82.5930 354.9817 1242337 140.0002 229.9642 12.47434081359720
GPS BII-04
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2 20302 53.1598 208.1551 0051029 196.6463 163.1520 2.00557227 57510
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1 20322U 89089A 97233.12431933 -.00000196 00000-0 -97583-4 0 3294
2 20322 98.9291 246.7526 0008199 284.0783 75.9470 14.03460905397238
Kvant-2
1 20335U 89093A 97236.86649905 -.00002672 00000-0 -26291-4 0 9977
2 20335 51.6533 100.8013 0005160 59.2997 300.9897 15.59812183440865
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2 20361 56.2392 36.2010 0096345 144.5838 216.0769 2.00567504 46991
COSMOS 2054 (Altair-1)
1 20391U 89101A 97230.31647985 -.00000179 00000-0 00000+0 0 5508
2 20391 4.6389 60.8198 0002808 112.5885 247.6455 1.00258277 28282
SPOT 2
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2 20436 98.7227 310.6464 0001295 100.8416 259.2945 14.20030658393395
UO-14
1 20437U 90005B 97236.74076823 .00000038 00000-0 31571-4 0 2922
2 20437 98.5161 316.9176 0011802 10.4129 349.7290 14.29968906396017
AO-16
1 20439U 90005D 97233.25475156 -.00000044 00000-0 -23764-6 0 877
2 20439 98.5331 316.5797 0011975 20.9097 339.2572 14.30014894395537
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1 20440U 90005E 97236.24254764 .00000009 00000-0 20143-4 0 865
2 20440 98.5364 320.4167 0011849 13.0677 347.0809 14.30158654395990
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2 20441 98.5343 317.9037 0012452 20.0840 340.0830 14.30125240395640
LO-19
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2 20442 98.5415 318.0936 0013174 18.9048 341.2619 14.30241094395597
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1 20478U 90013A 97236.66087033 -.00000044 00000-0 00000+0 0 724
2 20478 99.0837 305.7322 0006066 140.1825 219.9783 13.93978828304947
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1 20479U 90013B 97232.43543448 -.00000033 00000-0 38558-5 0 850
2 20479 99.0500 182.2338 0539552 231.1224 124.0562 12.83352817352963
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1 20480U 90013C 97236.48551475 .00000031 00000-0 14705-3 0 9908
2 20480 99.0525 185.2519 0540926 222.5668 133.2259 12.83238630353466
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1 20491U 90013D 97236.89716582 .00000734 00000-0 14477-2 0 3726
2 20491 99.0261 263.6246 0470226 358.3747 1.5802 13.03022567358340
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2 20508 82.9541 283.4286 0042975 239.0799 120.6127 13.73525490375390
OKEAN 2
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2 20510 82.5237 185.0338 0019168 352.3139 7.7758 14.78707694403415
GPS BII-07
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2 20533 54.2771 270.4027 0031113 50.6679 309.6285 1.91040410 54041
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2 20546 94.1054 239.1333 0052961 128.7276 231.8725 15.52862342411813
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Glonass 45
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2 20620 65.0028 309.1029 0009801 31.4353 328.6944 2.13102762 56566
Glonass 46
1 20621U 90045C 97236.39316844 -.00000052 00000-0 10000-3 0 199
2 20621 65.0062 309.1461 0013170 195.6900 164.3517 2.13102795 56578
Kristall
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2 20635 51.6533 100.8013 0005160 59.2997 300.9897 15.59812183411697
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2 20638 52.9906 144.3939 0011702 14.1602 345.9715 15.07664827397773
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1 20670U 90057A 97236.85184693 .00000057 00000-0 37684-4 0 3759
2 20670 82.5437 3.4362 0017216 114.3664 245.9292 13.84130237361731
CRRES
1 20712U 90065A 97236.03903515 .00000006 00000-0 41184-4 0 4808
2 20712 17.9764 72.8045 7184855 345.2391 1.6814 2.35937926 53339
GPS BII-08
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Feng Yun1-2
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2 20788 98.8233 233.4372 0016293 7.8466 352.2941 14.01424340356818
Meteor 2-20
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Glonass 47
1 21006U 90110A 97232.66302342 .00000001 00000-0 10000-3 0 9725
2 21006 65.3639 70.1915 0056948 189.3286 170.6314 2.13102310 52164
Glonass 48
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2 21008 65.3583 70.3014 0008132 270.8683 89.1189 2.13098671 52084
AO-21
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RS-12/13
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2 21089 82.9214 227.5825 0030696 103.8917 256.5654 13.74084630328611
MOP-2
1 21140U 91015B 97235.14539352 -.00000104 00000-0 00000+0 0 3711
2 21140 1.4231 79.1816 0002305 110.9664 184.3525 1.00274523 25931
Nadezhda 3
1 21152U 91019A 97235.93617355 .00000035 00000-0 21493-4 0 8345
2 21152 82.9242 185.2403 0040528 217.5555 142.2743 13.73550024323159
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1 21216U 91025A 97234.55702339 -.00000039 00000-0 10000-3 0 6363
2 21216 64.7361 308.5574 0010076 199.8605 160.1690 2.13103302 49714
Glonass 51
1 21217U 91025B 97236.03862892 -.00000050 00000-0 10000-3 0 334
2 21217 64.7225 308.4996 0009369 207.4496 152.5660 2.13101981 49733
Glonass 52
1 21218U 91025C 97236.14756609 -.00000050 00000-0 10000-3 0 5037
2 21218 64.7279 308.4705 0007104 7.3757 352.6815 2.13102823 49745
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2 21225 28.4568 79.3551 0004843 250.8793 109.1226 15.19305921236503
Meteor 3-4
1 21232U 91030A 97236.57777017 .00000051 00000-0 10000-3 0 37
2 21232 82.5357 66.3869 0013204 155.2532 204.9234 13.16477197304561
NOAA 12
1 21263U 91032A 97237.14234109 .00000104 00000-0 65388-4 0 4984
2 21263 98.5378 249.2953 0013854 91.2020 269.0746 14.22743209326161
OKEAN 3
1 21397U 91039A 97234.65582224 .00000150 00000-0 18068-4 0 2988
2 21397 82.5247 100.5467 0024598 68.4844 291.9002 14.76602546335035
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ERS-1
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2 21574 98.5460 311.0393 0001435 76.7339 283.4006 14.32249354319576
UO-22
1 21575U 91050B 97235.22604633 .00000020 00000-0 20703-4 0 7948
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SARA
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2 21578 98.3364 302.7491 0005934 55.1563 305.0181 14.39415140320410
TDRS 5
1 21639U 91054B 97236.59435059 .00000057 00000-0 10000-3 0 2019
2 21639 0.0632 101.5869 0002488 72.7608 198.1661 1.00274559 22207
Meteor 3-5
1 21655U 91056A 97233.85554361 .00000051 00000-0 10000-3 0 04
2 21655 82.5586 16.2909 0013169 169.8944 190.2424 13.16854636289355
UARS
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UFO F2
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Feng Yun 2B
1 24834U 97029A 97228.80237269 -.00000343 00000-0 00000+0 0 534
2 24834 1.0893 263.4047 0001402 279.1218 175.5266 1.00264763 671
Progress M-35
1 24851U 97033A 97236.86649905 -.00002672 00000-0 -26291-4 0 721
2 24851 51.6533 100.8013 0005160 59.2997 300.9897 15.59812183 7928
GPS BIIR-02
1 24876U 97035A 97236.08326220 -.00000025 00000-0 10000-3 0 264
2 24876 54.9335 150.8994 0023374 249.9204 109.8533 2.00529877 686
Superbird C
1 24880U 97036A 97237.20327384 -.00000278 00000-0 00000+0 0 183
2 24880 0.0437 275.1920 0003373 243.1378 32.4531 1.00278567 237
1997036B
1 24881U 97036B 97212.35098576 .00022731 00000-0 23857-1 0 39
2 24881 25.6330 147.0643 8705992 181.6634 168.5372 0.75347648 26
1997034G
1 24882U 97034G 97236.86363439 .00416879 00000-0 31043-1 0 387
2 24882 86.2793 164.1595 0092454 44.9383 315.7659 14.97618374 6885
SeaStar
```

```
1 24883U 97037A 97237.18227526 .00767686 00000-0 51912-1 0 453
2 24883 98.2311 334.5604 0013901 240.5318 119.5794 15.04025295 3645
1997037B
1 24884U 97037B 97235.64541036 .00125639 86635-5 34802-3 0 234
2 24884 98.2752 333.8402 0012193 197.0272 163.0751 15.93754623 3469
1997034H
1 24885U 97034H 97237.21952997 .00028459 00000-0 37678-2 0 196
2 24885 86.3686 164.5576 0024616 53.7228 306.6260 14.79573054 5717
Soyuz TM-26
1 24886U 97038A 97236.86649905 -.00002672 00000-0 -26291-4 0 319
2 24886 51.6533 100.8013 0005160 59.2997 300.9897 15.59812183 3012
1997038B
1 24887U 97038B 97220.57925646 .41560137 12671-4 26332-3 0 224
2 24887 51.6127 181.7271 0010058 230.2547 130.0191 16.53248678 484
1997038C
1 24888U 97038C 97219.24678963 .08698103 12165-4 15600-2 0 203
2 24888 51.6098 189.2396 0040438 83.4272 276.8999 16.29030627 268
PAS 6
1 24891U 97040A 97234.12657483 -.00000295 00000-0 10000-3 0 133
2 24891 0.0980 80.5164 0001434 84.3867 168.0358 1.00295855 180
1997040B
1 24892U 97040B 97230.06815512 .00002011 00000-0 99135-3 0 45
2 24892 6.8958 231.7966 7341106 185.4261 157.3131 2.19316189 221
Cosmos 2345
1 24894U 97041A 97236.75303234 -.00000271 00000-0 00000+0 0 184
2 24894 1.3090 284.5312 0362413 184.5831 113.9904 1.00135826 166
1997041B
1 24895U 97041B 97228.69703704 .10609446 12619-4 90307-4 0 147
2 24895 53.1697 279.3531 0010433 254.9848 157.0509 16.51264563 301
1997041C
1 24896U 97041C 97227.22665091 .26229078 12362-4 11381-2 0 23
2 24896 53.1594 287.3864 0008292 239.7836 119.9217 16.42901904 34
1997034J
1 24898U 97034J 97237.20605999 .00097479 00000-0 11042-1 0 134
2 24898 86.3349 164.3462 0060686 46.2433 314.3808 14.84571257 6197
1997041E
1 24899U 97041E 97227.59863537 -.00000049 00000-0 00000+0 0 13
2 24899 49.3543 285.9128 7175434 356.4362 0.5829 2.31200202 25
1997041F
1 24900U 97041F 97236.23388056 .00001246 00000-0 61082-3 0 59
2 24900 48.7877 285.5193 7245999 354.5583 0.7334 2.31611068 217
Agila 2
1 24901U 97042A 97236.72234094 -.00000216 00000-0 00000+0 0 75
2 24901 0.2790 253.8772 1207122 159.3542 310.8535 0.89840722 54
1997042B
1 24902U 97042B 97232.02927368 -.00000342 16136-6 00000+0 0 26
2 24902 24.6699 233.6936 7723353 178.5900 173.6853 1.78516926 05
Iridium
1 24903U 97043A 97236.92400375 -.00056136 00000-0 -40109-2 0 213
2 24903 86.6992 39.3477 0011589 223.5927 136.4369 15.04813791 581
```

```
Iridium
1 24904U 97043B 97236.99016176 .00000581 00000-0 38642-4 0 226
2 24904 86.6942 39.3173 0011977 219.6258 140.4100 15.04971385 597
Iridium
1 24905U 97043C 97237.18954030 .00000054 00000-0 14530-5 0 236
2 24905 86.6905 39.2264 0011926 217.3881 142.6525 15.05002810 626
Iridium
1 24906U 97043D 97236.92339376 -.00041452 00000-0 -29369-2 0 229
2 24906 86.6963 39.3425 0012349 219.4486 140.5861 15.05052427 589
Iridium
1 24907U 97043E 97236.92308289 -.00053653 00000-0 -37949-2 0 194
2 24907 86.6959 39.3442 0013040 220.6107 139.4123 15.05165093 578
1997043F
1 24908U 97043F 97236.65084678 .00210374 -10035-5 39457-3 0 126
2 24908 82.6318 37.8121 0243029 337.1355 21.9211 15.65079136 562
LMLV-1
1 24909U 97044A 97237.21346823 -.00863449 22073-3 -31441-2 0 118
2 24909 97.5654 131.3604 0013996 243.3998 116.5859 15.88264463 301
1997044B
1 24910U 97044B 97236.70879737 .00074658 43755-5 23716-3 0 76
2 24910 97.5652 130.7326 0009511 241.6979 118.3269 15.91233957 227
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2286. CQ (RADIO AMATEUR'S JOURNAL) 1 12 $8.56

Newsgroup: rec.radio.amateur.space
Date: 1997-08-26 00:00:00 UTC
From: walteddy@nbaf.com
Message-ID: <5ttfcd$t7k@camel2.mindspring.com>
Source record: 18153
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.broadcasting

(please note: if posted to moderated group please contact
walt@nbaf.com for removal)

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visit http://nbaf.com/magazines.html

2287. * Amateur CW/Voice Satellite Frequencies for 08.26.97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-08-26 00:00:00 UTC
From: ve7vdx@dowco.com
Message-ID: <ve7vdx-2608971232280001@cqt-pm2-064.dowco.com>
Source record: 18154
Cross-posted to: aus.radio.amateur.misc,uk.radio.amateur,rec.radio.amateur.space

```
SB freqs @ amsat $FREQ08.26
Amateur CW/Voice Satellite Frequencies for August 26, 1997.

BID: $FREQ0826
-----------------------------------------------------------------
Name Mode(s) Frequencies Beacon(s)

AO-10* B Uplink 435.030 - 435.180 CW/LSB
Downlink 145.975 - 145.825 CW/USB 145.810 CC*

RS-10/11* A Uplink 145.865 - 145.905 CW/USB
Downlink 29.360 - 29.400 CW/USB 29.357 CW

RS-12/13 KT Uplink 21.210 - 21.250 CW/USB
K Downlink 29.410 - 29.450 CW/USB 29.408 CW
T Downlink 145.910 - 145.950 CW/USB 145.910 CW

RS-15* A Uplink 145.858 - 145.898 CW/USB
Downlink 29.354 - 29.394 CW/USB 29.3525 CW 29.3987 CW

RS-16* A Uplink 145.915 - 145.948 CW/USB 435.504 CW 435.548 CW
Downlink 29.415 - 29.448 CW/USB 29.408 CW 29.451 CW

FO-20 JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

AO-27 J-FM* Uplink 145.850 FM
Downlink 436.792 FM

FO-29* JA Uplink 146.000 - 145.900 CW/LSB
Downlink 435.800 - 435.900 CW/USB 435.795 CW

MIR Simplex* Uplink 145.200 FM
Downlink 145.800 FM

Simplex 145.985 FM

SAFEX Repeater(Mir)*
Uplink 435.750 FM subaudible tone 141.3
Downlink 437.950 FM

SAREX Simplex (Space Shuttle)*
Uplink 144.910, 144.93, 144.95 144.97 or 144.99 FM
(Europe Only) Uplink 144.70, 144.75, or 144.80 MHz
(Worldwide) Downlink 145.55 FM

-------------------------------------------------------------------------------
* Amsat Oscar-10 has been reported to have an FMing signal. Please do not
```

use the satellite if the beacon frequency wavers, or if downlink signals chirp, warble, or drift irregularly. Such FMing occurs when sunlight strikes the satellite's solar cells at an unfavorable angle, resulting in insufficient power to the electronics. AO-10's batteries are dead, so the satellite shuts down during periods of eclipse. *CC = continuous, unmodulated carrier.

* Radio Sport-10's beacon, ROBOT and transponder remain silent. Bad news to report regarding the satellite:

Leonid Labutin, UA3CR, responded,
"Yesterday I had meeting with Alex Papkov at GCC. We talked about RS-10 and other problems. He thinks there is 1 - 2% of the possibility to restore RS-10. It will be clear after coming back one good expert in GCC from his vacation. Cross fingers....."

Still no firm information as to what is wrong with the bird and why the problem occured. Let's pray that this report was a 'bad translation' from Russian to English.

* Radio Sport-15 has battery charging problems therefore the transponder and beacon are silent when the satellite is in darkness. CW is the most effective mode for using this satellite. Where six months back RS-15 was self-switching all it's systems off soon after entering eclipse, then two months ago continuing to function well into shadow, RS-15's transponder and beacon is now switching off even when under solar cell battery charge in daylight. This effect is evidenced whenever high power uplink stations come up on the transponder. The satellite normally recovers within a few seconds, only to switch off again when the QRO operator(s) re-appear. The lesson to be learned is for users to improve their downlink reception, and NOT to increase their uplink power in order to hear (just) themselves. 100w erp is more than enough to produce an adequate signal from RS-15 on the single proviso that other users do not run more than this.

* Radio Sport-16 currently has its Mode A transponder turned off. Andy Mirinov RK3KPK reports that RS-16 "now has a new voice on CW". All beacon reports received by Andy of this latest Russian satellite will be answered by him with a QSL card.

* Please note Amsat Oscar-27 has a very sensitive receiver, I have routinely uplinked to it with a handheld on low power. On the other hand reception of the 70cm downlink signal is more difficult without a directional antenna most of the time. Therefore it is important to make sure that you can hear the satellite downlink before you transmit therefor avoiding interfering with others already on this one channel satellite repeater. Recently a station has been heard sending Packet on this satellite. This is frowned upon and not one of the recommended uses of this satellite.

AO-27 TEPR (Timed Eclipse Power Regulation) States are as follows
As of July 6, 1997
TEPR STATE Time TX Status
---

1 n/a OFF
2 n/a OFF
3 --- OFF

4 21 OFF
5 17 ON at Med Power
6 --- OFF

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time) ...

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5) ...

You should note that TEPR states 1,2 and 3 happen during the Night Time passes and TEPR states 4,5 and 6 happen during the Day time passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

* Fuji-Oscar 20 can also be used in mode JD (D meaning Digital), at time of writing this satellite was reported to be in Analog mode until further notice.

* Fuji-Oscar 29 can also be used in mode JD (D meaning Digital),the following schedule is a guide to satellite Mode availability. This schedule has been known to be amended with little or no notice by the ground control station.

The latest FO-29 Schedule:

Aug 22 (Fri) 08:26z JD1200
Aug 29 (Fri) 00:40z JD9600
Sept 5 (Fri) 01:18z JA
Sept 12 (Fri) 00:13z JD1200
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA

* Mir Simplex - Astronaut Mike Foale has been farily active, making the odd contact with radio amateurs on 2M. Both 145.800 down 0.600 split and the 145.985 simplex have been used. Please do not interrupt QSO's already in progress.

* Mir SAFEX Repeater - Not operational at this time.

Satellite Mode Descriptions for currently operational satellites:

Mode A: Uplink 2M
Linear Downlink 10M

Mode B: Uplink 70CM
Reverse Downlink 2M

Mode J: Uplink 2M
Reverse Downlink 70CM

Mode K: Uplink 15M
Linear Downlink 10M

Mode T: Uplink 15M
Linear Downlink 2M

This FAQ is being updated and re-released on a weekly basis on
or about Monday. Any constructive suggestions are always welcome.

The latest update of this list may be found at these locations:

Web.....http://www.umecut.maine.edu/~baack/freqguide.html
Newsgroups...rec.radio.amateur.space
....aus.radio.amateur.misc
....uk.radio.amateur
Mail List....amsat-bb@amsat.org

- errors or omissions to ve7vdx@dowco.com

/EX

--
Scott Leaf - VE7VDX (VHF-DX)
Coquitlam, British Columbia, Canada
Maidenhead Grid Locator CN89

2288. Test, do not read

Newsgroup: rec.radio.amateur.space
Date: 1997-08-27 00:00:00 UTC
From: s1w1a1n1@fox.nstn.ca
Message-ID: <5u005o$j8d$1@news.istar.ca>
Source record: 18155

It's just a test! There is no real information in this post.

2289. Re: KR500 Rotor problem

Newsgroup: rec.radio.amateur.space
Date: 1997-08-27 00:00:00 UTC
From: Allen Fugelseth <Allen.Fugelseth@lmco.com>
Message-ID: <34049328.1871@lmco.com>
Source record: 18156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

P.Jensen wrote:
>
> Henk-PA3GUO wrote:
> >
> > My KENPRO KR500 (elevation) rotator normally stops turning/moving
> > at 0 and 180 degrees, the maximums.
> >
> > Last week I was only able to move it from 30-60 degrees, since
> > yesterday it is even stucked at 35 degrees. I can hear the motor
> > being mechanically blocked.
> >
> > It looks like a mechanical (brake?) problem.
> >
> > Is this a know problem of the rotator ?
> > Does anyone know how to repair it ?
> >
> > Please any reactions to : pa3guo@amsat.org
> >
> > Many thanks,
> >
> > Henk / PA3GUOhi henk
> i have mine stirpped down at present
> i had the same problem it would not move at all
> i found that the bearins had collasped
> i am wiating to find out where i can get
> some new bearings and replace them
> it is very easy to strip down and replace them
> if you need any more info email me
> poul g7btp
> p.jensen@virgin.net

Have you tried to look for webpage from the manufacturer?
Try http://www.rotordoc.com. They used to be C.A.T.S. in Pemberville,
Ohio USA. They may be able to answer questions and supply parts.

Allen WB6RWU
allen@cruzio.com

2290. Re: 121.5 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-08-27 00:00:00 UTC
From: frussle@erols.com
Message-ID: <340733fc.7528097@news.erols.com>
Source record: 18157

On Wed, 27 Aug 1997 12:26:04 +0100, Dave Abernethy
<safemarine@dial.pipex.com> wrote:

>Problem.
>
>I have a system which listens out on 121.5 MHz for emergency beacons.
>The main purpose of this unit is to set off an alarm when a beacon is
>detected, so the appropriate action can be taken. It is primarily used
>offshore, where personnel wear mini beacons which are water activated.
>
>The main problem is that I have a large number of false alarms.
>
>In an effort to detect the source of these, I have addad an audio output
>circuit, so I can hear exactly what has triggered the alarm circuit. On
>90% of false alarms, the audio is voice, and sounds very like aircrew
>speech.
>
>Question.
>
>Has anyone out there ever had to deal with this problem before.
>
>Can anyone suggest an easy way of identifying the source ? (max 5
>seconds transmissions).
>
>can anyone suggest a way of eliminating these false triggers. (I don't
>want to be too selective, or a genuine beacon might be missed)

121.5 MHz is an internationally recognized emergency comm frequency.
Yes, it is used for ELTs and EPIRBs, but it is also used for other
stuff as well: Example: lost aircraft, military interceptions, lost
comm with Air traffic control, etc...

What did you really hope to accomplish by monitoring 121.5? ELTs
usually have an AM siren sound with modulation duty cycles approaching
100%. Speech is usually much less. Perhaps a circuit for minimum
modulation index might be appropriate?

73,

Jake Brodsky, mailto:frussle@erols.com
PP ASEL IA, Cessna Cardinal N30946, Based @ MD24
Amateur Radio Station AB3A

2291. WISP and TS-790 Problem

Newsgroup: rec.radio.amateur.space
Date: 1997-08-28 00:00:00 UTC
From: kn4cg@vci.net
Message-ID: <5u2kr2$67k@apple.telalink.net>
Source record: 18158

Anyone had a problem using WISP (W95 version) and the Kenwood TS-790A radio?
Mine updates the frequencies on transmit and receive just fine using the
KC tracker/tuner interface. It even sets the proper transmit mode. The
problem is it set the receive or sub receiver mode as AUTO everytime it
updates. Since the radio's AUTO mode selection is not what I want to use
everytime (example UO-22 receive on 435.120 FM but the radio selects USB
as the "proper" mode) does anyone have a cure.
Thanks in advance
Curtis
KN4CG

2292. Ap Note: Design of Precision Wideband Active Audio 90 Degree Phase Splitting Networks

Newsgroup: rec.radio.amateur.space
Date: 1997-08-28 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <3405C6EB.7B5C@webblabs.com>
Source record: 18159
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf,alt.ham-radio.marketplace

A new application note detailing the design of precision wideband audio 90 degree phase splitting networks can be found at:

http://www.webblabs.com/afdplus.htm

The note discusses in detail the operation of the professional AFDPLUS active filter design environment in the synthesis of user-specified quadrature generation electronics. A printed copy of the four-page ap note is available by mail upon request.

Kathy Goerg

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005

TEL 414.367.6825 FAX 414.367.6824
kgoerg@webblabs.com

2293. Re: 121.5 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-08-28 00:00:00 UTC
From: KF6BBL@qualcomm.com
Message-ID: <5u30is$10i$1@thefuture.qualcomm.com>
Source record: 18160

In article <4ecTGIAM7AB0EwGy@dial.pipex.com>,
Dave Abernethy <safemarine@dial.pipex.com> wrote:
>Problem.
>I have a system which listens out on 121.5 MHz for emergency beacons.
>The main purpose of this unit is to set off an alarm when a beacon is
>detected, so the appropriate action can be taken. It is primarily used
>offshore, where personnel wear mini beacons which are water activated.
>
>The main problem is that I have a large number of false alarms.
>
>In an effort to detect the source of these, I have addad an audio output
>circuit, so I can hear exactly what has triggered the alarm circuit. On
>90% of false alarms, the audio is voice, and sounds very like aircrew
>speech.
>
>Question.
>
>Has anyone out there ever had to deal with this problem before.
>
>Can anyone suggest an easy way of identifying the source ? (max 5
>seconds transmissions).
>
>can anyone suggest a way of eliminating these false triggers. (I don't
>want to be too selective, or a genuine beacon might be missed)

What your system needs is some intelligent decision making abilities. Right
now the decision is
'Any carrier = alarm'
Given your description of the false alarms, the easy way to solve it would be
'Any carrier longer than 5 sec. = alarm'
You didn't mention anything unique about the water activated mini beacons, so
I assume they are a Continuous Wave (CW) signal. If they have any type of
modulation on then, like an FM tone, you can also use that to make the alarm
decision.

I wanted to be warned when the 2 meter beacon from Hawaii could be heard here
in San Diego to let me know there is a VHF path opening. I took a 2m reciever
and tuned it to the beacon frequency. The squelch was set to a level I felt
the beacon should overcome when it appears. I took the speaker output to a
portable data logger that has some alarming capabilities. The logger was
programmed to pick up the phone line and dial my pager and display "144-170"
if there was any voltage present on the speaker output. For the next two days
I recieved about 10 false alarms. I created an new program for the logger that
had some more intelligence by looking at the speaker output for one minute,
and if the speaker output had any voltage swings for more than 30% of that

past minute, it then will page me. So far I haven't got any false alarms.

I don't know what your skill level is for homebrewing some sort of system to make the decisions, but you can do this (except for the pager part) with a simple Basic Stamp processor, or even a simple R-C type circuit. Either way, with a life saving system like this, test the heck out of it with real life scenarios before you depend on it!

Good luck to you,
-BP

Bill Paul KF6BBL San Diego, CA KF6BBL@qualcomm.com
Cinematronics Home Page ----> http://www.concentric.net/~Zonn/
Bill's Home page ----------> http://people.qualcomm.com/wpaul/
Disclaimer:
The above post is the opinion of Bill Paul, not Qualcomm Inc.

2294. live sex show

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: your_email@domain.address
Message-ID: <474310926398.5896728548@msgidabcxyz.com>
Source record: 18161

hot live sex shows
http://www.sexmansion.com

2295. Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: 106452, 657@compuserve.com
Message-ID: <3406b760.0@208.212.139.3>
Source record: 18162

Hi! I am an electronics and information technology student fascinated by satellites, tracking them and monitoring telemetry etc. I would be most grateful if someone could advise me how to start studying this subject as a hobby, e.g. any useful books to read and where I may get them from and other support. Thank-you.

2296. Re: what ariel for MIR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: Proctor Hymera <username@wavetech.net>
Message-ID: <01bcb4bb$fd0cf4a0$3a9192ce@default>
Source record: 18163
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

I'm confused. Are you talking about Ariel, the type of gazelle?, Ariel, the spirit servant of Prospero? Ariel, the moon of Uranus or Ariel, the little mermaid? I,m guessing the construction of any one of these to be either impossible or cost prohibitive.

joel <unit77@concentric.net> wrote in article
<3406C275.1751@concentric.net>...
> Dave@omen.softnet.co.uk wrote:

2297. Microsoft Space Simulator ver 1.0

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: J.Trout@exeter.ac.uk
Message-ID: <EFp235.JG8@exeter.ac.uk>
Source record: 18164

Does any know of a source where a copy of this program could be obtained ?
Microsft (UK) tell me it has been discontinued. Grateful for replies to
E-Mail: J.Trout@exeter.ac.uk.

2298. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2908971713230001@wd1v.mv.com>
Source record: 18165
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John Seney
http://www.mv.com/ipusers/wd1v

2299. Re: what ariel for MIR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-08-29 00:00:00 UTC
From: Joel <unit77@concentric.net>
Message-ID: <34078459.364C@concentric.net>
Source record: 18166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Proctor Hymera wrote:
>
> I'm confused. Are you talking about Ariel, the type of gazelle?, Ariel, the
> spirit servant of Prospero? Ariel, the moon of Uranus or Ariel, the little
> mermaid? I,m guessing the construction of any one of these to be either
> impossible or cost prohibitive.
>
> joel <unit77@concentric.net> wrote in article
> <3406C275.1751@concentric.net>...
> > Dave@omen.softnet.co.uk wrote:
I am also confused as to why you felt the need to include my name etc
in your childish reply.
Joel

2300. Pointer to Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-08-30 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-3008970829580001@wd1v.mv.com>
Source record: 18167
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

Oscilloscope.FAQ is located on
my home page.

If you'd like an Email version
sent to you as an attached text
file (50k), send an Email with
SCOPE FAQ on the SUBJECT LINE.

Best regards,

John Seney
http://www.mv.com/ipusers/wd1v

2301. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-08-30 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34084A76.2423@trader.com>
Source record: 18168

Douglas Stockman wrote:
> publishes a book entitled The Satellite Experimenter's Handbook, by Martin
> Davidoff, K2UBC which is another good reference.

And he _does_ mean reference. There's little real info in the book. Just intros and bibliographies. Good luck chasiing down citations. In fact, unless you've got lots of money and intend to buy everything off the shelf, it's difficult to find the info you need to "work the birds".
--
Teach! Testify!

2302. Amateur Radio Page

Newsgroup: rec.radio.amateur.space
Date: 1997-08-30 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <34087F76.3B7E7257@cyberramp.net>
Source record: 18169

http://www.cyberramp.net/~rnewland

2303. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-08-30 00:00:00 UTC
From: "Greg D." <gregd@jps.net>
Message-ID: <340911B4.6C10@jps.net>
Source record: 18170

Dennis Erwin Thurlow wrote:
>
> Douglas Stockman wrote:
> > publishes a book entitled The Satellite Experimenter's Handbook, by Martin
> > Davidoff, K2UBC which is another good reference.
>
> And he _does_ mean reference. There's little real info in the book. Just
> intros and bibliographies. Good luck chasiing down citations. In fact,
> unless you've got lots of money and intend to buy everything off the shelf,
> it's difficult to find the info you need to "work the birds".
> --
> Teach! Testify!

I guess I'm at a loss to understand what you're asking for. I found the book very informative as both a reference and a guide in improving both my operating procedures and my station itself. There are some clever ideas described in assembling a station on a budget which I employed successfully. The only thing the book doesn't give you is experience, but that can only be gained by getting on the air and actually trying.

Greg.

2304. Mars Lander Freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: ouisie@ripco.com
Message-ID: <5uae3jivc1@gail.ripco.com>
Source record: 18171

Would anyone out here happen to know the frequencies used by the Mars lander? I'm interested in dxing them and would like to know such things as data type, date xfer rates, etc...in addition to the freqs. I've already e-mailed nasa but so far, no reply...so I thought I'd check out here.

2305. Help FT-780R & satellites tuning

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: eb5agv@ctv.es
Message-ID: <873027241.1114@dejanews.com>
Source record: 18172
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.space

Hello!

I'm looking for information about how to connect a FT-780R (or a FT-480R) to a PC in order to do automatic doppler correction for satellite use. I would like to know if there is any way to digitally change the frequency (something similar to CAT system). The UP/DOWN system would work if I can send to the transceiver the correct starting frequency.

Thanks and best regards.

73 JOSE - EB5AGV / EC5AAU
Valencia - SPAIN
http://www.geocities.com/SiliconValley/6992/

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2306. Re: Mars Lander Freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: lawrenceh@ndirect.co.uk
Message-ID: <340b44f1.6261173@news-feed.ndirect.co.uk>
Source record: 18173

ouisie@ripco.com (Ouisie) wrote:

>Would anyone out here happen to know the frequencies used by the Mars
>lander? I'm interested in dxing them and would like to know such
>things as data type, date xfer rates, etc...in addition to the freqs.
>I've already e-mailed nasa but so far, no reply...so I thought I'd
>check out here.

I would expect that the weak signals from the Mars lander would not be
within reach of amateur equipment. The following page links to the
type of info that you want.

www.newspace.com/publications/casr/home.html

Lawrence Harris

lawrenceh@ndirect.co.uk
http://www.ndirect.co.uk/~lawrenceh/

2307. Re: 121.5 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: Mike Lussier kf4mqf <mlussier@erols.com>
Message-ID: <01bcb621$9db9b260$586eaccf@mlussier.erols.com>
Source record: 18174

There are no cures for these false alarms except for pilots to try and land
these large airliners more smoothly.
rough touchdowns are the cause of these alarms. Personally I have never set
one off when I have been out flying however I have heard them go off
myself. They are usually reset by the pilot as soon as the plane comes to a
stop.
If you are hearing allot of them then 1. you must live close to a major
airport or 2. you must live in the mountains.
The transmission range of an ELT is not very far for a ground search crew.
That is why there is air recon first to locate the area.

73
Mike KF4MQF

Dave Abernethy <safemarine@dial.pipex.com> wrote in article
<4ecTGIAM7AB0EwGy@dial.pipex.com>...
> Problem.
>
> I have a system which listens out on 121.5 MHz for emergency beacons.
> The main purpose of this unit is to set off an alarm when a beacon is
> detected, so the appropriate action can be taken. It is primarily used
> offshore, where personnel wear mini beacons which are water activated.
>
> The main problem is that I have a large number of false alarms.
>
> In an effort to detect the source of these, I have addad an audio output
> circuit, so I can hear exactly what has triggered the alarm circuit. On
> 90% of false alarms, the audio is voice, and sounds very like aircrew
> speech.
>
> Question.
>
> Has anyone out there ever had to deal with this problem before.
>
> Can anyone suggest an easy way of identifying the source ? (max 5
> seconds transmissions).
>
> can anyone suggest a way of eliminating these false triggers. (I don't
> want to be too selective, or a genuine beacon might be missed)
>
> Cheers
>
>
> --
> DaveA@Safemarine.co.uk

> --
> DaveA@Safemarine.co.uk
>

2308. ***Re: Don't use "***" header !!!!!***

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: Steve S <kf4nnq@hotmail.com>
Message-ID: <3409B1C6.3F36@hotmail.com>
Source record: 18175
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

M@s@ wrote:
>
> Seems many people started to use *** ..... *** headers. Please
> refrain. Now, I should change the style so that others can (or can't
> I should say !!) see my articles and.....
> ***Who died and made you internet boss?***

> ---
>
> M@S@
> Student @ McGill University Science
> Montreal, Quebec, Canada
> E-mail : Masa@WriteMe.NOSPAMcom
> URL : http://www.geocities.com/~masataka (General)
> http://www.geocities.com/~masataka/main.htm (Radio)
> ---
>
> Remove "NOSPAM" to reply.

2309. Re: PH3D On The Way To Kourou? (News Update)

Newsgroup: rec.radio.amateur.space
Date: 1997-08-31 00:00:00 UTC
From: rfm@worldnet.att.net
Message-ID: <wkn2lxbp02.fsf@worldnet.att.net>
Source record: 18176
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy

"Christopher Cox" <cobox@netexp.net> writes:

>
> Then might I say in a very mature way that you have a very socialist tone.
>
> I think that the correct capitalist thing to do would be perhaps to let the
> organization bankrupt itself.

Um, are you saying that there was never a Real Private (tm)
Corporation that didn't get a satellite in orbit on time?

--
Rich McAllister, KO6CL, rfm@worldnet.att.net

2310. Re: Mars Lander Freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-09-01 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <340A8DC3.36D@erols.com>
Source record: 18079

Ouisie wrote:
>
> Would anyone out here happen to know the frequencies used by the Mars
> lander? I'm interested in dxing them and would like to know such
> things as data type, date xfer rates, etc...in addition to the freqs.
> I've already e-mailed nasa but so far, no reply...so I thought I'd
> check out here.

Mars Pathfinder Communications

Downlink (MHz): 8427.222 MHz
8429.938 MHz

Data Streams: 1
Format: Biphase-L
Subcarrier Freq: 22.5, 360 kHz
Bit Rates: 5 - 19,908 b/s

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newsline-off@lists.newspace.com (to cancel an existing subscription)
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2311. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-09-01 00:00:00 UTC
From: Joel Stanley <jstanley@sun.science.wayne.edu>
Message-ID: <340ADB4C.A3299BA8@sun.science.wayne.edu>
Source record: 18080

Dennis Erwin Thurlow wrote:

> Douglas Stockman wrote:
> > publishes a book entitled The Satellite Experimenter's Handbook,
> by Martin
> > Davidoff, K2UBC which is another good reference.
>
> And he _does_ mean reference. There's little real info in the
> book. Just
> intros and bibliographies. Good luck chasiing down citations. In
> fact,
> unless you've got lots of money and intend to buy everything off
> the shelf,
> it's difficult to find the info you need to "work the birds".

Yeah, I noticed that problem with the book too. The Wx-satellite book isn't exactly chock full of information either. However, there is plenty of operational information available via e-mail. AMSAT runs two mailing lists, one which distributes Keplerian elements (to enable one to track a satellite), and the other with news and information about the satellites, _including the proper frequencies_.

Joel KC8DQH
http://www.umd.umich.edu/~jrstanle/index.html

2312. RS12

Newsgroup: rec.radio.amateur.space
Date: 1997-09-01 00:00:00 UTC
From: "R.S. Glines" <wq1t@amsat.org>
Message-ID: <340B54EC.5B1D@amsat.org>
Source record: 18081

Are you an RS12 satellite operator? If so look for me on RS12, I need the following states confirmed via RS12. AL, AK, KS, HI, ID, LA, RI, GA, DE, MS, NV, ME, OK, WV, NM, OR, KY, SD, UT, and WY.

73 de, Rich/WQ1T - wq1t@amsat.org

2313. Re: ***Re: Don't use "***" header !!!!!***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-01 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <340a35e1.22744186@news.capital.net>
Source record: 18177
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

On Sun, 31 Aug 1997 14:02:46 -0400, Steve S <kf4nnq@hotmail.com>
wrote:

>M@s@ wrote:
>>
>> Seems many people started to use *** ..... *** headers. Please
>> refrain. Now, I should change the style so that others can (or can't
>> I should say !!) see my articles and.....

>>>***Who died and made you internet boss?***

Geez, Look out! You'll get him missed off again.

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

2314. Phase 3D

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: rtregl@pa.net
Message-ID: <873245014.29679@dejanews.com>
Source record: 18082

Does anyone have the Keplerians for that block of concrete or the QSL info?? Ron

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2315. Re: 121.5 MHz

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: Dave Abernethy <safemarine@dial.pipex.com>
Message-ID: <ztmhqCAvyDD0EwF9@dial.pipex.com>
Source record: 18083

In article <01bcb56c$47a8c6f0$045a15ce@main>, "Gregory W.
Ratcliff" <gwr@edaind.com> writes

>try a better reciever before you attempt tone detection.
>
>Greg
>

I'm using a Wood & Douglas already

Any more suggestions ?

--
DaveA@Safemarine.co.uk

2316. Re: PH3D Launch Schedule

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5uhvktbae1@tilde.csc.ti.com>
Source record: 18084

In article <3407096F.192B@nospam.qsl.net>, kd6pag@nospam.qsl.net says...

The AMSAT news referenced below is from Aug 18th. What has happened
since then? Does anyone know? When things were going well, there seemed
to be a lot of self and mutual congratulations in this newsgroup and
elsewhere. Pretty low profile recently.

Ken K5MBV

>KD6PAG wrote:
>>
>>Let's cross our fingers (or do whatever rituals you prefer) that
>> this bird will fly (and work) as planned in spite of the last minute
>> complications.
>>
>> -- KD6PAG (networking old-timer, RF newbie)
>
>The latest AMSAT News includes a progress report on P3D, and i find
>this very encouraging:
>
> http://www.amsat.org/amsat/ftp/news/ans236.txt
>
>

2317. ARLK068 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk068.1997@arrl.org>
Source record: 18085
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK068
ARLK068 Keplerian data

ZCZC SK68
QST de W1AW
Keplerian Bulletin 68 ARLK068
From ARRL Headquarters
Newington, CT September 2, 1997
To all radio amateurs

SB KEP ARL ARLK068
ARLK068 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97243.87159401 .00000066 00000-0 10000-3 0 5027
2 14129 26.1644 129.1645 6047182 147.6657 270.6923 2.05880615 78946
RS-10/11
1 18129U 87054A 97245.37989134 .00000031 00000-0 17970-4 0 3903
2 18129 82.9250 181.6725 0012849 14.2195 345.9318 13.72381661510822
UO-11
1 14781U 84021B 97244.97331639 .00000130 00000-0 29678-4 0 00365
2 14781 97.8420 223.1635 0012665 113.0033 247.2510 14.69576525722536
RS-12/13
1 21089U 91007A 97245.47729377 .00000021 00000-0 58722-5 0 49
2 21089 82.9214 221.3170 0031005 81.1278 279.3385 13.74085023329778
UO-14
1 20437U 90005B 97245.27729465 .00000020 00000-0 24319-4 0 2942
2 20437 98.5159 325.2669 0011509 346.4145 13.6726 14.29969428397234
RS-15
1 23439U 94085A 97245.50286992 -.00000039 00000-0 10000-3 0 2434
2 23439 64.8130 27.8166 0147571 117.5252 244.0754 11.27528320110653
AO-16
1 20439U 90005D 97244.16994744 -.00000009 00000-0 13129-4 0 00948
2 20439 98.5318 327.2787 0011542 350.8364 9.2608 14.30016201397093
RS-16
1 24744U 97010A 97244.27738794 .00003703 00000-0 12314-3 0 720
2 24744 97.2674 147.8927 0006819 164.6618 195.4848 15.31765412 27735
```

```
DO-17
1 20440U 90005E 97245.19771031 -.00000014 00000-0 11428-4 0 885
2 20440 98.5360 329.2036 0011283 345.9935 14.0922 14.30158973397278
WO-18
1 20441U 90005F 97244.14789246 -.00000005 00000-0 14905-4 0 01050
2 20441 98.5346 328.0588 0012343 349.8205 10.2747 14.30126499397128
LO-19
1 20442U 90005G 97244.17901877 .00000004 00000-0 18321-4 0 01043
2 20442 98.5380 328.8023 0012368 348.6958 11.3947 14.30242271397152
FO-20
1 20480U 90013C 97244.90622956 -.00000051 00000-0 -39630-4 0 9928
2 20480 99.0525 192.0930 0540790 203.5656 153.9796 12.83238144354549
AO-21
1 21087U 91006A 97244.84856639 .00000094 00000-0 82657-4 0 8487
2 21087 82.9405 354.8338 0037332 54.2863 306.1757 13.74585358330686
UO-22
1 21575U 91050B 97244.13814684 .00000017 00000-0 19913-4 0 08147
2 21575 98.2931 301.9739 0008172 33.0590 327.1093 14.37081420321397
KO-23
1 22077U 92052B 97244.09508383 -.00000037 00000-0 10000-3 0 06967
2 22077 66.0829 346.2975 0005697 194.0609 166.0273 12.86303612237518
KO-25
1 22828U 93061F 97245.20149410 -.00000024 00000-0 75506-5 0 5585
2 22828 98.5366 318.0432 0010582 5.1727 354.9560 14.28188312173203
IO-26
1 22826U 93061D 97244.13458059 -.00000029 00000-0 56427-5 0 05908
2 22826 98.5401 316.9164 0009994 23.5022 336.6617 14.27843987204926
AO-27
1 22825U 93061C 97244.17198087 -.00000012 00000-0 12395-4 0 05933
2 22825 98.5410 316.6875 0009552 22.0836 338.0758 14.27733988204918
FO-29
1 24278U 96046B 97244.10712074 -.00000008 00000-0 28949-4 0 01140
2 24278 98.5323 274.9524 0351893 349.6266 9.7743 13.52632914051386
MO-30
1 24305U 96052B 97244.58800156 .00000204 00000-0 20364-3 0 1362
2 24305 82.9318 298.1196 0031871 355.9706 4.1178 13.73097348 49546
Mir
1 16609U 86017A 97245.45131501 .00005411 00000-0 72142-4 0 5695
2 16609 51.6522 57.6482 0005199 88.6261 271.5294 15.59899183659088

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
September 6, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2318. Re: M.Jackson

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5uhvrh$f35$1@tilde.csc.ti.com>
Source record: 18086
Cross-posted to:
nl.radio.scanners,nl.radio.amateur,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.space,rec.radio.scanner

In article <34085DF5.B8DC204@ping.be>, ost@ping.be says...
>
>Wanted ;
>
>Frequenties for M.Jackson tour.
>____
Yep, rec.radio.amateur.space does seem to be
the right newsgroup to try for this kind of info.

Ken K5MBV

2319. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5ui86b$6m4$1@blackbird.afit.af.mil>
Source record: 18087

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2320. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: Glenn LeBrasseur <glennl@ka.ee.pdx.edu>
Message-ID: <Pine.GSO.3.96.970902221550.12403E-100000@ka.ee.pdx.edu>
Source record: 18088

Check out the site http://www.grove.net/~tkelso/ for general satellite information. Also look at http://www.amsat.org/ regarding amateur satellites. Email me directly if you would like a more extensive source list.

Glenn Noel LeBrasseur KJ7SU
glennl@ee.pdx.edu http://www.ee.pdx.edu/~glennl

On 29 Aug 1997, it was written:

> Hi! I am an electronics and information technology student fascinated by
> satellites, tracking them and monitoring telemetry etc. I would be most
> grateful if someone could advise me how to start studying this subject
> as a hobby, e.g. any useful books to read and where I may get them from
> and other support. Thank-you.
>

2321. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: Johan Dijkhuis <s8804028@mail.student.utwente.nl>
Message-ID: <53630.s8804028@mail.student.utwente.nl>
Source record: 18089

On Sat, 30 Aug 1997 09:29:42 -0700,
Dennis Erwin Thurlow <geosynq@trader.com> wrote:

>Douglas Stockman wrote:
>> publishes a book entitled The Satellite Experimenter's Handbook, by Martin
>> Davidoff, K2UBC which is another good reference.
>
>And he _does_ mean reference. There's little real info in the book. Just
>intros and bibliographies. Good luck chasiing down citations. In fact,
>unless you've got lots of money and intend to buy everything off the shelf,
>it's difficult to find the info you need to "work the birds".

But there are no other books, and everyone who wants to build everything
himself is bound to have some knowledge and books on RF electronics anyway.
The biggest problems I experience is getting the difficult antenna parts,
such as the glassfiber boom, debugging a brand new X yagi antenna etc.
These things cannot be covered in one book because they are different for
every country, and it will be obsolete anyway by the time it is publised!

I agree with you that Davidoff could have spend more time and space on a
lot of subjects in the book, but it stays as the only introduction to
amateur satellites that I know of (except for chapters in books on
microwaves and VHF/UHF), and it includes a lot of references as well. I
would welcome a better book, but as that would take at least 1000 pages, it
will never come.
73 Johan Dijkhuis, pa3fpj@amsat.org
packet pa3fpj@pi8daz.#twe.nld.eu
PS. And it is easy to read! As a non native speaker and reader of English
books on electronics (I am a student of electronic engineering) I know a
lot of books are not.

2322. WTB: 70 cm All Mode, Used

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: Red Johnson <redj@together.net>
Message-ID: <340BF2DF.7A128011@together.net>
Source record: 18090

Looking for a good used 70 cm all mode rig for satellite ops.

redj@together.net

73's,
Red
N1TNB

2323. Re: Don't use "***" header !!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: holford@cnwl.igs.net.nospam
Message-ID: <5uhccr$1v7$2@news.igs.net>
Source record: 18091
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

In article <3408c25b.5133506@news.mcgill.ca>, masa@writemeNOSPAM.com&#65533; says...
>
>Seems many people started to use *** ..... *** headers. Please
>refrain. Now, I should change the style so that others can (or can't
>I should say !!) see my articles and.....
>
>
>
>_____
>
>M@S@
>Student @ McGill University Science
>Montreal, Quebec, Canada
>E-mail : Masa@WriteMe.NOSPAMcom
>URL : http://www.geocities.com/~masataka (General)
> http://www.geocities.com/~masataka/main.htm (Radio)
>_____
>
>Remove "NOSPAM" to reply.

Please change your style so that we can***NOT*** see your articles.

rec.radio.amateur,
rec.radio.amateur.misc,
rec.radio.amateur.space,
rec.radio.scanner,
alt.radio.scanner

You must be slowing down, you only posted to five groups.
--
Dave Holford.

2324. NORAD Two-Line Orbital Element Sets (TLE056)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5ui67u$5q8$1@blackbird.afit.af.mil>
Source record: 18092

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #056 -
Alouette 1
1 00424U 62049A 97241.86507987 .00000045 00000-0 42833-4 0 3137
2 00424 80.4643 210.8827 0023740 348.6767 11.3910 13.67901617742315
ATS 1
1 02608U 66110A 97240.54996836 -.00000032 00000-0 10000-3 0 331
2 02608 14.4643 348.1013 0004817 154.6921 205.4021 1.00301689 29258
ATS 3
1 03029U 67111A 97242.37835281 -.00000126 00000-0 10000-3 0 6914
2 03029 14.8755 355.0587 0011697 269.8932 104.5790 1.00272717109173
Starlette
1 07646U 75010A 97240.17361465 -.00000050 00000-0 71267-4 0 805
2 07646 49.8256 224.2919 0206009 233.7736 124.3956 13.82193532139400
LAGEOS
1 08820U 76039A 97241.84267172 -.00000021 00000-0 00000+0 0 3147
2 08820 109.8191 176.2748 0044015 33.7997 326.5365 6.38664391241841
GOES 2
1 10061U 77048A 97242.58173543 .00000035 00000-0 10000-3 0 8748
2 10061 12.9108 32.1248 0010132 136.5166 203.4470 1.00257003 18845
IUE
1 10637U 78012A 97242.97126301 .00000033 00000-0 10000-3 0 4072
2 10637 36.1754 76.5853 1374263 69.3187 235.0170 1.00059570 24336
GOES 3
1 10953U 78062A 97241.47295010 -.00000098 00000-0 10000-3 0 8397
2 10953 11.9333 35.2408 0002846 131.0414 232.1710 1.00271606 23459
SeaSat 1
1 10967U 78064A 97242.20223875 -.00000031 00000-0 34149-4 0 6000
2 10967 107.9958 3.2145 0001620 259.4899 100.6062 14.38184660 4565

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Nimbus 7
1 11080U 78098A 97242.12658562 -.00000037 00000-0 33513-5 0 6933
2 11080 98.8892 87.7183 0007953 226.6165 133.4329 13.83678241951870
GOES 5
1 12472U 81049A 97241.44374486 -.00000214 00000-0 10000-3 0 130
2 12472 8.8595 46.0995 0001366 70.5318 289.4720 1.00335109 17491
Cosmos 1383
1 13301U 82066A 97241.84993480 .00000038 00000-0 26923-4 0 6082
2 13301 82.9295 172.1604 0028552 108.1661 252.2601 13.68084852757351
LandSat 4
1 13367U 82072A 97239.88100533 .00000019 00000-0 13966-4 0 942
2 13367 98.0170 281.9872 0005700 209.7679 150.3199 14.57205706804137
DMSP B5D2-1
1 13736U 82118A 97239.85519798 .00000031 00000-0 31164-4 0 2998
2 13736 98.6214 67.1706 0008517 188.0857 172.0206 14.25849660763297
IRAS
1 13777U 83004A 97243.04653865 -.00000254 00000-0 -14507-3 0 7601
2 13777 98.9739 65.3432 0013236 323.1827 36.8426 13.99278070414886
Cosmos 1447
1 13916U 83021A 97241.85519112 .00000026 00000-0 10993-4 0 7036
2 13916 82.9427 226.5681 0039063 11.7863 348.4203 13.74358518723990
TDRS 1
1 13969U 83026B 97242.30906491 -.00000311 00000-0 10000-3 0 7845
2 13969 9.6011 39.5043 0003860 101.2560 260.4065 1.00268498 25797
GOES 6
1 14050U 83041A 97242.40212895 .00000051 00000-0 10000-3 0 7056
2 14050 7.7406 49.6167 0003750 75.7983 223.8055 1.00279632110594
AO-10
1 14129U 83058B 97239.01815108 -.00000012 00000-0 10000-3 0 5012
2 14129 26.1513 129.9806 6048554 146.3172 273.4778 2.05880308 78847
LandSat 5
1 14780U 84021A 97239.76542049 .00000025 00000-0 15789-4 0 6394
2 14780 98.2782 302.0983 0003424 33.1613 326.9795 14.57080140717537
UO-11
1 14781U 84021B 97241.50082747 .00000102 00000-0 24965-4 0 9973
2 14781 97.8416 219.8266 0012431 123.4477 236.7919 14.69575195722023
Cosmos 1574
1 15055U 84062A 97239.56397638 -.00000010 00000-0 -27310-4 0 9016
2 15055 82.9554 284.1017 0026242 205.0816 154.9077 13.73651449660897
Cosmos 1602
1 15331U 84105A 97242.56387689 .00000210 00000-0 21852-4 0 5853
2 15331 82.5316 61.3356 0019100 299.8724 60.0590 14.84918047698173
ERBS
1 15354U 84108B 97237.69880386 -.00000149 00000-0 79213-5 0 2990
2 15354 56.9951 81.6130 0001766 104.3599 255.7632 14.95062948701821
NOAA 9
1 15427U 84123A 97242.82689967 .00000033 00000-0 41001-4 0 2704
2 15427 98.8988 312.7166 0015366 144.2496 215.9706 14.13876917655753
Mir
1 16609U 86017A 97243.46531424 .00004548 00000-0 61716-4 0 5631
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2 16609 51.6537 67.6314 0005404 83.3366 276.8181 15.59873558658772
SPOT 1
1 16613U 86019A 97243.25527619 -.00000044 00000-0 00000+0 0 1072
2 16613 98.7901 315.2159 0002072 88.0362 272.1051 14.19999348282767
Cosmos 1766
1 16881U 86055A 97240.71500971 .00000118 00000-0 11356-4 0 5008
2 16881 82.5178 120.6377 0019227 338.8263 21.2132 14.83875135598724
EGP
1 16908U 86061A 97241.52327582 -.00000083 00000-0 10000-3 0 2047
2 16908 50.0116 89.3715 0011401 48.1527 312.0284 12.44416822170985
NOAA 10
1 16969U 86073A 97242.81288016 .00000007 00000-0 21182-4 0 2003
2 16969 98.5488 233.9073 0013199 145.7248 214.4788 14.25053301569217
MOS-1
1 17527U 87018A 97242.18664214 -.00000043 00000-0 00000+0 0 5816
2 17527 98.8874 299.2005 0018017 185.4900 174.6025 14.00479650536431
GOES 7
1 17561U 87022A 97240.56189132 -.00000162 00000-0 10000-3 0 3781
2 17561 3.9060 66.5083 0002507 270.7420 103.3914 1.00277107 21698
Kvant-1
1 17845U 87030A 97243.01689647 .00005039 00000-0 67704-4 0 1176
2 17845 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669592811
DMSP B5D2-3
1 18123U 87053A 97242.77239032 .00000048 00000-0 46899-4 0 336
2 18123 98.7629 71.6998 0015272 78.8286 281.4612 14.15488370526686
RS-10/11
1 18129U 87054A 97237.36013173 .00000025 00000-0 10477-4 0 3889
2 18129 82.9222 187.6011 0013274 34.7412 325.4608 13.72381333509725
Meteor 2-16
1 18312U 87068A 97239.44776594 .00000016 00000-0 12790-5 0 5863
2 18312 82.5574 6.0439 0014028 75.7729 284.4988 13.84102432506521
Meteor 2-17
1 18820U 88005A 97243.07400595 -.00000029 00000-0 -38758-4 0 3481
2 18820 82.5388 57.1610 0017423 126.5074 233.7685 13.84779377484407
DMSP B5D2-4
1 18822U 88006A 97242.86396771 .00000028 00000-0 30546-4 0 6106
2 18822 98.3851 59.9810 0006225 148.8473 211.3083 14.23237513497110
Glonass 34
1 19163U 88043A 97240.40790483 .00000015 00000-0 10000-3 0 2117
2 19163 65.4438 71.1203 0002986 163.6542 196.3835 2.13102433 71550
Glonass 36
1 19165U 88043C 97240.46574500 -.00000087 00000-0 10000-3 0 6153
2 19165 65.4130 71.0647 0002626 307.8795 52.1334 2.13101196 72172
METEOSAT 3
1 19215U 88051A 97238.83740875 -.00000185 00000-0 00000+0 0 3337
2 19215 4.1306 65.3314 0006246 138.8626 221.5337 0.96948719 21401
OKEAN 1
1 19274U 88056A 97241.88691453 .00000221 00000-0 24328-4 0 1997
2 19274 82.5116 220.8993 0020902 116.8470 243.4885 14.82650426494370
Meteor 3-2
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1 19336U 88064A 97241.89779545 .00000051 00000-0 10000-3 0 5979
2 19336 82.5378 215.9674 0015664 217.9979 142.0050 13.16983122437223
Glonass 39
1 19503U 88085C 97241.43528114 -.00000032 00000-0 10000-3 0 5028
2 19503 65.4042 309.9002 0006468 142.4747 217.6378 2.13101812 69689
NOAA 11
1 19531U 88089A 97242.78782731 -.00000006 00000-0 21491-4 0 909
2 19531 99.1489 277.4681 0012849 85.5654 274.6977 14.13141541460538
TDRS 3
1 19548U 88091B 97239.61778140 -.00000215 00000-0 10000-3 0 2982
2 19548 3.3504 69.5222 0005018 354.6886 219.2320 1.00266011 19909
Glonass 40
1 19749U 89001A 97241.00340365 .00000016 00000-0 10000-3 0 7092
2 19749 65.4047 70.5917 0006032 264.0495 95.9410 2.13101117 67185
Glonass 41
1 19750U 89001B 97240.58865537 -.00000028 00000-0 10000-3 0 6238
2 19750 65.3937 70.6859 0007488 242.4928 117.4678 2.13101887 67198
GPS BII-01
1 19802U 89013A 97240.89394058 -.00000016 00000-0 00000+0 0 4632
2 19802 55.5517 93.2020 0017481 149.1341 211.0539 2.00549679 62494
Akebono
1 19822U 89016A 97243.06429317 .00008466 00000-0 41114-3 0 9777
2 19822 75.0625 226.6625 3710597 131.8452 266.5010 7.99421294201688
Meteor 2-18
1 19851U 89018A 97241.68722918 .00000032 00000-0 15398-4 0 5841
2 19851 82.5203 291.4377 0013456 180.2488 179.8668 13.84437541429504
MOP-1
1 19876U 89020B 97242.15478199 -.00000102 00000-0 00000+0 0 2792
2 19876 2.8750 70.2616 0017134 293.1969 67.0251 0.97109710 10884
TDRS 4
1 19883U 89021B 97243.13114317 -.00000288 00000-0 10000-3 0 3565
2 19883 0.7564 87.1497 0002594 70.3893 188.0513 1.00268684203511
GPS BII-02
1 20061U 89044A 97241.23825587 .00000020 00000-0 10000-3 0 4527
2 20061 53.9286 268.2844 0177804 225.2244 133.3709 2.00562703 60249
Nadezhda 1
1 20103U 89050A 97240.83417091 .00000008 00000-0 -76120-5 0 1489
2 20103 82.9621 145.9214 0036388 276.2813 83.4198 13.73881027408778
GPS BII-03
1 20185U 89064A 97241.93772265 -.00000009 00000-0 00000+0 0 4823
2 20185 55.3591 93.5343 0034774 51.3159 308.9122 2.00566596 58830
GMS 4
1 20217U 89070A 97240.63028935 -.00000392 00000-0 10000-3 0 6248
2 20217 2.6686 73.3255 0001641 192.3415 57.6521 1.00256939 29804
INTERCOSMOS 24
1 20261U 89080A 97239.34161208 .00000227 00000-0 60791-4 0 6132
2 20261 82.5924 352.1126 1242348 129.7964 241.9359 12.47435812360284
GPS BII-04
1 20302U 89085A 97239.10951663 .00000015 00000-0 10000-3 0 4768
2 20302 53.1594 208.0310 0049959 197.1753 162.6198 2.00557272 57576
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Meteor 3-3
1 20305U 89086A 97241.32607537 .00000044 00000-0 10000-3 0 8831
2 20305 82.5483 181.6564 0007528 332.0634 28.0044 13.04439532375328
COBE
1 20322U 89089A 97241.10897515 .00000210 00000-0 16206-3 0 3313
2 20322 98.9282 254.5883 0008233 260.8947 99.1290 14.03465270398356
Kvant-2
1 20335U 89093A 97243.01689647 .00005039 00000-0 67704-4 0 28
2 20335 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669441823
GPS BII-05
1 20361U 89097A 97241.62064603 -.00000063 00000-0 00000+0 0 2582
2 20361 56.2386 35.9880 0095500 144.7962 215.8540 2.00567427 47109
COSMOS 2054 (Altair-1)
1 20391U 89101A 97239.29348914 -.00000191 00000-0 00000+0 0 5519
2 20391 4.6548 60.7651 0003060 122.1766 238.1956 1.00256545 28375
SPOT 2
1 20436U 90005A 97243.23830178 -.00000044 00000-0 00000+0 0 2683
2 20436 98.7220 316.8968 0001385 96.8468 263.2866 14.20031166394298
UO-14
1 20437U 90005B 97241.21894731 .00000020 00000-0 24399-4 0 2938
2 20437 98.5161 321.2983 0011479 358.4007 1.7146 14.29968932396656
AO-16
1 20439U 90005D 97243.19037852 .00000001 00000-0 17257-4 0 899
2 20439 98.5318 326.3186 0011557 353.6655 6.4379 14.30016239396955
DO-17
1 20440U 90005E 97240.79009155 -.00000021 00000-0 85486-5 0 870
2 20440 98.5348 324.8789 0011297 0.2604 359.8582 14.30158817396648
WO-18
1 20441U 90005F 97242.25886959 .00000004 00000-0 18359-4 0 941
2 20441 98.5346 326.2060 0012266 355.8145 4.2930 14.30126456396856
LO-19
1 20442U 90005G 97242.22019123 .00000018 00000-0 23751-4 0 925
2 20442 98.5369 326.8791 0012590 354.0773 6.0262 14.30242221396876
GPS BII-06
1 20452U 90008A 97243.01691860 -.00000039 00000-0 10000-3 0 3661
2 20452 54.0569 148.8470 0060283 93.6068 267.1188 2.00569729 55639
MOS-1B
1 20478U 90013A 97240.75211041 -.00000044 00000-0 00000+0 0 738
2 20478 99.0834 309.7526 0006073 130.2470 229.9222 13.93978844305519
DEBUT
1 20479U 90013B 97237.34703962 -.00000034 00000-0 75976-8 0 864
2 20479 99.0497 186.2220 0539626 219.9868 136.0302 12.83352832353594
FO-20
1 20480U 90013C 97240.85180003 -.00000032 00000-0 48007-5 0 9916
2 20480 99.0515 188.7982 0540942 212.6895 143.9627 12.83238454354021
MOS-1B R/B
1 20491U 90013D 97242.11818406 .00000222 00000-0 48455-3 0 3744
2 20491 99.0278 268.0026 0470104 346.1147 12.7392 13.03022951359028
LACE
1 20496U 90015A 97242.85049498 .00001582 00000-0 50652-4 0 7858
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2 20496 43.1007 211.0477 0010985 30.8543 329.2996 15.37050558421451
Nadezhda 2
1 20508U 90017A 97240.64304913 .00000019 00000-0 39909-5 0 1485
2 20508 82.9532 280.4710 0042958 227.7473 132.0036 13.73525405375946
OKEAN 2
1 20510U 90018A 97243.23765042 .00000210 00000-0 25496-4 0 6080
2 20510 82.5244 176.9244 0018406 323.2207 36.7741 14.78710563404701
GPS BII-07
1 20533U 90025A 97242.32959986 .00000016 00000-0 00000+0 0 3545
2 20533 54.2754 270.2092 0031117 48.0737 312.2515 1.91040979 54149
PegSat
1 20546U 90028A 97243.03250556 .00010646 00000-0 16093-3 0 1202
2 20546 94.1055 244.0135 0053830 97.1142 263.6279 15.53004478413139
HST
1 20580U 90037B 97239.59086980 .00000337 00000-0 20692-4 0 9838
2 20580 28.4650 302.1072 0014395 215.3428 144.6211 14.86475383203681
MACSAT 2
1 20608U 90043B 97240.23706769 .00000189 00000-0 30043-4 0 2911
2 20608 89.9265 169.5608 0105375 329.4109 30.0988 14.65021822390271
Glonass 44
1 20619U 90045A 97241.36918127 -.00000031 00000-0 10000-3 0 4259
2 20619 64.9915 308.9194 0024350 217.5374 142.3554 2.13102558 56643
Glonass 45
1 20620U 90045B 97240.54923145 .00000041 00000-0 10000-3 0 4010
2 20620 65.0210 308.9594 0006945 33.0009 327.0789 2.13103238 56665
Glonass 46
1 20621U 90045C 97241.08572927 -.00000033 00000-0 10000-3 0 220
2 20621 65.0060 308.9843 0012988 193.0956 166.9383 2.13103070 56673
Kristall
1 20635U 90048A 97243.01689647 .00005039 00000-0 67704-4 0 7941
2 20635 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669412655
ROSAT
1 20638U 90049A 97240.79417106 .00000226 00000-0 33389-4 0 6849
2 20638 52.9896 127.9680 0012347 24.9958 335.1622 15.07669767398328
Meteor 2-19
1 20670U 90057A 97242.41804536 .00000061 00000-0 41346-4 0 3804
2 20670 82.5441 359.0159 0017333 99.5368 260.7751 13.84130551362505
CRRES
1 20712U 90065A 97242.81978084 .00000093 00000-0 14056-3 0 4841
2 20712 17.9873 70.0457 7186425 350.2864 1.0961 2.35940230 53499
GPS BII-08
1 20724U 90068A 97240.74884969 -.00000018 00000-0 00000+0 0 2762
2 20724 55.1942 91.0691 0137769 192.8517 166.8968 2.00564241 50222
Feng Yun1-2
1 20788U 90081A 97243.04383655 -.00000036 00000-0 45612-5 0 4350
2 20788 98.8235 239.5857 0016278 351.2297 8.8571 14.01423815357704
Meteor 2-20
1 20826U 90086A 97240.69891242 .00000061 00000-0 41502-4 0 954
2 20826 82.5243 296.1831 0014720 16.9281 343.2367 13.83658065349341
GPS BII-09
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1 20830U 90088A 97239.30373821 -.00000059 00000-0 10000-3 0 2212
2 20830 56.1807 33.9691 0071144 96.6186 264.2222 2.00556767 50830
GPS BIIA-10
1 20959U 90103A 97241.70168258 -.00000011 00000-0 00000+0 0 2263
2 20959 55.3712 93.1977 0120805 240.5594 118.3130 2.00566953 49478
DMSP B5D2-5
1 20978U 90105A 97242.79573582 .00000061 00000-0 37402-4 0 2047
2 20978 98.5534 315.1932 0078557 312.7490 46.7096 14.32770648352660
Glonass 47
1 21006U 90110A 97238.76340735 .00000005 00000-0 10000-3 0 9735
2 21006 65.3685 69.9850 0056773 189.5356 170.4209 2.13102309 52298
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2 21007 65.3835 70.0457 0031010 178.1313 181.9914 2.13101272 52306
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RS-12/13
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2 21140 1.4232 79.0578 0002614 121.3994 0.5980 1.00274197 25954
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2 21152 82.9244 182.1102 0040749 205.4272 154.4878 13.73549776323730
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2 21232 82.5361 63.3220 0013463 144.0773 216.1256 13.16477649305139
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2 21263 98.5360 254.8171 0014005 76.5466 283.7275 14.22744462326976
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2 21578 98.3356 310.9941 0005649 32.5016 327.6519 14.39418564321630
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2 22014 54.8860 151.1635 0100169 339.2112 20.4008 2.00555702 31152
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LAGEOS II
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Glonass 59
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Glonass 61
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NOAA 13
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Meteor 2-21
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Nadezhda 4
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Glonass 65
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Polar
1 23802U 96013A 97235.50821176 .00000086 00000-0 00000+0 0 1557
2 23802 86.3827 21.3532 6523078 265.1052 23.3043 1.35671576 7440
1996010E
1 23824U 96010E 97241.89817351 .00008718 00000-0 10205-1 0 3133
2 23824 47.6524 110.2080 6777694 160.5709 248.5717 2.86753305 13877
GPS BIIA-25
1 23833U 96019A 97243.14195770 -.00000082 00000-0 00000+0 0 2323
2 23833 54.5245 329.9939 0014742 282.1240 77.6709 2.00565418 10500
Priroda
1 23848U 96023A 97243.01689647 .00005039 00000-0 67704-4 0 4430
2 23848 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669 77224
MSX
1 23851U 96024A 97241.91635295 -.00000047 00000-0 00000+0 0 2638
2 23851 99.4191 237.3326 0008283 39.0646 321.1113 13.97393370 68774
SAX
1 23857U 96027A 97239.41351522 .00001213 00000-0 44241-4 0 933
2 23857 3.9537 164.3721 0013304 223.5553 136.3470 14.91880250 72397
MSTI 3
1 23868U 96031A 97242.92204505 .00001672 00000-0 34529-4 0 1802
2 23868 97.1161 71.8076 0010128 10.6451 349.5065 15.47227391 72789
TOMS-EP
1 23940U 96037A 97240.20435941 .00001996 00000-0 88110-4 0 1431
2 23940 97.4154 146.2837 0011040 250.7583 109.2474 15.22870713 64101
GPS BIIA-26
1 23953U 96041A 97242.06723204 -.00000008 00000-0 00000+0 0 1899
2 23953 55.2382 90.6670 0027056 348.9055 11.0913 2.00576524 8274
ADEOS
1 24277U 96046A 97239.55500729 -.00000043 00000-0 00000+0 0 2136
2 24277 98.5926 315.8420 0001923 47.4074 312.7270 14.27026160 53545
FO-29
1 24278U 96046B 97242.11002308 -.00000020 00000-0 16569-4 0 1038
2 24278 98.5324 273.2291 0351928 354.7758 4.9750 13.52632706 51117
FAST
1 24285U 96049A 97238.82587759 .00001694 00000-0 17005-3 0 1223
```

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2 24285 82.9971 6.1256 2204703 228.3946 110.6406 10.82339191 40066
1996049B
1 24286U 96049B 97242.84998477 .00003512 00000-0 34589-3 0 1344
2 24286 83.0034 4.4647 2203807 220.5681 120.8772 10.82865142 40506
Microsat
1 24291U 96050A 97242.10085182 .00037425 65616-5 32038-3 0 2731
2 24291 62.7892 253.1961 0490081 161.2121 200.7871 14.89697233 53934
MO-30
1 24305U 96052B 97241.67324449 .00000204 00000-0 20364-3 0 1354
2 24305 82.9326 300.2738 0031368 4.6676 355.4759 13.73096820 49144
GPS BIIA-27
1 24320U 96056A 97242.42790443 .00000016 00000-0 00000+0 0 1048
2 24320 54.5149 270.5826 0051367 102.6003 258.0321 2.00558942 6940
SAC-B/HETE
1 24645U 96061A 97239.91001016 .00000449 00000-0 29430-4 0 913
2 24645 37.9752 153.6365 0046491 143.2760 217.1126 15.15138568 44946
ZEYA
1 24744U 97010A 97243.23216441 .00003017 00000-0 10085-3 0 715
2 24744 97.2679 146.8677 0006691 168.3868 191.7560 15.31754551 27571
DMSP B5D2-9
1 24753U 97012A 97242.74136551 .00000032 00000-0 41008-4 0 1574
2 24753 98.9291 286.8358 0008338 194.2564 165.8366 14.12995283 20915
MINISAT 01
1 24779U 97018A 97239.84482547 .00001401 00000-0 42213-4 0 359
2 24779 150.9715 233.0523 0013760 213.8812 146.0882 14.98382897 19276
CELESTIS
1 24780U 97018B 97238.87067453 .00001354 00000-0 35516-4 0 397
2 24780 150.9716 228.4069 0020367 203.7751 156.1909 14.99641028 19146
GOES 10
1 24786U 97019A 97243.26613845 -.00000120 00000-0 00000+0 0 1077
2 24786 0.2271 276.2628 0001418 9.6951 45.2215 1.00271645 1307
Feng Yun 2B
1 24834U 97029A 97240.74936921 -.00000358 00000-0 00000+0 0 561
2 24834 1.0839 262.4834 0000715 347.8446 100.7240 1.00276947 798
Progress M-35
1 24851U 97033A 97243.01689647 .00005039 00000-0 67704-4 0 770
2 24851 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669 8885
GPS BIIR-02
1 24876U 97035A 97241.06985937 -.00000058 00000-0 00000+0 0 298
2 24876 54.9350 150.6988 0023356 250.8756 108.8950 2.00530145 780
SeaStar
1 24883U 97037A 97242.31004867 .00001500 00000-0 24685-3 0 562
2 24883 98.2113 339.8342 0014011 228.7238 131.2763 14.72016864 4402
1997037B
1 24884U 97037B 97243.23767223 .00214991 20735-4 52477-3 0 300
2 24884 98.2749 343.1834 0010600 175.9514 184.1855 15.96106772 4675
1997034H
1 24885U 97034H 97240.80373637 .00029868 00000-0 39317-2 0 235
2 24885 86.3647 162.9357 0025602 41.0696 319.2634 14.79789922 6245
Soyuz TM-26
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1 24886U 97038A 97243.01689647 .00005039 00000-0 67704-4 0 368
2 24886 51.6525 69.8889 0005812 77.9568 282.4056 15.59867669 3978
1997038B
1 24887U 97038B 97220.57925646 .41560137 12671-4 26332-3 0 224
2 24887 51.6127 181.7271 0010058 230.2547 130.0191 16.53248678 484
1997038C
1 24888U 97038C 97219.24678963 .08698103 12165-4 15600-2 0 203
2 24888 51.6098 189.2396 0040438 83.4272 276.8999 16.29030627 268
PAS 6
1 24891U 97040A 97234.12657483 -.00000295 00000-0 10000-3 0 133
2 24891 0.0980 80.5164 0001434 84.3867 168.0358 1.00295855 180
1997040B
1 24892U 97040B 97240.96641351 .00000725 00000-0 33431-3 0 73
2 24892 6.8540 227.6114 7340539 193.7143 121.7164 2.19318562 461
Cosmos 2345
1 24894U 97041A 97242.60553669 -.00000275 00000-0 00000+0 0 267
2 24894 1.3122 284.2493 0353190 184.8947 64.8725 1.00276182 214
1997041B
1 24895U 97041B 97228.69703704 .10609446 12619-4 90307-4 0 147
2 24895 53.1697 279.3531 0010433 254.9848 157.0509 16.51264563 301
1997041C
1 24896U 97041C 97227.22665091 .26229078 12362-4 11381-2 0 23
2 24896 53.1594 287.3864 0008292 239.7836 119.9217 16.42901904 34
1997034J
1 24898U 97034J 97240.84506401 .00096900 00000-0 10767-1 0 193
2 24898 86.3246 162.6605 0063152 39.4604 321.1188 14.85248525 6735
1997041E
1 24899U 97041E 97227.59863537 -.00000049 00000-0 00000+0 0 13
2 24899 49.3543 285.9128 7175434 356.4362 0.5829 2.31200202 25
1997041F
1 24900U 97041F 97243.14156692 .00001743 00000-0 63025-3 0 91
2 24900 48.7808 283.6270 7246404 356.3141 0.5962 2.31633353 371
Agila 2
1 24901U 97042A 97242.31312674 -.00000323 00000-0 00000+0 0 123
2 24901 0.2824 248.7287 0028842 265.0142 82.8864 0.99880208 118
1997042B
1 24902U 97042B 97242.65074962 .00008469 -95558-6 28120-3 0 52
2 24902 23.4205 230.6771 7720297 184.0444 160.0373 1.78623746 206
Iridium 26
1 24903U 97043A 97242.51394072 -.00046973 00000-0 -36348-2 0 354
2 24903 86.6933 36.9546 0006381 167.4522 192.6872 15.01802420 1428
Iridium 25
1 24904U 97043B 97241.98289780 -.05081256 00000-0 -59886+0 0 384
2 24904 86.7230 37.1459 0005957 41.8180 318.3502 14.89857204 1342
Iridium 24
1 24905U 97043C 97242.84882626 .06202697 00000-0 53006+0 0 368
2 24905 86.6691 36.7909 0016821 80.8816 279.4353 14.92649509 1475
Iridium 23
1 24906U 97043D 97243.18375492 -.01672674 00000-0 -18652+0 0 300
2 24906 86.6959 36.6661 0004508 131.8210 228.3403 14.90775631 1520
```

```
Iridium 22
1 24907U 97043E 97241.91015063 -.00463268 00000-0 -35359-1 0 261
2 24907 86.6918 37.2032 0012157 204.5513 155.5079 15.04408998 1332
1997043F
1 24908U 97043F 97243.23084851 .00236113 -94967-6 43061-3 0 213
2 24908 82.6245 30.9110 0231935 312.0633 46.1069 15.67775120 1599
Lewis
1 24909U 97044A 97243.45134635 .00229626 21187-4 79192-3 0 345
2 24909 97.5639 138.2948 0017703 219.3233 140.6735 15.89284511 1293
1997044B
1 24910U 97044B 97242.24121883 .00118342 74774-5 35550-3 0 145
2 24910 97.5659 136.9090 0009363 215.2719 144.7938 15.92252523 1109
PAS 5
1 24916U 97046A 97241.79182926 -.00000198 00000-0 00000+0 0 51
2 24916 14.6244 355.3425 4777302 0.3311 62.2856 1.78965955 116
1997046B
1 24917U 97046B 97241.72441838 .14159534 12766-4 13208-3 0 221
2 24917 51.6124 344.3576 0027304 285.5614 74.6937 16.48788224 289
1997046C
1 24918U 97046C 97240.75012334 .32786074 12513-4 10952-2 0 169
2 24918 51.5821 349.9015 0020942 278.3655 81.5213 16.42299161 126
1997046D
1 24919U 97046D 97240.80813579 -.00000199 00000-0 00000+0 0 17
2 24919 14.6264 355.3199 4808322 0.6053 149.4325 1.79818933 03
FORTE
1 24920U 97047A 97243.07854622 .00000167 00000-0 10000-3 0 60
2 24920 69.9622 271.0039 0023361 167.1665 193.0121 14.22583411 202
1997047B
1 24921U 97047B 97243.14838540 .00025500 00000-0 11257-1 0 50
2 24921 69.9774 270.8466 0022599 166.6329 193.5369 14.23055064 225
1997043G
1 24922U 97043G 97242.89556158 .23765398 00000-0 26026+0 0 26
2 24922 86.6008 36.6939 0036407 294.4198 82.8553 15.56189057 1393
1997043H
1 24923U 97043H 97241.15502770 .01318334 00000-0 64149-1 0 15
2 24923 86.6707 37.5073 0024206 247.9992 111.8631 15.15429758 1129
1997043J
1 24924U 97043J 97241.43738789 .00286112 00000-0 17787-1 0 11
2 24924 86.6858 37.3987 0018272 216.7035 143.2915 15.08122862 1152
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2325. Temporary MIR Frequency

Newsgroup: rec.radio.amateur.space
Date: 1997-09-02 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19970902.183719.8782.4.harrymue@juno.com>
Source record: 18093
Body handling: HTML body converted to readable text

ATTENTION MIR FANS

Get your 440 gear ready for the MIR

This log has been edited to fascilitate easier reading and
to fill in a few garbaged words probly due to signal fade.

KC5TRB LOG: (Monitored):

R0MIR-1>W0IOH [09/02/97 13:53:54] :
Logged on to R0MIR's Personal Message System

R0MIR-1>W0IOH [09/02/97 13:55:41] :
CMD(B/H/J/K/KM//M/R/S/SR/V/?)>

:Stat :PR
:Posted : 09/02/97 21:50
:To : ALL
:From : N6CO
:@ BBS :
:BID :
:Subject: MIREX 70cm EXP INFO

Mir International Amateur Radio Experiment (MIREX) will be conducting a
test.
MIREX will be switched to the 70cm band on 437.650 FM Simplex world wide
for
extensive 70cm testing. We believe this temporary frequency will an ideal
learning opportunity to verify the impact of 70cm Doppler phenomena on FM
voice and packet operations.

The test will run from September 6, untwide. After the completion of the
test, we will switch the Mir PMS frequency back to the current 2-meter
frequency on September 29th -- OR sooner

If any Questions

N6CO@N0ARY.#NOCAL.CA.USA.NOAM
OR
doc@volcano.net

CREW QUSTIONS -
DAVE N6CO
MIREX PRESDENT

R0MIR-1>W0IOH [09/02/97 13:57:56] : - Logged off

==========

Also monitored Mike on 143.620-625, same day, earlier pass.
He will need no more practice for the EVA. He has worked out
getting through the hatch. He is still concerned about how
they are going to pack everthing that they need for the EVA.

73... Harry, KC5TRB
Tulsa, OK

2326. MIR

Newsgroup: rec.radio.amateur.space
Date: 1997-09-03 00:00:00 UTC
From: Ruca <Ruca@4u.net>
Message-ID: <340DD873.2B787043@4u.net>
Source record: 18094
Body handling: HTML body converted to readable text

Hello

Anyone can give me information about VHF contacts with Orbital Station MIR?

Frequencies? Trajectory? Time? Etc?

Thankx

73

Ruca

Hello

Anyone can give me information about VHF contacts with Orbital Station MIR?

Frequencies? Trajectory? Time? Etc?

Thankx

73

Ruca

2327. MIR equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-09-03 00:00:00 UTC
From: glueck@saturn.caps.maine.edu
Message-ID: <5uid6c$1sqg$1@sol.caps.maine.edu>
Source record: 18095

Can anybody give me a current listing of the commercial amateur radios being used aboard MIR?

I am giving a short lecture on the space station to a local radio club this coming week, and there will be inquiring minds!

Dick N1MDZ

2328. Re: what ariel for MIR ?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-04 00:00:00 UTC
From: Tammy James <taj@u.washington.edu>
Message-ID: <340F0374.6AAD@u.washington.edu>
Source record: 18096
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Joel used "British" english when he referred to an ariel.
What he meant was an Antenna (I'm Indian, and we refer to
antennas as ariels back home).

Balaji KK7HE

2329. complete sat. setup

Newsgroup: rec.radio.amateur.space
Date: 1997-09-04 00:00:00 UTC
From: "Reed C." <reed@schat.com>
Message-ID: <340F6B04.2D8F@schat.com>
Source record: 18097

Hello,

I am from california and this is a rather large item(s) so pick up is
Prefered.

I am selling my satellite station to pay for school.

TX/RX
FT-726R: (2m,430,6m,sat unit) (Just serviced at yaesu so A-OK)
With external tone encoder (For mir)
AMPS
Mirage 1010 UHF amp (10watt in =100 out)
Mirage 1070? vhf (I am not sure on the numbers but its 10w -> 70w.)
PRE-AMPS
VHF Lanwheir pre-amp (Very sensitive low noise..they are hard to
find, but it might be worth looking it up for the specs...they
costed about $150 each)

UHF " "

ANTENAS
KLM-435-40CX (40 element circ. polarized beam for uhf)
KLM-2M-22C (22 element circ. poloarized for vhf)

MISC:
-Yaesu 5600 azmuth/elevation rotor (similar to the 5400 but "heavyduty")
-2 30 foot runs of 3/4 inch hardline with conector etc.
-fiberglass cross boom re-inforced with a hardwood dowel
-20 foot tower All the conectors and misc coax needed to hook up the
amps,pre amps, radio and antenias together.
-2 50 foot runs of rotor cable

E-mail me for offers.. I am looking for about $2300 you pay shipping or
pick it up in california (Bishop, ca)

73's Reed

2330. Re: PH3D Launch Schedule

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <CF28B177F4D02B0B.DF050F85DD93E807.E0890BE1CCE61345@library-proxy.airnews.net>
Source record: 18098

I said it is news from Aug 18. The date of the article is later.

Ken K5MBV

2331. Re: Mir leaving 2 meters??????

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: orion@xnycap.rr.com
Message-ID: <34108568.51270191@news-server>
Source record: 18099

On Thu, 04 Sep 97 21:59:03 GMT, Tom@astro.net wrote:

> Just heard from a packet message and a friend that Mir is leaving 2 meters
>and going all 70cm sometime between 9/6 and 9/29, using 437.650 simplex for
>both voice and packet. What is the story? This will no doubt piss off a lot
>of us who do not have 70cm gear. What's the real scoop on this stupid move?
>
>Tom

As I understand it this is a test. I believe Mir will return to 2
Meters when the test is concluded.

--
Butch N2YMJ

To reply, delete the
x from my address.

2332. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <34102CFB.66D51684@direct.ca>
Source record: 18100

Ken Durham wrote:
>
> Will we be able to see our concrete
> satellite with a telescope if we get
> the Keps?

You should be more than capable of figuring this out yourself.

Consider that concrete is about the same colour as the Moon,
and thus probably reflects about the same proportion of the
light that hits it (astronomers says "albedo")...
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

2333. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <341044DB.57EB@worldnet.att.net>
Source record: 18101

Ken Durham wrote:
>
> Will we be able to see our concrete
> satellite with a telescope if we get
> the Keps?
>
> Ken K5MBV

What the heck is that? I cant find a previous message to clue me in...

2334. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5upoc2$b3a$1@tilde.csc.ti.com>
Source record: 18102

In article <341044DB.57EB@worldnet.att.net>, jim.N8XYN@worldnet.att.net
says...
>
>Ken Durham wrote:
>>
>> Will we be able to see our concrete
>> satellite with a telescope if we get
>> the Keps?
>>
>> Ken K5MBV
>
>What the heck is that? I cant find a previous message to clue me in...
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Answer: PH3-D was to be replaced with a cement substitute
of the same weight and general shape because the rocket
was found to create more vibrational stress than we were
told. No recent news about the status. Don't know if the
concrete was shipped on time or not. (See "Re: PH3D On The Way
To Kourou?" posts.)

Ken K5MBV
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

2335. ARLS029 Mir ham operations to shift temporarily to 70 cm

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls029.1997@arrl.org>
Source record: 18103
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS029
ARLS029 Mir ham operations to shift temporarily to 70 cm

ZCZC AS29
QST de W1AW
Space Bulletin 029 ARLS029
From ARRL Headquarters
Newington, CT September 5, 1997
To all radio amateurs

SB SPACE ARL ARLS029
ARLS029 Mir ham operations to shift temporarily to 70 cm

Starting on or about Saturday, September 6, and continuing no later than September 29, ham radio voice and packet operations aboard the Russian Mir spacecraft will shift from 2 meters to 70 cm. An ''experimental'' worldwide FM simplex frequency of 437.650 MHz will temporarily replace the current 2-meter operating frequencies. Operations will return to 2 meters after the experiment ends. In the meantime, the shift could make it a bit more difficult to work Mir. For starters, power requirements will be higher than on 2 meters--25 W ERP or greater--although contacts using an H-T are not out of the question. Also, some transceivers do not cover the satellite subband (435 to 438 MHz).

The Mir International Amateur Radio EXperiment (MIREX) is conducting the 70 cm test based on suggestions from several Amateur Radio satellite groups who are interested in the feasibility of operating Mir and the International Space Station on 70 cm. MIREX hopes the experiment will determine whether the 70-cm frequency receives interference from the existing commercial VHF equipment on Mir and whether 70-cm operation will interfere with onboard equipment.

More important for simple ground stations, however, is whether they'll be able to compensate for 70-cm Doppler shift on voice or packet. MIREX President Dave Larsen, N6CO, concedes that Doppler will be the biggest challenge for earthbound hams trying to work Mir on 70 cm. The Doppler on 70 cm is plus or minus 10 kHz. Most radios include 5-kHz tuning steps, and to work Mir on voice you will need to get within 3 kHz of the Mir receiver frequency. To work Mir on packet, the frequency error must be less than 2 kHz.

Miles Mann, WF1F, of MIREX reports he talked to Mike Foale, KB5UAC, aboard Mir on 70 cm on Thursday, September 4. Mann was mobile at the time, running 35 W. He reports very good signal quality during the

10-minute pass, which was at close to 60 degrees. Mann said he compensated for Doppler by programming odd-split channels in advance. He reminds users that both the transmit and receive frequencies must change, if you program channels in advance.

Larsen said this week that if the experiment does not work out, ''it will be cut short.'' He said he hopes a filter that could be sent to Mir as early as October will minimize desensing of the 2-meter transceiver by Mir's commercial equipment on 143 MHz.

To comment on the experiment or for more information, contact Dave Larsen, N6CO, doc(at)volcano.net or Miles Mann, WF1F, MilesMann(at)Pictel.com.
NNNN
/EX

2336. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: Howard Kanare <hkanare@sprintmail.com>
Message-ID: <341073BC.3C21@sprintmail.com>
Source record: 18104

I work at the labs of the Portland Cement Association and am intrigued by the thought of a concrete ball in orbit. Is anyone else concerned about lack of burnup and fragmentation on re-entry?

Regarding albedo, concrete can have a wide range of reflectance and color depending on raw mix composition used to manufacture the cement, pyroprocessing conditions, water-cement ratio, aggregates, curing, etc. Color can range from white (>90% reflectance) to buff to dark gray.

I'll keep my hard hat on when this one starts to come down!

****
Howard M. Kanare
Principal Scientist and Group Manager
Chemical Services Group
Construction Technology Laboratories Inc
5420 Old Orchard Rd Skokie IL USA 60077
****

2337. W. Connecticut Hamfest Sunday, 21 Sep, Newtown CT

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3410C38E.3F55@ix.netcom.com>
Source record: 18105
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.homebrew

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

2338. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-09-05 00:00:00 UTC
From: wb6siv@cyberg8t.com
Message-ID: <wb6siv-0509972330370001@host34.clr.cyberg8t.com>
Source record: 18106

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

2339. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EG301t.6IK@pe1chl>
Source record: 18107

In <34102CFB.66D51684@direct.ca> laura halliday <ve7ldh@direct.ca> writes:

>Ken Durham wrote:
>>
>> Will we be able to see our concrete
>> satellite with a telescope if we get
>> the Keps?

>You should be more than capable of figuring this out yourself.

>Consider that concrete is about the same colour as the Moon,
>and thus probably reflects about the same proportion of the
>light that hits it (astronomers says "albedo")...

However, it is considerably smaller than the moon, and also closer
to the earth. So, what is the answer?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2340. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <34116AFB.4E90@ix.netcom.com>
Source record: 18108

Rob Janssen wrote:
>
> In <34102CFB.66D51684@direct.ca> laura halliday <ve7ldh@direct.ca> writes:
>
> >Ken Durham wrote:
> >>
> >> Will we be able to see our concrete
> >> satellite with a telescope if we get
> >> the Keps?
>
> >You should be more than capable of figuring this out yourself.
>
> >Consider that concrete is about the same colour as the Moon,
> >and thus probably reflects about the same proportion of the
> >light that hits it (astronomers says "albedo")...
>
> However, it is considerably smaller than the moon, and also closer
> to the earth. So, what is the answer?
>
> Rob
> --
> +-----------------------------------+--------------------------------------+
> | Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
> | AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
> +-----------------------------------+--------------------------------------+

The ARRL Letter issued yesterday reported that AMSAT has assembled an international team of project workers to try to get P3D up to the new specifications in time for the launch. The team is working round-the-clock to complete the P3D modifications on time.

The report sounds very optimistic.

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
With all of the Y2K problems, we had better start now working on Y10K.
To reply to this e-mail, remove the eat_spam.and_die part of the address.

2341. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <34117E25.7802@phoenix.net>
Source record: 18109

Howard Kanare wrote:
>
> I work at the labs of the Portland Cement Association and am intrigued
> by the thought of a concrete ball in orbit. Is anyone else concerned
> about lack of burnup and fragmentation on re-entry?
>
> Regarding albedo, concrete can have a wide range of reflectance and
> color depending on raw mix composition used to manufacture the cement,
> pyroprocessing conditions, water-cement ratio, aggregates, curing, etc.
> Color can range from white (>90% reflectance) to buff to dark gray.
>
> I'll keep my hard hat on when this one starts to come down!
>
> **
> Howard M. Kanare
> Principal Scientist and Group Manager
> Chemical Services Group
> Construction Technology Laboratories Inc
> 5420 Old Orchard Rd Skokie IL USA 60077
> **
I would think that concrete would act (or react) just like a space rock
upon entering the earths atmosphere. In other words it would be mostly
consummed by heat. I say cardboard box sats would be an even better way
to go. they would be cheeper to construct and would burn up 100% on
deorbit.
****
Joe d
Principal person in charge of none that goez up and none of which comes
down
Offsite scopper and frequent driver byer of the Johnson Space Boondoggle
Near here
****

2342. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <34119B8D.6477@larc.nasa.gov>
Source record: 18110

There is about a factor of three difference in speed between "space
rocks" and low orbit satellites. This would mean a factor of 9 as far
as energy is concerned. Like sizeable portions of Skylab and Salyut 7,
a big piece of it could make it back.
John WA4WDL

2343. Wanted : PSK demodulator

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: Carlton Richey <kb0qoq@mwci.net>
Message-ID: <01bcbaf0$cf62b040$28a2fecd@richeych>
Source record: 18111

I am looking for a good deal on a PSK demodulator. If anyone knows where to find one let me know. I can be contacted at kb0qoq@mwci.net

Thanks

Carl Richey

2344. ARLK069 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk069.1997@arrl.org>
Source record: 18112
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK069
ARLK069 Keplerian data

ZCZC SK69
QST de W1AW
Keplerian Bulletin 69 ARLK069
From ARRL Headquarters
Newington, CT September 6, 1997
To all radio amateurs

SB KEP ARL ARLK069
ARLK069 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97245.81292256 -.00000006 +00000-0 +10000-3 0 05035
2 14129 026.1695 128.8425 6046674 148.2074 269.5478 02.05881305078982
RS-10/11
1 18129U 87054A 97248.22326048 .00000028 00000-0 14557-4 0 3925
2 18129 82.9238 179.5689 0012702 7.0857 353.0477 13.72381673511219
UO-11
1 14781U 84021B 97247.96918553 .00000149 00000-0 32953-4 0 00149
2 14781 97.8426 226.0431 0012748 103.9746 256.2876 14.69577825722976
RS-12/13
1 21089U 91007A 97248.09869259 .00000005 00000-0 -10995-4 0 00215
2 21089 82.9209 219.3702 0031148 74.3917 286.0655 13.74084870330138
UO-14
1 20437U 90005B 97248.07615473 -.00000001 00000-0 16384-4 0 03096
2 20437 98.5155 328.0032 0011313 338.2166 21.8540 14.29969605397636
RS-15
1 23439U 94085A 97247.80890415 -.00000039 00000-0 10000-3 0 02520
2 23439 64.8130 24.0879 0147474 117.0087 244.5978 11.27528332110911
AO-16
1 20439U 90005D 97248.08822254 -.00000021 00000-0 86250-5 0 00938
2 20439 98.5321 331.1193 0011302 339.8839 20.1901 14.30016243397656
RS-16
1 24744U 97010A 97248.32758621 .00004196 00000-0 13905-3 0 736
2 24744 97.2670 151.8653 0007660 149.9799 210.1882 15.31799198 28353
```

```
DO-17
1 20440U 90005E 97248.20608578 -.00000013 00000-0 11836-4 0 01079
2 20440 98.5362 332.1543 0010993 337.6336 22.4393 14.30159157397704
WO-18
1 20441U 90005F 97248.20579125 .00000003 00000-0 17771-4 0 01022
2 20441 98.5328 332.0386 0011882 337.6668 22.3992 14.30126879397706
LO-19
1 20442U 90005G 97248.16663148 -.00000027 00000-0 64653-5 0 01048
2 20442 98.5381 332.7154 0012302 336.5846 23.4777 14.30242411397726
FO-20
1 20480U 90013C 97247.86909438 -.00000093 00000-0 -13643-3 0 00101
2 20480 99.0531 194.5011 0541184 196.8460 161.4042 12.83237296354925
AO-21
1 21087U 91006A 97248.19690795 .00000094 00000-0 82657-4 0 8499
2 21087 82.9408 352.3553 0037311 45.0640 315.3518 13.74585726331147
UO-22
1 21575U 91050B 97248.17643939 .00000039 00000-0 27084-4 0 08117
2 21575 98.2916 305.8648 0008156 19.8955 340.2554 14.37082316321978
KO-23
1 22077U 92052B 97247.74933156 -.00000037 00000-0 10000-3 0 06939
2 22077 66.0825 338.6483 0005782 196.5439 163.5392 12.86303603237981
KO-25
1 22828U 93061F 97248.21401627 -.00000005 00000-0 15164-4 0 05717
2 22828 98.5365 320.9885 0010615 356.1294 3.9801 14.28188665173638
IO-26
1 22826U 93061D 97248.19896169 -.00000015 00000-0 11265-4 0 05934
2 22826 98.5388 320.8862 0009631 13.1102 347.0330 14.27844482205505
AO-27
1 22825U 93061C 97248.16659535 -.00000022 00000-0 83482-5 0 05933
2 22825 98.5402 320.5893 0009422 11.8216 348.3194 14.27734192205486
FO-29
1 24278U 96046B 97248.17528570 -.00000021 00000-0 16614-4 0 01159
2 24278 98.5321 278.4629 0351855 339.0995 19.6044 13.52633132051937
Mir
1 16609U 86017A 97248.78260435 .00006288 00000-0 82669-4 0 5781
2 16609 51.6523 40.8999 0005203 96.3088 263.8539 15.59943082659607

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
September 9, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2345. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-06 00:00:00 UTC
From: pmarkham@mortimer.COM
Message-ID: <17082928100831@mortimer.com>
Source record: 18113

Thank you for the insight provided; and the absence of sarcasm and
ridicule.

> Date: Sat, 6 Sep 97 04:31:26 PDT
> From: Ham-Space Mailing List and Newsgroup <Ham-Space@ucsd.edu>
> Reply-to: Ham-Space@ucsd.edu
> Subject: Ham-Space Digest V97 #296
> To: Ham-Space@ucsd.edu

> Regarding albedo, concrete can have a wide range of reflectance and
> color depending on raw mix composition used to manufacture the cement,
> pyroprocessing conditions, water-cement ratio, aggregates, curing, etc.
> Color can range from white (>90% reflectance) to buff to dark gray.
>
Pete/wa4hei

The meek will not inherit the Earth.

2346. APT Antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: cfree36675@aol.com
Message-ID: <19970907025901.WAA12316@ladder02.news.aol.com>
Source record: 18114

Has anyone tried the Hamtronics APT-2CP Trunstile Antenna for NOAA Satellite antenna. If so let me know how it works. If this is not a good one how about a recomdation. I've tried the crossed dipoles in the Weather Satellite Handbook with mixed results. I will be using a preamp.

Let me know about the antenna at this address!

Thanks
Chuck WD0ASJ

2347. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34121f29.140707841@news.atl.bellsouth.net>
Source record: 18115

On Sat, 06 Sep 1997 20:50:23 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:

Argh! Everywhere you see miles below, substitute kilometers.

Gary

>On Fri, 05 Sep 1997 09:02:03 -0700, laura halliday <ve7ldh@direct.ca> wrote:
>>Ken Durham wrote:
>>>
>>> Will we be able to see our concrete
>>> satellite with a telescope if we get
>>> the Keps?
>>
>>You should be more than capable of figuring this out yourself.
>>
>>Consider that concrete is about the same colour as the Moon,
>>and thus probably reflects about the same proportion of the
>>light that hits it (astronomers says "albedo")...
>
>Actually, concrete is a lot lighter than most moon terrain.
>(Ever handled a moon rock?) It only looks bright to us
>because it is so large that it reflects a lot of sunlight to
>us, even if with rather low efficiency. To be equally
>bright at P3D apogee, the Moon would have to be
>about 730 miles in diameter.
>
>If we assume that the concrete mass is ten times as
>reflective as average moon terrain, it would have to
>be 230 miles in diameter to be as bright as the moon.
>Of course we can see objects much fainter than the
>Moon, about 16,000 times fainter. So it is possible
>that we could see a chunk of concrete as small as
>1.8 miles in diameter at P3D apogee. But that would
>require someone with perfect eyesight, in a totally
>dark sky location. The ballast mass is much smaller
>than that.
>
>Now if we slather on some good white paint before
>launch and look for it at perigee....
>
>Gary
>Gary Coffman KE4ZV | You Make It | Email:
>Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
>534 Shannon Way | Guaranteed | or
>Lawrenceville, GA 30244 | | ke4zv@radio.org

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2348. * Satellite Mailing Lists at QTH.Net *

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34126044.15D3@primenet.com>
Source record: 18116

```
* Satellite Mailing Lists at QTH.Net *
WxSat PacSat CommSat HamSat

Additional information available at: http://www.qth.net

--

>>>> info wxsat
WxSat is a mailing list (reflector) devoted to the
discussion of WxSat, weather satellites.

* APT, HRPT, WEFAX
* NOAA, GOES, METEOR
* Equipment, Software
* Remote Sensing and Interpretation
* Anything WxSat Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe wxsat

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe wxsat

To post information/questions to the list:

TO: wxsat@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

-----
>>>> info pacsat
PacSat is a mailing list (reflector) devoted to the
discussion of PacSat, packet radio satellites.

* Amateur Store and Forward Satellites
* Telemetry Reception and Interpretation
* Anomaly Detection and Diagnosis
* Equipment, Software
* Satellite Sleuthing
* Anything PacSat Related
```

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe pacsat

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe pacsat

To post information/questions to the list:

TO: pacsat@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

>>>> info commsat
CommSat is a mailing list (reflector) devoted to the
discussion of CommSat, commercial satellites.

* TVRO, DBS, C-Band, Ku
* Hidden Signals and Subcarriers
* Equipment, Software
* Satellite Sleuthing
* Anything CommSat Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe commsat

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe commsat

To post information/questions to the list:

TO: commsat@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

>>>> info hamsat
HamSat is a mailing list (reflector) devoted to the
discussion of HamSat, amateur radio satellites.

* Amateur Radio Satellites
* Transponders, Schedules
* DX, Special Events
* Equipment, Software
* Buy, Sell
* Anything HamSat Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe hamsat

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe hamsat

To post information/questions to the list:

TO: hamsat@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

>>>>

2349. FAQ?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: Howard Kanare <hkanare@sprintmail.com>
Message-ID: <34126FAB.2F38@sprintmail.com>
Source record: 18117

can someone pls direct me to the FAQ for this newsgroup? thnx.

--Howard Kanare

2350. Insurance Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: planning@cyberpromo.com
Message-ID: <3412b9cb.0@nntp1.nac.net>
Source record: 18118

The past year has seen a dramatic reduction in the cost

of term life insurance from many quality companies.

The San Fransisco Chronicle reported, "Price War Creates

Consumer Bargains in Term Life Insurance," and the New

York Times, "Premiums have fallen to record lows."

You may not be aware that your life insurance company

could now be charging new policyholders less than you

are now paying for the same coverage. Your traditional

life insurance agent has access to a small number of

life insurance companies. Through the internet, you

can compare rates to every other policy available.

Our free price comparison service gives you access to

over 550 term policies from over 175 life insurance

companies.

For a free comparison please go to:
http://www.2plan.com/quote.htm

2351. Re: Curious about 143.625mhz use by Mir.

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <3412C4AF.6511@larc.nasa.gov>
Source record: 18119

The frequency is also used to communicate with NASA's Wallops Island facility. That is the downlink frequency, I forget the uplink frequency in the 130 Mhz portion of the spectrum.
The frequency was at least at one time used to communicate with their tracking and support ships (boats).
John

2352. SSB vs Landwehr Preamp?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: Mike Blanchard <n5kdy@amsat.org>
Message-ID: <3412DC78.F7A5E363@amsat.org>
Source record: 18120

Can anyone compare/contrast the SBB and Landwehr 2m and 70cm pre amps
for use with amateur radio satellites (like AO-10)?

A friend of mine has a IC-821H transceiver and KLM satellite antennas
and found that he needed a pre amp to be able to hear the AO-10
satellite. He purchased a used Landwehr and it seems to work ok. Neither
of us were able to find any specs. for the Landwehr (the original owner
of his pre amp lost all the documentation). I need to purchase a pre amp
and am not sure which unit (SBB vs Landwehr) to select?

73,
Mike N5KDY

2353. Any Mode A activity? Or Mode J CW activity?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: hamdan@ix.netcom.com
Message-ID: <5uumnd$8t8@sjx-ixn9.ix.netcom.com>
Source record: 18121

With the apparent demise (or at least, hibernation) of RS-10, are there any satellites in Mode A other than RS-15? I've monitored a pass of RS-15 on a weekend during daytime, and heard no activity. Has everyone gone somewhere else and not told me (why am I always the last to know)? Is RS-16 operational? Is anyone ever going to get on FO-20 on CW?

73's de Bernie, KF0QS

hamdan@ix.netcom.com

2354. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <7E90A737BCB309A8.3818CCFBE329DC70.7B2DA9476E9BA372@library-proxy.airnews.net>
Source record: 18122

>The ARRL Letter issued yesterday reported that AMSAT has assembled an
international team
>of project workers to try to get P3D up to the new specifications in time
for the
>launch. The team is working round-the-clock to complete the P3D
modifications on time.
>
>The report sounds very optimistic.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
The last letter I've seen was dated Aug 24th and was
written Aug 18th. The AMSAT home page and the AMSAT
PH3-D page don't have any recent news. Is there some
news buried somewhere in the ARRL page?
Ken K5MBV
>
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

2355. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: jeff@jehosophat.com
Message-ID: <slrn61697f.ac9.jeff@photuris.jehosophat.com>
Source record: 18123

On 7 Sep 1997 21:20:24 GMT,
Ken Durham <5mbv@airmail.net> spewed forth:
>
> The last letter I've seen was dated Aug 24th and was
> written Aug 18th. The AMSAT home page and the AMSAT
> PH3-D page don't have any recent news. Is there some
> news buried somewhere in the ARRL page?

Nope. They are maintaining silence on the issue which quite
probably means that it is too late to ride on 502.

Sooner or later another ride will come along and P3D will
be in space.

It just isn't going to happen fast enough to make anyone
happy....

73,
--
jeffrey davis <jeff@jehosophat.com>
http://jehosophat.com/

2356. Re: Curious about 143.625mhz use by Mir.

Newsgroup: rec.radio.amateur.space
Date: 1997-09-07 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <34138C34.19B9@erols.com>
Source record: 18124

Dust Mite wrote:
>
> TIA for reading this!
>
> I was under the impression that 143.625 was used by Mir to contact the
> ground stations in Russia. But I see that some posts from the USA say
> they have heard activity on this frequency, who would Mir be talking
> to over the USA on this freq?
>
> Or is the freq. used by the cosmonauts to communicate with Mir during
> an EVA, and that is what is be overheard?
>
> Tnx

Mir's 143.625 is used over the United States to downlink to three NASA tracking stations; Wallops Island, VA, Dryden Flight Research Center, CA, and White Sands Complex, NM. These three stations receive the Mir voice downlink and relay it to Moscow so they can talk with mission control.

They also support the Soyuz TM voice downlink on 121.75 MHz.

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newsline-off@lists.newspace.com (to cancel an existing subscription)
+ - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - +

2357. Re: P3D report in AMSAT news

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: John Mock - KD6PAG <kd6pag@nospam.qsl.net>
Message-ID: <34145D57.3C7D@nospam.qsl.net>
Source record: 18029

> The last letter I've seen was dated Aug 24th and was
> written Aug 18th. The AMSAT home page and the AMSAT
> PH3-D page don't have any recent news. Is there some
> news buried somewhere in the ARRL page?
> Ken K5MBV
The most recent AMSAT news

http://www.amsat.org/amsat/ftp/news/ans250.txt

reiterates previous news articles and things posted to AMSAT-BB, also indicating that much of what which has been posted there have been comments made by individual not necessarily representing AMSAT's position. It indicated that the current conclusion is that P3D and AMSAT's schedules remain incompatible, in spite of intense efforts to prepare P3D for launch. This is discouraging, but as they say in baseball, "It's not over until it's over", and the last inning has yet to be played.

-- KD6PAG (Networking Old-Timer, RF newbie)

2358. Re: Antenna pre-amp power HOW???????

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <34142FBC.408EC507@rl.ac.uk>
Source record: 18030
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

westy wrote:

> I would like to know how to power a 12vdc preamp via the coax, is it a
>
> simple as placing a .1 microfarad cap on the center conductor of the
> coax
> therefore blocking dc to the receiver and then feeding 12 volts up the
>
> coax. ??????
>

No. You need a capacitor to block DC into the rig. It must be low
impedance
to the RF you are supplying and it must be able to take the power. You
need
to supply the 12V via an effective RFC. The supply end of which should
be
effectively grounded.

If you don't follow all the above - SSB and several others sell one
including
sequencing. It is very easy to do for low power VHF rigs, quite hard at
1500W.

--
Mike

(Remove the space from the Email address to reply)

2359. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: russell@probe.net
Message-ID: <5v1h95jac1@jake.probe.net>
Source record: 18031

jeff@jehosophat.com (Jeff Davis) writes:

>Nope. They are maintaining silence on the issue which quite
>*probably* means that it is too late to ride on 502.

>Sooner or later another ride will come along and P3D will
>be in space.

>It just isn't going to happen fast enough to make anyone
>happy....

The 9/7 bulletin confirms that P3D will not launch on Ariane 502. It also makes it clear that, as far as AMSAT is concerned, there are no ill feelings towards ESA and in fact they are very appreciative of ESA's committment to amateur launches.

I, for one, am confident that they'll do the right thing, namely, launching P3D at the earliest opportunity. I also think that it just may turn out to be a good thing overall - 502 may fail, and even if it doesn't, it will be a good way to raise our confidence factor in the launcher.

--
Tim Russell System Admin, Probe Technology email: russell@probe.net
PGP RSA: C992 109C 6D7F 8D91 062E 817E 00D3 287A
"The worst censorship is self-censorship, because fear has no limits."
-- Grady Ward

2360. Radio Meteor Obs. Bull. Aug 1997 Perseids

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.136.341470F1@vvs.innet.be>
Source record: 18032

Radio Meteor Observation Bulletin No. 49 September 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Enric Fraile Algeciras
Location: Barcelona, Spain (01 59' E, 41 21' N)
Frequency: 48.250 MHz
Transmitter location: most likely Czech television C2 C. Budejovica,
100 kW, horizontal polarisation.
Antenna: 6-element Yagi 617-6B, 14 dBd gain.
Antenna: astronomical azimuth 215 deg (=NE), elevation 0 deg.
Receiver: home made converter 20 dB gain, 1 dB noise and Kenwood TS-830S.
Sensitivity: 0.25 uV for 10 dB S/N
Observing method: the audio signal of the video carrier is received using
a narrow CW filter (100 Hz) and fed into the PC in real time.
Data sampling system: using a super 14 bits A/D card to PC/XT and
"Data Capture" software with 9 second/18 sampling interval to store
all the > 1.0 s signal increases.

Perseids

| Aug 1997
UT | 10 11 12 13
---+----------------
0 | 56 * 102 257
1 | 49 * 276 237
2 | 69 * 191 234
3 | 71 115 216 208
4 | 102 192 210 251
5 | 124 155 184 278
6 | 132 130 289 298
7 | 158 134 314 300
8 | 110 126 383 261
9 | 105 154 327 177
10 | 113 74 259 171
11 | 79 65 155 137
12 | 55 69 176 178
13 | 56 61 277 95
14 | 70 48 231 111
15 | 46 24 204 59
16 | 59 33 121 57
17 | 63 37 53 67
18 | 183? 50 62 79
19 | 46 38 67 71
20 | 65 49 101 56

```
21 | 88 89 75 92
22 | 81 68 134 101
23 | * 132 176 92
---+----------------
UT | 10 11 12 13
| Aug 1997
```

. * thunderstorm
. ? probably affected by sporadic-E, direct reception

Enric Fraile Algeciras

Observer: Eisse Pieter Bus
Location: Groningen, Netherlands (6 deg 33' E, 53 deg 13' N)
Frequency: 72.11 MHz
Transmitter Location: Wroclaw, Poland, 130 kW, Distance 740 km
Antenna: Yagi, 3 elements, geographical azimuth 106 deg (ESE),
elevation 13 deg
Receiver: Bearcat UBC 177XLT Scanning Radio, sensitivity: 0.5 uV
Observation method: Listening and counting in 5-minute intervals.

Mean "sporadic" activity of long-duration reflections >1 second,
between 1997 July 6 and 1997 August 3.
Between brackets the statistical error of one-sigma (n-1).

Starting at UT:

```
6h00m 6h30m 7h00m 7h30m 8h00m 8h30 9h00m 9h30m
-------------------------------------------------------------
10(2) 10(1) 7(1) 8(1) 6(2) 7(1) 6(2) 7(1)
```

Mean "sporadic" activity between 1997 July 5 and 1997 August 2.
Between brackets the statistical error of one sigma (n-1).

Starting at UT:

```
16h00m 16h30m 17h00m 17h30m 18h00m 18h30m 19h00m 19h30m
-------------------------------------------------------------
37(8) 36(4) 36(6) 36(5) 37(6) 42(6) 45(4) 49(8)
```

Uncorrected counts of long-duration reflections >1 second.
Between brackets the total reflection-time in minutes.
Starting at UT:

```
|6h00m 6h30m 7h00m 7h30m 8h00m 8h30m 9h00m 9h30m
----------+--------------------------------------------------
August 11 | 13 15 11 15 11 - 10 15
1997 12 | 16 24 19 25 33 21 17 15
| (1.0) (4.1) (10.5) (12.8) (13.6) (7.6) (6.0) (5.6)
13 | 23 19 18 18 13 13 14 21
```

Uncorrected counts on 1997 August 12.
Between brackets the total reflection-time in minutes.

Starting at UT:

16h00m 16h30m 17h00m 17h30m 18h00m 18h30m 19h00m 19h30m

63(3.3) 67(1.1) 68(0.9) 76(0.8) 89(1.6) 72(2.9) 74(0.7) 68(1.6)

Peter Bus

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elevation 27 deg.
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

August 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Aug | UT
1997 | 20h 21 22 23 00 01 02 03 04 05 06
---+---
1- 2 |
2- 3 | 67 99 96 125 199 175 195 203 156 103 80
3- 4 | 63 105 128 123 143 213 187 189 266 172 86
4- 5 | 67 71 130 164 201 178 203 170 200 147 174
5- 6 | 70 147 117 138 131 168 207 203 185 164 118
6- 7 | 71 104 119 142 166 195 200 239 215 222 137
7- 8 | 99 109 134 139 177 207 181 197 175 127 113
8- 9 | 101 91 117 152 203 209 209 260 290 278 283
9-10 | - 107 144 142 219 299 278 236 218 194 129
10-11 | 114 126 165 209 277 211 206 233 254 279 148
11-12 | 132 165 206 199 235 352 281 269 289 272 358

```
12-13 | 262 224 230 247 277 261 292 241 219 167 230
13-14 | 117 281 165 182 185 242 225 187 194 187 129
14-15 | 92 36 6 1 2 1 2 6 179 178 4
15-16 | 69 110 124 132 116 121 149 162 156 409 278
16-17 | 40 84 111 111 128 135 162 152 97 105 79
17-18 | 56 131 94 97 136 142 163 149 113 129 123
18-19 | 83 121 114 136 131 116 207 149 121 147 103
19-20 | 37 73 86 88 124 129 126 122 118 108 105
20-21 | 38 100 96 89 91 99 132 147 115 166 183
21-22 | 22 29 49 76 87 86 85 85 84 59 276
22-23 |
23-24 | 37 49 83 96 97 100 98 122 136 114 76
24-25 |
25-26 |
26-27 | 78 60 80 77 100 98 108 118 142 118 142?
27-28 |
28-29 |
29-30 | - 33 45 66 76 76 89 93 112 114 86
30-31 | 20 39 50 90 86 71 78 88 103 133 64
31-01 | 39 45 75 80 72 121 147 104 133 173 119
------+-----------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06
Aug | UT

Aug | UT
1997 | 07h 08 09 10 11 12 13 14 15 16 17
------+-----------------------------------------------------
11 | 297 - - 113 85 200? 50 93 115 60 123
12 | 594 - 226 179 138 194 353? 109 128 84 106
13 | 434? - 507? 385? 259? 193 159 156 216 183 116
------+-----------------------------------------------------
1997 | 07h 08 09 10 11 12 13 14 15 16 17
Aug | UT

Notes:
. highest Perseid activity on Aug 12, 6-8h UT
. & sporadic-E, direct reception.
. Aug 14-15: transmitter failure?
. thunderstorms on Aug 24-26
. ? probably affected by sporadic-E, direct reception
. local time = UT + 2 hours.

Maurice De Meyere

--------------------------------------------------------------------------
Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 20 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
```

Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

| Aug 1997 | 10x % reflec. time | horiz: day | vert: time |

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0 | 87 66 79 77 126 46 39 65 72 75 76 140 125 85 47
1 | 88 77 122 102 107 69 102 58 79 139 66 171 114 143 87
2 | 189 109 134 119 94 75 75 78 134 88 152 232 164 152 71
3 | 169 132 186 120 96 123 142 86 95 70 150 257 230 121 111
4 | 119 119 106 125 138 97 105 103 143 96 108 308 252 177 185
5 | 94 140 87 85 102 60 119 53 72 110 99 213 119 124 73
6 | 65 102 143 64 87 81 89 115 124 76 80 219 166 78 90
7 | 97 92 73 55 100 58 83 47 55 41 61 30 86 63
8 | 55 99 44 90 46 61 26 81 16 49 61
9 | 44 78 104 39 72 50 66 31 26 43 65
10 | 29 58 40 29 25 56 47 46 68 54 104
11 | 27 63 20 8 37 64 34 61 98 54
12 | 24 23 12 36 20 37 44 35 58 83
13 | 13 21 81 70 16 44 19 25 34 27 88 49 28 83
14 | 12 19 49 8 2 10 21 8 51 20 79 58 42 44
15 | 19 15 12 26 12 23 15 17 32 10 44 88 27
16 | 14 24 32 38 36 26 22 22 17 66 60 163 68 16
17 | 23 29 11 17 17 41 14 13 25 15 34 137 67 36
18 | 23 56 21 49 25 25 39 14 29 33 56 145 58 28
19 | 34 37 34 19 31 21 35 9 29 27 30 106 25 43 26
20 | 19 28 27 25 28 22 67 23 25 24 92 148 37 34
21 | 46 40 38 16 32 40 36 43 31 43 62 131 37 61 42
22 | 42 36 37 37 35 57 36 36 38 65 62 97 51 57 37
23 | 70 29 32 55 42 23 40 45 29 57 73 92 67 52 29

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

| Aug 1997 | 10x % reflec. time | horiz: day | vert: time |

| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

```
---+-------------------------------------------------------------
0 | 32 57 39 48 46 42 60 68 32 49 29 23 50 56 41 46
1 | 60 78 58 65 60 60 49 65 37 52 41 30 69 75 45 61
2 | 72 111 51 74 63 62 73 70 45 72 52 41 85 90 69 54
3 | 75 97 52 115 73 87 97 93 62 60 75 53 97 89 73 94
4 | 121 44 41 94 80 63 71 61 63 63 137 86 112 121 101 153
5 | 70 63 37 83 87 57 38 84 61 57 85 33 80 95 83 130
6 | 37 75 25 39 42 10 13 77 46 43 106 50 28 63 103 66
7 | 29 47 12 17 23 7 29 53 14 47 152 33 64 59 42
8 | 24 47 11 12 15 14 58 28 20 89 41 47 53 47
9 | 33 68 20 30 25 25 27 78 23 22 29 25 44 62 19
10 | 67 54 26 25 13 33 28 41 79 23 18 33 41 70 26
11 | 45 65 26 39 32 36 25 34 42 17 24 39 14 50 60
12 | 31 39 48 35 25 19 27 44 24 10 10 7 13 34 33
13 | 35 33 49 15 18 14 21 18 34 4 8 12 13 15 47 34
14 | 18 23 14 17 16 9 15 18 54 10 3 10 10 16 27 21
15 | 19 20 33 10 35 17 20 12 21 9 5 6 39 28 36 19
16 | 15 11 14 18 20 28 14 11 15 16 9 17 13 19 17
17 | 24 7 26 19 6 22 16 10 13 13 10 16 8 12 11
18 | 18 18 11 21 20 20 17 28 9 11 13 35 21 14 27
19 | 35 27 20 20 17 30 45 25 16 18 33 20 23 21 26 28
20 | 22 16 31 20 23 23 19 23 25 39 51 31 38 28 31 46
21 | 31 23 27 30 22 29 27 29 30 21 23 28 47 31 35 34
22 | 43 28 34 35 31 35 28 38 31 17 23 25 56 34 28 39
23 | 23 34 28 28 27 34 37 27 34 20 32 33 45 29 37 43
---+-------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Notes:
. ? probably affected by sporadic-E.
. not so strong Perseid activity as last year (but interesting daytime
observations had to be eliminated due to interference).
. alpha Aurigids at the end of the month.
. local time = UT + 2 hours.

Pierre De Groote / comments by C. Steyaert

--------------------------------------------------------------------------------
Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south, elevation 65 deg
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitters: 1) 30 kW TV video carrier from Bari, Italy, distance 700 km,
direction south 2) a 30 kW TV video carrier from Sicilia,
Italy, distance 900 km, south. Both transmitters are on the same
frequency (+/- 10 Hz) and are processed within the same 40 Hz
receiver channel. Several high mountains in transmitter direction
prevent direct and tropospheric reception.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record
the audio signal. 20 channels of 2 Hz width are used for meteor
identification, pictures with interference, sporadic-E, E-layer
```

and FAI propagation are manually rejected.

All meteor counts below are corrected for a full hour observing time. If the recording duration is 20-40 minutes, a dot is shown after the value. Data for less than 20 minutes observing time are not shown here.

Meteor counts of reflections longer than 6.5 seconds: assumed to be overdense.

```
| Aug 1997
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+-------------------------------------------------------------
0| 49. 15 27 13 27 26 24 16 11 34 36 53 30 23
1| 47 21 26 29 16 25 13 23 26 31 36 40 34 26
2| 46 22 23 16 19 34 20 19 29 35 51 59 32 28
3| 47 22 24 14 27 25 34 35 31 29 48 53 41 30
4| 31 17 18 8 16 22 31 27 35 23 46 42 36 39.
5| 15 13 16 8 13 38. 22 26 27 24 24 51 35 46
6| 16 18. 11 5 7 17 13 16 6 30 27 58 30 43
7| 22 9. 5. 3 11 22 22 8 14 30 21 52 25 35
8| 6 10 9 6 11 27 13 6 27 21 55 28 22
9| 7 4 9 12 13 8 31. 13 66 30 25
10| 10 6 2 13 15 18 13. 19 38 25. 18
11| 4 1 7 6 13 4 21. 11 26 16. 14
12| 1 3 6 4 4 7 6 7 3. 6 29 12
13| 6. 1 9. 4 1 2. 1 1 5. 10
14| 4 1 0 1 9. 17 7 14 2.
15| 0 1 3. 3 0 5
16| 7.
17| 1 5. 2.
18| 0 10 19 5
19| 6 1 6. 5 1 5. 8 12 3
20| 1 5 5 0 9 3. 2 4. 14. 12 11 18
21| 8 6 3 3 6 9 8 8 10. 14 22
22| 9 13 6 7 14 15 4 11 8 27 7. 11 9
23| 4 21 10 21 20 16 7 17 24 21 36. 15 22
---+-------------------------------------------------------------
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Aug 1997
```

```
| Aug 1997
UT| 22 23 24 25 26 27 28 29 30 31
---+---------------------------------------
0| 12 6 4 4 0 7 12 15 2
1| 14 9 0 6 12 9 4
2| 16 6 10 6 14 6 5
3| 18 12 4 9 7 8 15 7
4| 19 3 11 7 5 10 9 6
5| 17 11. 8 6 12 9 6 15 11
6| 13 7 7 5 11 4 10 18 7
7| 10 19 7 5 8 4 11 20
```

```
8| 7 7 2 10 14. 3 13
9| 9 5 5 10. 2 3 8
10| 2 4 2 6 8 6
11| 13 3 5. 0 6. 4 6
12| 8 5. 4 0 7. 4 5
13| 3 2 5 1 5. 9 3 5
14| 3 0. 3. 0. 1 4.
15|
16| 3 0.
17| 2. 2. 2. 5.
18| 3. 0 0
19| 6 2.
20| 0. 9. 7 4. 0. 3. 0 2. 7
21| 6 3 4 0. 3 3 8 4
22| 6 9 3. 2 0. 7 9 7 4
23| 16. 5 13 2 4 10 12 7 4
---+--------------------------------------
UT| 22 23 24 25 26 27 28 29 30 31
| Aug 1997
```

The Perseids maximum on Aug 12-13 is not very explicit in the above counts. I found the maximum to be clearer in the fireball counts, which I have for 2 different channels:

Comparison of the radio fireballs counts for two different directions

Channel "A": two transmitters from Italy, direction south, as described above compared with Channel "C": one transmitter from Germany, northwest, distance about 700 km, recorded at 62.2500 Mhz. Same recording technique as avove. Even these long reflections (fireballs) depend on the specific transmitter-receiver geometry, as the counts for the 2 channels are de-phased.

Only counts of reflection duration longer than 50 seconds are shown here, assumed to be fireballs.

```
| Channel "A" Channel "C"
| Aug 1997 Aug 1997
UT| 3 4 5 6 7 8 9 10 11 12 13 14 15 11 12 13 14
---+------------------------------------------------- ---------------
0| 1 0 1 2 2 2 0 2 1 1 0 0 0 0
1| 0 0 0 0 1 0 0 1 2 3 0 0 0 2 0
2| 0 0 1 0 1 0 1 1 6 5 1 1 1 1 0
3| 0 0 0 2 4 2 2 2 4 6 2 3 0 1 1
4| 1 1 0 0 0 1 0 0 4 6 5 5. 1 0 0
5| 0 0 2 2. 1 1 2 0 1 4 7 3 1 4 0
6| 2 0 0 2 0 1 0 2 2 4 3 2 0 3 2
7| 0. 0 0 0 4 0 1 4 3 4 2 3 1 3 1
8| 1 1 0 0 2 2 1 0 0 15 2 0 2 1 1
9| 0 1 1 0 2 2. 1 12 1 0 3 1 1
10| 0 0 0 0 1 0. 1 7 2. 1 5 0 1
11| 0 0 0 3 1 6. 0 0 0. 1 10 0 0
12| 2 1 0 0 1 0 0. 0 3 0 13 0
```

```
13| 2. 1 0 0. 0 0 0. 0 3 0.
14| 0 0 0 2. 0 0 0 0. 3 0
15| 0 0. 0 0 3 3
16| 2.
17| 0 2. 0. 0
18| 0 1 3 0 3 0
19| 0 0 0. 0 0 0. 1 0 0 0 0
20| 0 0 0 1 0. 0 0. 0. 1 0 0 0. 0. 0
21| 0 0 0 0 0 0 0 0. 0 0 0 1 0
22| 0 0 1 0 0 0 0 1 0. 0 0 0 0 0
23| 0 1 3 0 0 0 0 0 6. 0 0 0 0 0
---+------------------------------------------------- ---------------
UT| 3 4 5 6 7 8 9 10 11 12 13 14 15 11 12 13 14
| Aug 1997 Aug 1997
```

Notes:
. blank value means either few or no data available, interference,
sporadic-E, E-layer or FAI propagation, or offline during
thunderstorms and holiday.
. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)

Werfried Kuneth

Observer: Sadao Okamoto
Location: Damine, Japan (137.53 E, 35.07 N)
Transmitter: JA9BOH/b beacon for RMO (50 W CW 53.7500 MHz)
by JA9BOH Kimio Maegawa
Antenna: 2 element Cross Yagi 4 dBi aiming to Zenith.
Location: Sabae city (136.2 E, 35.9 N)
Receiver: IC575
Antenna: 2 element Yagi, pointed to the zenith

Notes: @xx numbers are converted hourly rate with less than hour data.
nxx numbers are uncertain data due to high noise level.
"--" means lost counts because of high noise level or machine failure.
"e" means lost counts because of Es opening.
Time is JST = 9 + UTC.

All echoes
1997

```
Aug|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Aug|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+------------------------------------------------------------------------
01|119 88 79 65 58 45 43 41 39 31 11 23 15 21 23 9 15 -- -- 14 19 26 49@56
02 |72 76 66 63 75 64 64 51 28 33 19 23 21 -- 22 24 12 9 21 25 26 40 50@66
03 |80 81 80 83 75 56 59 46 41 12 19 32 12 -- --@14 9 15 17 7 20 36 42@67
04 |65 63 50 70 66 78 58 55 34 29 30 21 21 -- 22 14 16 13 19 17 31 21 60@66
05 |65 58 63 73 68 62 43 39 41 24 21 28 21 25 17 19 25 22 12 11 21 39 49@45
06 |63 57 66 46 53 58 50 40 49 e e 20 19 23 26 16 18 20 16 9 31 37 51@60
07 |49 50 48 40 59 59 48 43 36 37 17 22 16 19 18 17 20 14 24 13 37 39 45@46
08 |65 58 78 61 59 59 52 43 40 29 23 26 18 24 17 24 25 13 15 15 29 35 49@54
```

```
09 |56 50 59 53 39 42 48 39 36 30 29 22 17 18 21 17 16 -- 18 15 32 38 38@45
10 |55 45 55 55 62 66 53 49 49 27 26@30n27 17 18 17 19 14 14 13 18 29 40@48
11 |56 46 57 63 70 60 43 47 30n21 -- -- 23 42 17 31 31 20 12 18 29 43 49@60
12 |62 58 70 88 84 84 70 59 62 44 31 21 22 37 e e e e e 18 33 37 52@75
13 |64 73 68 89 94 89 87 72 61 51 38 29 18 32 25 29 23 27 16 15 28 36 54@60
14 |63 53 68 92 86 67 80 53 62 43 40 30 31@34 25 21 28 17 17 21 33 39 53 --
15 |52 52 72 83 77 63 65 61 51 51 40 36 33 45 21 17 29 13 18 17 15 48 50@48
16 |53 40 60 59 72 63 59 55 46 40 31 19 28 36 22 e e e e 14 26 40 41@45
17 |54 66 61 61 64 90 71 50 38 e e e e@35 27 18 23 20 19 15 19 32 40@32
18 |45 40 51 62 50 65 56 63 46 22 27 29 27 27 36 34 18 14 17 25 23 37 39@47
19 |52 48 61 66 51 61 66 65 35 -- -- -- -- 25 29 19 16 15 12 17 42 29 48@44
20 |48 42 51 68 55 78 74 45 29 36 32 29 29 26 35 13 23 19 13 22 34 43 32@53
21 |46 53 56 65 57 62 53 50 40 30 37 25 30 31 22 19 18@16@12 16 22 36 43@30
22 |37 56 53 59 60 45 64 47 54 24 26 35 en16n16 23 19 19 12 16 26 34 41@46
23 |43 36 57 54 53 41 62 61 36 47 21 30 21 30 21 18 19 16 12 24 22 31 40@67
24 |56 47 36 56 52 64 47 44 35 31 25 22 20 23 e 12 e e e 18 25 34 44@53
25 |45 66 54 60 46 56 52 49 33 36n19n14n16n13n14 13n13 18 17n23n20n37n35@47
26 |51 50 38 60 46 51n49 54 39n30 19n31 16 29 30n11 n8 -- e 18 20 34 32@42
27 |58 39 49 38 45 56 55 51 38 21 21 15 12 18 14n14n15 18 22 17n21 35 30@31
28 |55 40 48 65 50 55 54 46 33 34 26n15n18n12 n9 n9n16n11 11 16 22 24 34@32
29 |47 53 54 55 62 50 58 54 33 26 27 18 n6 n8n12 n7n19 18n16 14 21 39 49@55
30 |46 51 40 53 55 58 52 41n40n31n12n11n10n16 n7 n7 11 12 8 16 26 36 32@48
31 |59 59 55 60 59 51 61 37 42 51 28 31 25n25 20n22 17 18 22 16 20 35 48@45
---+--------------------------------------------------------------------------
Aug|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
UT Aug|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22
23 JST
1997

Echoes with duration > 5 s
1997
Aug|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Aug|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+--------------------------------------------------------------------------
01 |12 10 18 8 6 6 2 8 6 3 2 2 1 2 8 5
02 | 8 6 6 3 6 10 6 4 2 3 3 1 1 1 11
03 | 8 8 12 16 14 7 10 7 5 1 1 1 2 1 6
04 | 2 1 5 9 11 9 4 5 1 6 2 3 2 3 2 2 3
05 | 4 6 6 10 7 6 3 2 1 2 3 1 3 1 1 3
06 | 5 7 10 2 10 7 4 3 2 2 2 1 2 1 1 2 1 1 1
07 | 3 6 11 6 6 9 6 3 2 2 2 1 2 1
08 | 1 7 11 9 10 5 4 2 4 1 5 2 1 1 1 1 1 1
09 | 6 5 10 12 5 5 8 3 5 3 2 1 2 1 2 2
10 | 3 2 4 9 8 5 5 3 12 4 1 2 1
11 | 3 8 10 8 9 11 11 8 5 6 2 1 1 1 4 2 2 7
12 | 5 12 27 22 29 29 16 19 18 12 4 1 1 5 1 3 9
13 |14 21 16 24 39 33 31 17 8 10 5 5 1 2 1 1 1 2 1 5
14 | 9 14 15 16 28 11 18 12 7 6 4 3 4 3 1 1 1 4 2
15 | 5 7 10 13 20 16 19 14 8 3 8 3 2 1 1 1 1 2
16 | 3 6 13 12 10 8 8 4 2 2 1 1 4 1 2 1
```

```
17 | 4 4 5 3 8 7 5 9 3 1 2 1 2 1
18 | 2 3 5 6 1 9 9 3 1 2 1 1 3 1 1 1 2
19 | 2 8 2 7 5 4 6 8 3 1 2 1 1 1
20 | 3 2 8 3 4 6 9 5 4 4 1 1 1 1 1 1
21 | 2 5 1 6 7 4 4 4 3 4 6 2 1 1 1 1
22 | 8 4 4 3 6 2 2 3 1 3 1 1 1 1 1 1
23 | 2 5 5 4 1 4 3 3 1 2 1 1 1 2
24 | 2 1 3 2 2 4 3 2 2 1 2 2 1
25 | 3 4 3 2 4 3 7 1 1 2 1 1 3
26 | 3 3 1 4 4 5 3 4 1 1 1 1
27 | 1 2 3 2 4 6 3 1 1 1 1 1 2 1 1 1 1 1
28 | 5 5 5 2 3 1 1 1 1 1 2
29 | 2 1 3 9 2 5 1 1 1 2 1
30 | 2 4 2 1 3 4 6 8 5 2 1
31 | 2 4 1 3 6 6 5 3 1 1 1 1 1 1 1 1
---+------------------------------------------------------------------------
Aug|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
UT Aug|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22
23 JST
1997
```

Sadao Okamoto / via Kimio Maegawa

```
Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)
```

Meteor counts in one hour intervals starting at:

Perseids 1997

```
| August 1997
UT | 11 12 13 14
----+-----------------------------------
0 | 492 808 788 487
1 | 602 830 771 506
2 | 638 851 910 647
3 | 701 1043 994 540
4 | 803 836 935 535
5 | 660 531 907 516
6 | 662 709 819 698
```

```
7 | 545 1423* 820 557
8 | 533 1395* 828 303
9 | 411 1246* 853 386
10 | 372 911 500 412
11 | 183 745 511 317
12 | 311 567 312 277
13 | 229 573 257 202
14 | 227 326 222 179
15 | 265 367 201 203
16 | 235 369 239 232
17 | 126 339 249 291
18 | 158 365 207 303
19 | 247 315 299 172
```

2361. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcbc94$e4e92e80$9c60b6cd@cbx-nt>
Source record: 18033

Tim Russell <russell@probe.net> wrote in article
<5v1h95jac1@jake.probe.net>...
>
> jeff@jehosophat.com (Jeff Davis) writes:
>
> >Nope. They are maintaining silence on the issue which quite
> >*probably* means that it is too late to ride on 502.
>
> >Sooner or later another ride will come along and P3D will
> >be in space.
>
> >It just isn't going to happen fast enough to make anyone
> >happy....
>
> The 9/7 bulletin confirms that P3D will not launch on Ariane 502. It
also
> makes it clear that, as far as AMSAT is concerned, there are no ill
feelings
> towards ESA and in fact they are very appreciative of ESA's committment
to
> amateur launches.
>
> I, for one, am confident that they'll do the right thing, namely,
launching
> P3D at the earliest opportunity. I also think that it just may turn out
to
> be a good thing overall - 502 may fail, and even if it doesn't, it will
be a
> good way to raise our confidence factor in the launcher.
>
> --
> Tim Russell System Admin, Probe Technology email:
russell@probe.net
> PGP RSA: C992 109C 6D7F 8D91 062E 817E 00D3 287A
> "The worst censorship is self-censorship, because fear has no limits."
> -- Grady Ward
>

I see. So the next possible launch could be with, Who? When?

Next week? Next month? Next year?

It is nice that everyone is civil, is anyone expecting results or is the
project dead.

I would really like to know when I should look at buying back into the hobby. Not being sarcastic, I know it sounds like it, sorry. I already sold the FT-736R, so no big deal for now.
--
Christopher Cox
KC8FRJ
TRA#4901 L2

2362. Re: Antenna pre-amp power HOW???????

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: erk <erk@inde.mct.anl.gov>
Message-ID: <341442E7.FDE@inde.mct.anl.gov>
Source record: 18034
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

A capacitor feeds RF to the center of the coax at either end (ac couple). An RF choke feeds DC to the center of the coax, while blocking RF at the frequency of interest.

```
C C
signal--)(--------- coax center conductor -----------)(------ signal
| |
| |
[choke] [choke]
| |
| |
dc in/out dc out/in
```

The coax braid stays intact.
Dick,K9FFK

2363. Re: Getting started in satellite tracking and communications

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: kiyoinc@ibm.net
Message-ID: <34134312.0@news3.ibm.net>
Source record: 18125

In <3406b760.0@208.212.139.3>, 106452,657@compuserve.com writes:
>Hi! I am an electronics and information technology student fascinated by satellites, tracking them and monitoring telemetry etc. I would be most grateful if someone could advise me how to start studying this subject as a hobby, e.g. any useful books to r ead and where I may get them from and other support. Thank-you.

Then you'll want to check out http://www.stk.com for your FREE copy of their $10,000.00 Satellite Toolkit. They'll send you a CD with both the Win32 and Unix versions.

Analytical Graphics, the makers of STK, is locked in battle with a company that I used to work for that has a better product (more features, but I'm biased.) so they've lowered the price of STK from $10,000 to absolutely FREE.

Get your copy before they come to their senses... Check it out. If you decide you want something with more features, hit http://www.stacinc.com, STAC's simulator is much more expensive but I think it's worth it. (You get what you pay for.)

Cory Hamasaki AH6GI AMSAT Life member.

2364. Re: SSB vs Landwehr Preamp?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <3413A338.B2CFCD03@rl.ac.uk>
Source record: 18126

Mike Blanchard wrote:

> Can anyone compare/contrast the SBB and Landwehr 2m and 70cm pre amps
> for use with amateur radio satellites (like AO-10)?
>

I have one of each. One for 2m from Landwehr and one from SSB for 70cm. Both
are very good. You will find the power handling of the SSB is higher. I think you
may also find the noise figure lower, but I doubt it makes any
difference on 2m and only a marginal difference on 70cm.

A clear advantage of the SSB unit is that it is powered up the coax - like pre-amps
should be and is therefore easy to drive with ICOM rigs like the
275/475. The
Landwher seems to use better relays on 70cms but SSB often use unusual
configurations with matching and phasing to increase the performance.

Neither will mange more than 350W on 70cm, but you should not be using
so much uplink power in any case!

--
Mike

(Remove the space from the Email address to reply)

2365. RE:Pre amp's(Landwehr & SSB)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: shorton@juno.COM
Message-ID: <19970908.093023.5351.1.shorton@juno.com>
Source record: 18127

Hello Mike....Could you tell me what you paid for Landwehr & SSB pre amps?
Two meter and 70cm...I have several of the Landwehr's myself and have heard good reports about the SSB pre amps.....73 and thanks
de kd4esv el87rh samuel

2366. Re: SSB vs Landwehr Preamp?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-08 00:00:00 UTC
From: Joe Public <public@jow.com.usa>
Message-ID: <34141766.38E9@jow.com.usa>
Source record: 18128

Mike Blanchard wrote:

>> Can anyone compare/contrast the SBB and Landwehr 2m and 70cm pre amps
>> for use with amateur radio satellites (like AO-10)?

> A friend of mine has a IC-821H transceiver and KLM satellite antennas
> and found that he needed a pre amp to be able to hear the AO-10
> satellite. He purchased a used Landwehr and it seems to work ok. Neither
> of us were able to find any specs. for the Landwehr (the original owner
> of his pre amp lost all the documentation). I need to purchase a pre amp
> and am not sure which unit (SBB vs Landwehr) to select?

Cant compare them for you, but I have two SSB preamps, one for 2m and
one for 70cm. I just bought them three weeks ago. Im using them with
an ICOM 821H successfully, allowing voltage to be supplied across the
100 ft. of coax I have. I paid $250 for each of them new and am a very
satisfied customer!

I have been using the 2 meter one for AO-10 too.

If anyone has specific questions, just write me at: catman@codem.com
(The address above is bogus). I would be happy to answer specifics.

By the way, SSB's WEB Page can be found at: http://www.ssbusa.com

73, Mike Catalanotti
New Hampshire, USA
catman@codem.com

2367. Antenna pre-amp power HOW???????

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: westy <westyp@hotmail.com>
Message-ID: <873731760.429084@comcen.comcen.com.au>
Source record: 18035
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

I would like to know how to power a 12vdc preamp via the coax, is it a simple as placing a .1 microfarad cap on the center conductor of the coax therefore blocking dc to the receiver and then feeding 12 volts up the coax. ??????

I hope someone has the answer, thanks in advance

westy 8-)
westyp@hotmail.com

2368. no P3D launch

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: nferro@jlc.net
Message-ID: <3414aa1d.7338710@news.destek.net>
Source record: 18036

Check out:

http://www.amsat.org/amsat/news/ans1997/ans97250.html#01

2369. P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5v3qm2$s6c$1@tilde.csc.ti.com>
Source record: 18037

The recent ANS Bulletin 208.01 complained that comments
made to public forums such as newsgroups and magazines that
were made by someone other than AMSAT NA did not represent
the opinions of AMSAT. Futher we should be careful of what
we say about ESA and the delays in order not to jeapordize
negotiations.
I'll be careful of what I say, but I will not avoid voicing
my opinions. AMSAT may not be representing me either. We contributed
dollars to the project, without which there would be *no* P3D!
What is being negotiated? We want some feedback. When things were
going well there was a great deal of patting themselves on the back
in public forums. If they can't stand discussion, then they should
get the job done, or we will start putting on the pressure for a new
representation.

Ken Durham K5MBV

2370. Re: APT Antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970909171000.NAA07175@ladder02.news.aol.com>
Source record: 18038

Hi

I have used them all..the best is probably a quadrifilar helix. But as a Ham, you may want to consider the M2 Eggbeater. It does a superb job on weather sats and allows you a fine antenna for 2 meter ssb or mode a satellite work!

check out this web site for lots of weather sat info:

http://members.aol.com/jkktl/ham.htm

2371. ARLK070 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk070.1997@arrl.org>
Source record: 18039
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK070
ARLK070 Keplerian data

ZCZC SK70
QST de W1AW
Keplerian Bulletin 70 ARLK070
From ARRL Headquarters
Newington, CT September 9, 1997
To all radio amateurs

SB KEP ARL ARLK070
ARLK070 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97245.81292256 -.00000006 +00000-0 +10000-3 0 05035
2 14129 026.1695 128.8425 6046674 148.2074 269.5478 02.05881305078982
RS-10/11
1 18129U 87054A 97252.08732529 .00000037 00000-0 23979-4 0 03961
2 18129 82.9260 176.7161 0012629 356.4485 3.6580 13.72381887511742
UO-11
1 14781U 84021B 97251.98636951 .00000138 00000-0 31019-4 0 00134
2 14781 97.8428 229.9027 0012840 92.0598 268.2078 14.69579308723568
RS-12/13
1 21089U 91007A 97251.95797125 .00000045 00000-0 31007-4 0 00205
2 21089 82.9201 216.5037 0031279 64.1947 296.2429 13.74085407330662
UO-14
1 20437U 90005B 97251.78464262 .00000015 00000-0 22520-4 0 03066
2 20437 98.5153 331.6302 0011166 327.6294 32.4204 14.29970242398167
RS-15
1 23439U 94085A 97251.80011638 -.00000039 00000-0 10000-3 0 02549
2 23439 64.8125 17.6337 0147503 116.3423 245.2731 11.27528231111364
AO-16
1 20439U 90005D 97252.14643294 .00000047 00000-0 34994-4 0 00940
2 20439 98.5317 335.0963 0011291 327.6988 32.3503 14.30017384398231
RS-16
1 24744U 97010A 97252.18171426 .00004739 00000-0 15653-3 0 00811
2 24744 97.2665 155.6453 0008064 137.4475 222.7384 15.31837349028941
```

```
DO-17
1 20440U 90005E 97252.19392785 .00000047 00000-0 34991-4 0 01110
2 20440 98.5359 336.0656 0010681 325.0390 35.0099 14.30160278398275
WO-18
1 20441U 90005F 97252.12376319 -.00000001 00000-0 16199-4 0 01031
2 20441 98.5330 335.8810 0011925 326.0641 33.9778 14.30127094398265
LO-19
1 20442U 90005G 97252.15424216 .00000042 00000-0 33077-4 0 01022
2 20442 98.5384 336.6283 0012121 325.0352 35.0035 14.30243476398290
FO-20
1 20480U 90013C 97251.92354804 -.00000043 00000-0 -24563-4 0 00080
2 20480 99.0538 197.7964 0541383 187.6610 171.5964 12.83237599355449
AO-21
1 21087U 91006A 97252.12757117 .00000094 00000-0 82657-4 0 08545
2 21087 82.9410 349.4474 0037415 35.0689 325.2906 13.74585766331680
UO-22
1 21575U 91050B 97252.14510322 .00000059 00000-0 34120-4 0 08108
2 21575 98.2905 309.6899 0007608 10.6086 349.5278 14.37083263322542
KO-23
1 22077U 92052B 97252.18108094 -.00000037 00000-0 10000-3 0 07007
2 22077 66.0816 329.3667 0005249 194.3413 165.7456 12.86303650238559
KO-25
1 22828U 93061F 97252.13729914 .00000079 00000-0 48863-4 0 05841
2 22828 98.5366 324.8253 0010405 345.8583 14.2307 14.28189871174192
IO-26
1 22826U 93061D 97252.12319024 .00000004 00000-0 18988-4 0 05882
2 22826 98.5391 324.7225 0009550 1.6541 358.4674 14.27845036206069
AO-27
1 22825U 93061C 97252.16120896 .00000099 00000-0 57550-4 0 05895
2 22825 98.5393 324.4920 0008840 6.1429 353.9864 14.27735251206052
FO-29
1 24278U 96046B 97252.16949247 -.00000042 00000-0 -41226-5 0 01131
2 24278 98.5313 281.9073 0351671 328.7490 29.3143 13.52633225052472
MO-30
1 24305U 96052B 97252.16637272 .00000204 00000-0 20364-3 0 01485
2 24305 82.9270 292.5165 0032731 335.4298 24.5263 13.73097957050585
Mir
1 16609U 86017A 97252.43408653 .00006825 00000-0 89007-4 0 5874
2 16609 51.6537 22.5513 0004960 110.2296 249.9255 15.59998094660174

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
September 13, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2372. Wanted: back issues of Satellite Times magazine

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: dhrnsn@ptd.net
Message-ID: <5v4do3$6cj$1@news1.ptd.net>
Source record: 18040

I'm looking to buy back issues of "Satellite Times" magazine.

I understand Grove Enterprises has a limited supply of back issues,
but was hoping someone here may have a set they'd like to sell.

I need any and all between Volume 1-#1, and Volume 3-#4.

Thanks,

David Hirneisen/N3GKB
Lititz, Pennsylvania
dhrnsn@ptd.net

2373. Hamfest Sunday 21 Sep, Newtown, CT

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3415E637.5B3D@ix.netcom.com>
Source record: 18041
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.homebrew

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

2374. NORAD Two-Line Orbital Element Sets (TLE059)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5v4cqo$2ud$1@blackbird.afit.af.mil>
Source record: 18042

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

```
- Current Two-Line Element Sets #059 -
Alouette 1
1 00424U 62049A 97249.91077641 .00000011 00000-0 28835-5 0 3152
2 00424 80.4644 202.9416 0023309 328.1466 31.8270 13.67901883743415
ATS 1
1 02608U 66110A 97250.51939388 -.00000008 00000-0 10000-3 0 364
2 02608 14.4605 347.9974 0004515 170.5383 189.5622 1.00303976 29354
ATS 3
1 03029U 67111A 97249.44335615 -.00000114 00000-0 10000-3 0 6945
2 03029 14.8739 354.9851 0008992 271.5280 133.4114 1.00272736109247
Starlette
1 07646U 75010A 97248.48812797 -.00000144 00000-0 -26657-5 0 827
2 07646 49.8262 191.4790 0205902 261.3426 96.4093 13.82193020140554
LAGEOS
1 08820U 76039A 97250.45519343 .00000001 00000-0 00000+0 0 3163
2 08820 109.8165 179.2258 0045103 31.1980 329.1328 6.38664727242396
GOES 2
1 10061U 77048A 97251.32096480 .00000046 00000-0 10000-3 0 8780
2 10061 12.9202 32.0715 0010693 135.0223 119.3024 1.00260053 18937
IUE
1 10637U 78012A 97242.97126301 .00000033 00000-0 10000-3 0 4072
2 10637 36.1754 76.5853 1374263 69.3187 235.0170 1.00059570 24336
GOES 3
1 10953U 78062A 97251.45247744 -.00000082 00000-0 10000-3 0 8424
2 10953 11.9452 35.1255 0002984 129.3665 236.4183 1.00272334 23552
SeaSat 1
1 10967U 78064A 97250.54891595 -.00000018 00000-0 38542-4 0 6024
2 10967 107.9937 20.4871 0001698 260.1973 99.8975 14.38186423 5760
```

```
Nimbus 7
1 11080U 78098A 97250.58689501 -.00000038 00000-0 27575-5 0 6953
2 11080 98.8896 95.7203 0008148 200.1076 159.9758 13.83678349953040
GOES 5
1 12472U 81049A 97250.41323083 -.00000208 00000-0 10000-3 0 159
2 12472 8.8926 45.8292 0005454 92.6721 267.5034 1.00333960 17589
Cosmos 1383
1 13301U 82066A 97250.26055737 .00000038 00000-0 26923-4 0 6105
2 13301 82.9323 165.9983 0029110 86.3784 274.0696 13.68085095758501
LandSat 4
1 13367U 82072A 97248.53283432 .00000064 00000-0 23952-4 0 962
2 13367 98.0172 290.3168 0006195 178.4916 181.6303 14.57207634805391
DMSP B5D2-1
1 13736U 82118A 97251.85486307 .00000063 00000-0 44775-4 0 3023
2 13736 98.6216 78.9755 0008949 153.5623 206.6016 14.25852218765007
IRAS
1 13777U 83004A 97251.55558945 -.00000211 00000-0 -11488-3 0 7685
2 13777 98.9739 73.6783 0012820 299.3462 60.6420 13.99275095416070
Cosmos 1447
1 13916U 83021A 97250.08180518 .00000019 00000-0 38647-5 0 7056
2 13916 82.9411 220.4814 0038221 349.2858 10.7484 13.74358713725126
TDRS 1
1 13969U 83026B 97249.56016669 -.00000298 00000-0 10000-3 0 7876
2 13969 9.6111 39.5129 0003858 104.3858 354.6795 1.00265807 25869
GOES 6
1 14050U 83041A 97251.29098669 .00000064 00000-0 10000-3 0 7126
2 14050 7.7543 49.5464 0003626 89.9726 178.7348 1.00282847110684
AO-10
1 14129U 83058B 97245.81292256 -.00000006 00000-0 10000-3 0 5035
2 14129 26.1695 128.8425 6046674 148.2074 269.5478 2.05881305 78982
LandSat 5
1 14780U 84021A 97247.73124425 .00000022 00000-0 15121-4 0 6414
2 14780 98.2775 310.0104 0003270 9.6537 350.4723 14.57081340718699
UO-11
1 14781U 84021B 97250.48843686 .00000157 00000-0 34360-4 0 9999
2 14781 97.8426 228.4631 0012801 96.4741 263.7922 14.69578932723342
Cosmos 1574
1 15055U 84062A 97251.58255429 .00000063 00000-0 51186-4 0 9040
2 15055 82.9549 275.2374 0027273 169.8516 190.3192 13.73652459662545
Cosmos 1602
1 15331U 84105A 97250.98703631 .00000397 00000-0 43677-4 0 5874
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2 18312 82.5583 358.9373 0014024 52.4713 307.7719 13.84102880507763
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2 18820 82.5391 50.4351 0017859 104.1323 256.1823 13.84779994485578
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Meteor 3-2
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2 19883 0.7261 89.5609 0003074 103.4293 252.2353 1.00267596203575
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2 20185 55.3661 93.1760 0035812 52.0250 308.3749 2.00566788 59014
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Kvant-2
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2 22521 31.1018 101.6762 0055403 271.3058 88.1276 15.03699250249595
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2 22581 55.0601 329.8857 0073141 41.4239 319.1870 2.00560785 32601
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2 22657 55.0938 329.7830 0094695 229.1587 130.0758 2.00575253 27937
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1 22698U 93041A 97248.08553256 .00000091 00000-0 34664-4 0 6015
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2 22739 99.1036 216.7172 0010923 49.1731 311.0382 14.11000653210191
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2 22779 54.0866 268.8661 0012004 288.1868 71.7212 2.00574001 29474
Meteor 2-21
1 22782U 93055A 97249.34641634 .00000058 00000-0 38977-4 0 5879
2 22782 82.5513 353.5484 0022196 164.4606 195.7236 13.83079648202800
UFO F2
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2 22787 3.7143 329.6376 0004631 153.7834 219.8621 1.00268666 13274
SPOT 3
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2 22823 98.7098 323.1015 0016632 189.6186 170.4672 14.16998983204733
STELLA
1 22824U 93061B 97251.40249534 -.00000043 00000-0 51254-8 0 5788
2 22824 98.5358 322.7190 0007234 5.9119 354.2146 14.27108639205860
AO-27
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2 22825 98.5394 323.8070 0008937 8.8058 351.3310 14.27735008205952
IO-26
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2 22826 98.5394 322.8742 0009681 7.1693 352.9622 14.27844993205791
HEATHSAT
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HST Array
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CORONAS I
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RESURS 1-3
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Glonass 70
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1997046D
1 24919U 97046D 97248.91815295 -.00000154 00000-0 00000+0 0 37
2 24919 14.6248 354.6351 4808199 1.9425 359.3688 1.79819061 159
FORTE
1 24920U 97047A 97250.46147693 .00000040 00000-0 43478-4 0 116
2 24920 69.9564 254.4837 0023404 157.6185 202.6050 14.22577758 1258
1997047B
1 24921U 97047B 97251.51313070 .00000193 00000-0 11082-3 0 101
2 24921 69.9730 252.1282 0021295 156.8438 203.3649 14.23018619 1418
1997043G
1 24922U 97043G 97242.89556158 .23765398 00000-0 26026+0 0 26
2 24922 86.6008 36.6939 0036407 294.4198 82.8553 15.56189057 1393
1997043H
1 24923U 97043H 97246.91832298 .20726521 00000-0 23841+0 0 110
2 24923 86.6416 34.9237 0036250 310.9726 52.9533 15.54674041 2001
1997043J
1 24924U 97043J 97251.82236415 .00690258 00000-0 31046-1 0 142
2 24924 86.6681 32.8745 0017889 253.4244 106.4968 15.18704460 2725
Iridium MFS
1 24925U 97048A 97250.03210690 .00000302 00000-0 35932-4 0 109
2 24925 86.3363 123.8900 0006216 328.5419 31.5454 14.80568718 812
Iridium MFS
1 24926U 97048B 97251.24951918 .00000091 00000-0 84466-5 0 77
2 24926 86.3355 123.3336 0006717 322.1930 37.8818 14.80375145 998
1997048C
1 24927U 97048C 97250.51037344 .00150673 40122-5 51131-3 0 139
2 24927 86.2247 123.3333 0282645 135.2330 227.2226 15.48254579 910
1997048D
1 24928U 97048D 97249.84742244 .14514163 -27914-5 40942-2 0 142
2 24928 85.9971 123.5259 0160959 146.9081 222.5737 16.03152591 812
1997048E
1 24929U 97048E 97249.86652026 .11867471 -22707-5 46465-2 0 144
2 24929 86.0960 123.4827 0204980 142.4103 220.3566 15.90869611 811
1997048F
1 24930U 97048F 97251.90612091 .00651693 -14528-5 53653-3 0 170
2 24930 86.3426 122.6367 0320695 142.3774 220.0343 15.57940023 1123
HOT BIRD 3
1 24931U 97049A 97249.87087191 -.00000095 00000-0 10000-4 0 69
2 24931 6.9483 133.2763 7295238 181.1922 347.3260 2.28233836 86
Meteosat 7
1 24932U 97049B 97249.62187126 -.00000093 00000-0 00000+0 0 64
2 24932 1.8485 296.8711 0005568 337.7452 282.2267 1.00395867 50
1997049C
1 24933U 97049C 97249.22714088 .00040954 00000-0 53782-2 0 61
2 24933 6.9394 133.6479 7293638 180.6318 177.3461 2.28275832 77
1997049D
1 24934U 97049D 97250.53440168 .00003546 00000-0 50000-3 0 60
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2 24934 6.9488 132.9480 7293120 181.8110 171.8418 2.28318590 109
GE-3
1 24936U 97050A 97251.56407616 -.00000221 00000-0 00000+0 0 147
2 24936 14.9847 334.3257 7101519 181.3960 80.5442 1.72226612 66
1997050B
1 24937U 97050B 97250.00033391 .00001908 00000-0 22944-2 0 35
2 24937 19.0795 336.4073 7644581 179.2042 183.9228 1.81726230 41
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2375. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-09 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34161D8E.62CE@inreach.com>
Source record: 18043

joe d wrote:
>
> Howard Kanare wrote:
> >
> > I work at the labs of the Portland Cement Association and am intrigued
> > by the thought of a concrete ball in orbit. Is anyone else concerned
> > about lack of burnup and fragmentation on re-entry?
> >
> > Regarding albedo, concrete can have a wide range of reflectance and
> > color depending on raw mix composition used to manufacture the cement,
> > pyroprocessing conditions, water-cement ratio, aggregates, curing, etc.
> > Color can range from white (>90% reflectance) to buff to dark gray.
> >
> > I'll keep my hard hat on when this one starts to come down!
> >
> > **
> > Howard M. Kanare
> > Principal Scientist and Group Manager
> > Chemical Services Group
> > Construction Technology Laboratories Inc
> > 5420 Old Orchard Rd Skokie IL USA 60077
> > **
> I would think that concrete would act (or react) just like a space rock
> upon entering the earths atmosphere. In other words it would be mostly
> consummed by heat. I say cardboard box sats would be an even better way
> to go. they would be cheeper to construct and would burn up 100% on
> deorbit.
> **
> Joe d
> Principal person in charge of none that goez up and none of which comes
> down
> Offsite scopper and frequent driver byer of the Johnson Space Boondoggle
> Near here
> **

how about a giant mylar balloon! about the size of a zeppelinn ore
something. It might even reflect radio waves and we could all bounce off
of it.
I heard there were satellites like this at one time, polar orbits and
the like, but eventually they all popped.

2376. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5v5cca$329$1@ddi2.digital.net>
Source record: 18044

In article <5v3qm2$s6c$1@tilde.csc.ti.com> Ken Durham, mbv@ti.com writes:
>AMSAT may not be representing me either. We contributed
>dollars to the project, without which there would be *no* P3D!
>What is being negotiated? We want some feedback. When things were
>going well there was a great deal of patting themselves on the back
>in public forums. If they can't stand discussion, then they should
>get the job done, or we will start putting on the pressure for a new
>representation.

In that case I'd like to nominate you for the board of directors - if you think you can do a better job than the current board of directors.

Will you be at the annual meeting in Toronto?

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

2377. TRAKBOX Problem/Question

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: Art Jeyes <chrishil@erols.com>
Message-ID: <3416794D.3B85@erols.com>
Source record: 18045

I have a TRAKBOX and am using it with an ICOM 970 to control tuning via the CAT port. I have been having very poor performance of the CAT interface (about 1 command in 5 makes it to the ICOM and is decoded and acted upon). I am using the TTL output form the TRAKBOX to avoid having to buy an ICOM CT-17 level converter. The cable from the TRAKBOX to the ICOM is short and shielded with the shield tied to ground.

A scope on the TRAKBOX output line (TTL) shows no noise and a peak signal of 4.1 VDC. Everything looks like it should work. I have everything (power supply, TRAKBOX and IC-970) grounded to a common point with short ground wires.

I borrowed a CT 17 and hooked up to the RS-232 output of the TRAKBOX and everything works fine. Every command gets received and acted upon by the IC-970.

Any ideas or should I just go out and get an ICOM CT-17 level converter?

Thanks and 73

Art Jeyes -- AA3GU

2378. Baseline Interferometers

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: Barbar <trapper@technologist.com>
Message-ID: <01bcbded$8ef040e0$01e19ea7@trapper>
Source record: 18046

I am heading a up a project @ TAMU-Commerce of building a seven dish baseline interferometer. any ideas or helpful hints on interferometry. we are using comercial grade 1.6 meter dishes to make up the array as well as comercial recievers, we are however using a graduate students phased array A/D converter project for our A/D. By commercial equipment i mean to say we are using satellite dishes used to recieve satellite signals for movie down links, basically it's the systems used in hotels for the pay per view movies.

--
Darin McIntier
trapper@technologist.com
http://trapper.koyote.com/

2379. Re: Concrete Satellite color etc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <5v684p$rnj@bgtnsc02.worldnet.att.net>
Source record: 18047

Bill wrote:
>
> joe d wrote:
> >
> > Howard Kanare wrote:
> > >
> > > I work at the labs of the Portland Cement Association and am intrigued
> > > by the thought of a concrete ball in orbit. Is anyone else concerned
> > > about lack of burnup and fragmentation on re-entry?
> > >
> > > Regarding albedo, concrete can have a wide range of reflectance and
> > > color depending on raw mix composition used to manufacture the cement,
> > > pyroprocessing conditions, water-cement ratio, aggregates, curing, etc.
> > > Color can range from white (>90% reflectance) to buff to dark gray.
> > >
> > > I'll keep my hard hat on when this one starts to come down!
> > >
> > > **
> > > Howard M. Kanare
> > > Principal Scientist and Group Manager
> > > Chemical Services Group
> > > Construction Technology Laboratories Inc
> > > 5420 Old Orchard Rd Skokie IL USA 60077
> > > **
> > I would think that concrete would act (or react) just like a space rock
> > upon entering the earths atmosphere. In other words it would be mostly
> > consummed by heat. I say cardboard box sats would be an even better way
> > to go. they would be cheeper to construct and would burn up 100% on
> > deorbit.
> > **
> > Joe d
> > Principal person in charge of none that goez up and none of which comes
> > down
> > Offsite scopper and frequent driver byer of the Johnson Space Boondoggle
> > Near here
> > **
>
> how about a giant mylar balloon! about the size of a zeppelinn ore
> something. It might even reflect radio waves and we could all bounce off
> of it.
> I heard there were satellites like this at one time, polar orbits and
> the like, but eventually they all popped.

Wasnt that called ECHO about 40 twars ago? I thought about that as a means to get 70 CM rf to a ballon. Now where do you get RF reflective ballons in a size to use as a target? Might be kinda neat on field day....

2380. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: ltest@rte9-sun_5.5.1
Message-ID: <5v69mb$a0p@lztnsc06.att.com>
Source record: 18048

In article <01bcbc94$e4e92e80$9c60b6cd@cbx-nt> "Christopher Cox" <cobox@netexp.net> wrote:
>
>
> Tim Russell <russell@probe.net> wrote in article

Tim Russell <russell@probe.net> wrote in article
<5v1h95jac1@jake.probe.net>...
>
> jeff@jehosophat.com (Jeff Davis) writes:
>
> >Nope. They are maintaining silence on the issue which quite
> >*probably* means that it is too late to ride on 502.
>
> >Sooner or later another ride will come along and P3D will
> >be in space.
>
> >It just isn't going to happen fast enough to make anyone
> >happy....
>
> The 9/7 bulletin confirms that P3D will not launch on Ariane 502. It
also
> makes it clear that, as far as AMSAT is concerned, there are no ill
feelings
> towards ESA and in fact they are very appreciative of ESA's committment
to
> amateur launches.
>
> I, for one, am confident that they'll do the right thing, namely,
launching
> P3D at the earliest opportunity. I also think that it just may turn out
to
> be a good thing overall - 502 may fail, and even if it doesn't, it will
be a
> good way to raise our confidence factor in the launcher.
>
> --
> Tim Russell System Admin, Probe Technology email:
russell@probe.net
> PGP RSA: C992 109C 6D7F 8D91 062E 817E 00D3 287A
> "The worst censorship is self-censorship, because fear has no limits."
> -- Grady Ward
>

I see. So the next possible launch could be with, Who? When?

Next week? Next month? Next year?

It is nice that everyone is civil, is anyone expecting results or is the project dead.

I would really like to know when I should look at buying back into the hobby. Not being sarcastic, I know it sounds like it, sorry. I already sold the FT-736R, so no big deal for now.
--
Christopher Cox
KC8FRJ
TRA#4901 L2

2381. Re: Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: sco@mindspring.com
Message-ID: <3417c834.2174307@news.mindspring.com>
Source record: 18049

If ESA launches a piece of concrete in place of P3D would that not be a danger to people on the earth when it comes down? Would it be a danger to spacecraft? Would it be in the same orbit as P3D ... can't seem possible to me. P3D would have booster rockets to put it into the correct orbit. A piece of concrete just goes where it wants to go.

W4SCO
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

2382. Product Annoucement

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: sparksdm@gtwinc.com
Message-ID: <5v6o6j$cto@bilbo.w-link.net>
Source record: 18050

For complete information, visit: http//www.sparksintl.com

If you had told me a year ago that I would
be marketing a product that claims it will
remove two inches of fat in 24 hours,
I would have laughed.

"It sounds like snake oil," I would have told
you. "I wouldn't be involved with anything
that ridiculous."

...So much for predicting the future.

HERE'S WHAT CHANGED MY MIND:

Last December, I pushed my doubts aside
and tested the gel on my own "fat-prone
areas" -- stomach, hips, and thighs.
What happened just 24 hours later turned
me, an avowed skeptic, into a wide-eyed
believer. I lost 2-1/2" from my waist,
2-1/2" from my hips, and 3-1/2" from each
thigh -- overnight. I couldn't argue with
my tape measure or the way my painfully
tight jeans were suddenly comfortable.
My husband lost two inches from his worst
area -- his stomach. My mother-in-law
lost 1-1/2" from her stomach, and her problem
was a little bit of flabby skin, not serious
excess fat.

Now my company is marketing this miraculous
product around the world. And we're looking
for serious, motivated people who would enjoy
making terrific money while they sell a reliable
product that delivers results.

HOW OUR PRODUCT COMPARES TO OTHER PRODUCTS ON
THE MARKET...

1. It removes excess fat immediately, within
24 hours. You don't have to wait weeks or months
for it to work as you do with some "body contouring"
products on the market.

2. It liquefies fat naturally with common, European
herbs that have been used safely for centuries; the

fat is then eliminated by the body naturally thru
urination.

3. It's 100% safe, 100% herbal,
100% hypo-allergenic.

4. Quick and easy to use, it takes less than
an hour to apply.

5. No side effects, no after-effects, no strange
sensations - just great results!

6. It can be used repeatedly to lose multiple
inches and maintain the fat loss over months,
even years.

7. Affordable even for people on a budget.

FOR COMPLETE INFORMATION ON:
a) PRODUCT: http//www.sparksintl.com
b) BUSINESS OPPORTUNITY, reply to: info@sparksintl.com

2383. Attention High Frequency Designers

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: "K. Goerg" <kgoerg@webblabs.com>
Message-ID: <3416E2F3.5B7D@webblabs.com>
Source record: 18051
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

If you are involved in the design of transmission lines, directional couplers, distributed filters, or RF & microwave electronics in general, take a few minutes to acquaint yourself with the all-new TransCad Version 4, the most comprehensive single & coupled structure synthesis offering available:

http://www.webblabs.com/transcad.htm

TransCad is without peer. And with TransCad there is no single-user limitation. The one-time $975 license fee allows department-wide TransCad usage, with no annual support fees and free upgrades for two years! TransCad is a necessity for every department involved in the design of high frequency electronics. For more information, see our web site or e-mail your questions. TransCad is in stock for daily shipping to any destination worldwide.

Sincerely,
Kathy Goerg

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI USA
kgoerg@webblabs.com
TEL 414.367.6825 FAX 414.367.6824

2384. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5v69snloj1@tilde.csc.ti.com>
Source record: 18052

In article <5v5cca$329$1@ddi2.digital.net>, nobody@nowhere.com says...
>
>
>In that case I'd like to nominate you for the board of directors - if you
>think you can do a better job than the current board of directors.
>
>Will you be at the annual meeting in Toronto?
>
>
>Philip Chien, KC4YER@amsat.org
>Earth News - space writer and consultant
>~~~~~~
Philip, I don't know about a better job, but I believe
someone should do a different job of informing the members
about finances, negotiations, and launch delays. There
is no practical method to input members guidance. Public
discussion seems to be discouraged unless it is
only to offer congratulations.

I have no plans to attend the meeting, but might be
able to afford it when the time comes.

How do the board members pay their travel and other
expenses when performing AMSAT chores? Do they travel
first class? (This jetsetting is out of my league. I have
to work for a living.) How about you? Can you do a better
job? Are you available for nomination?

Ken Durham K5MBV

2385. WWW.IW7CHV.ORG

Newsgroup: rec.radio.amateur.space
Date: 1997-09-10 00:00:00 UTC
From: iw7chv@linux.iw7chv.org
Message-ID: <34166758.146795721@news.tin.it>
Source record: 18053

The new site WWW.IW7CHV.ORG is ready to be viewed.

You can find the most complete Ham Radio Search Engine.

POWWOW Community about Ham Radio

IW7CHV Radio Gateway

Greetings from Raffaello Di Martino

PacketAddress : IW7CHV@IW7CHV.IPUG.ITA.EU
FidoNET : 2:335/719.6
Radio E-mail : iw7chv@linux.iw7chv.org
Job E-mail : dimartino@webdes.com
HamRadio Site : http://www.iw7chv.org
My Job Site : http://www.webdes.com (WEB design s.r.l.)
Phone : Home:080-8775895 Job:080-5576911 Cell:0347-3604205

2386. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-1109970748160001@dhcp82_113.hst.nasa.gov>
Source record: 18054

In article <01bcbc94$e4e92e80$9c60b6cd@cbx-nt>, "Christopher Cox"
<cobox@netexp.net> wrote:

> I see. So the next possible launch could be with, Who? When?
>
> Next week? Next month? Next year?
>
> It is nice that everyone is civil, is anyone expecting results or is the
> project dead.
>
> I would really like to know when I should look at buying back into the
> hobby. Not being sarcastic, I know it sounds like it, sorry. I already sold
> the FT-736R, so no big deal for now.
> --
> Christopher Cox
> KC8FRJ
> TRA#4901 L2

The project is not dead, and P3D is not about to become the latest display
at the National Air and Space Museum.

If Ariane 502 is successful, we can expect to see 503 fly within 6 months.
If 502 is not successful, then we didn't want to be on it anyway. Given that
Ariane 5 has a total of 37 seconds of flight experience, I for one will
breathe easier if we go on a later flight, with one successful flight already
on the record books. If we fly on 502, I might need to be sedated as the
countdown reaches zero.....

No guarantee that ESA will put P3D on 503 of course, but they do acknowledge
that their last minute change in vibration specs is the reason why Amsat
does not have P3D ready for flight. It is simply not reasonable to ask ESA
to delay a billion dollar project to accomodate a million dollar passenger.
They feel a political need to get 502 launched before the end of their
accounting year. I expect that they will find room for us on a future
flight, even if the launch contract did not provide for this particular
contingency.

Amsat in general (and Amsat-DL in particular) has had an excellent
relationship with ESA in the past. Consider that when our satellite is
fueled for launch, it will contain almost 200 kilograms of explosive and
toxic rocket fuel. The fact that ESA allows an amateur group to fly a
"homemade" satellite loaded with dangerous fuel on top of their precious
rocket says a lot about their opinion of Amsat. And we have done the same
thing twice before with AO-10 and AO-13. I don't know of any US launch
company that would allow us to do that.

I know you guys have a lot of money tied up in P3D (as I do), but launching a satellite is quite different from ordering a FT-736R from some ham radio dealer. You can't call them up and say "I sent you my money, where is my satellite?" The satellite will fly when ESA and Amsat are ready to fly. We are pioneers living on the frontier of ham radio and the amateur space movement. We have to expect that there will be some rough spots on the frontier.

To be totally safe, postpone buying equipment until after the bird is safely in orbit. The ham manufacturers have designs for P3D friendly gear on their drawing boards (does anyone still use drawing boards?), and they are waiting to put the new gear into production after P3D is safely in orbit. So waiting until after launch will probably give you a wider selection. And if you are starting from scratch, don't automatically go with Mode B just because that was used in the past. Consider operating through P3D on the higher frequency bands, where antennas are smaller.

Dan Schultz N8FGV

2387. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5v998r$o2o$1@tilde.csc.ti.com>
Source record: 18055

Great response Dan. You write with authority and
appear to have some inside knowledge of both AMSAT
and the Amateur radio equipment industry. Do you
know for a fact that equipment manufacturers have
equipment on the "drawing board" for P3D operations?
Do you have information on P3D launch that isn't
available on the net? If so,can you tell us if the
concrete was delivered on time and what the latest
launch vehicle negotiations have yielded in the way
of promises or actual results?
Information seems to have become unavailable shortly
after it was disclosed that P3D would have to be replaced
by the substitute. AMSAT NA has scolded those who would
discuss the issue in print without their sanction in the
latest AMSAT bulletin. AMSAT volunteers and board members
have worked very hard and deserve credit for their efforts,
but also need to be reminded who is paying their expenses
if they don't keep us informed of what is happening with
the P3D project.

Ken Durham K5MBV AMSAT member 28079

2388. Re: TRAKBOX Problem/Question

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: Philip H Fritz <kf7jz@avana.net>
Message-ID: <34186966.13C7@avana.net>
Source record: 18056

Art Jeyes wrote:
>
> I have a TRAKBOX and am using it with an ICOM 970 to control tuning via
> the CAT port. I have been having very poor performance of the CAT
> interface (about 1 command in 5 makes it to the ICOM and is decoded and
> acted upon). I am using the TTL output form the TRAKBOX to avoid having
> to buy an ICOM CT-17 level converter. The cable from the TRAKBOX to the
> ICOM is short and shielded with the shield tied to ground.
>
> A scope on the TRAKBOX output line (TTL) shows no noise and a peak
> signal of 4.1 VDC. Everything looks like it should work. I have
> everything (power supply, TRAKBOX and IC-970) grounded to a common point
> with short ground wires.
>
> I borrowed a CT 17 and hooked up to the RS-232 output of the TRAKBOX and
> everything works fine. Every command gets received and acted upon by the
> IC-970.
>
> Any ideas or should I just go out and get an ICOM CT-17 level converter?
>
> Thanks and 73
>
> Art Jeyes -- AA3GU
This probably isn't much help, I am using the ttl with a trackbox and an
Icom 821H without any trouble. I did sometimes have problems with ttl
and the yaesu 736 with miss interperted commands. At times it would key
the radio up and stay there until i reste it. Not a good idea. I did buy
the interface from Icom for my radio but not using it.
Sorry not much help.
Phil
KF7JZ

--
Phil's Homepage
http://www.avana.net/~kf7jz/phil.htm

2389. AIRBORNE TV web site

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: scottcr@wku.edu
Message-ID: <YzI3R8bYmRe$@axp1>
Source record: 18057

We have a new ATV site up devoted to our airborne ATV project:
http://scott-inc.com/wb9neq.htm

If you think it worthy, we would appreciate maybe... a link?

Chris, WB9NEQ

--
chris.scott@wku.edu http://scott-inc.com/wb9neq.htm AIRBORNE
TV

2390. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcbec5$45dbd1c0$9660b6cd@cbx-nt>
Source record: 18058

Thanks Dan for the insight!

--
Christopher Cox
KC8FRJ
TRA#4901

2391. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-11 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <341836E5.2F78@ibag.com>
Source record: 18059

Dan Schultz wrote:
>
> In article <01bcbc94$e4e92e80$9c60b6cd@cbx-nt>, "Christopher Cox"
> <cobox@netexp.net> wrote:
>
> > I see. So the next possible launch could be with, Who? When?
> > >
> > > Next week? Next month? Next year?
> > >
> > > It is nice that everyone is civil, is anyone expecting results or is the
> > > project dead.
> > >
> > > I would really like to know when I should look at buying back into the
> > > hobby. Not being sarcastic, I know it sounds like it, sorry. I already sold
> > > the FT-736R, so no big deal for now.
> > > --
> > > Christopher Cox
> > > KC8FRJ
> > > TRA#4901 L2
>
> The project is not dead, and P3D is not about to become the latest display
> at the National Air and Space Museum.
>
> If Ariane 502 is successful, we can expect to see 503 fly within 6 months.
> If 502 is not successful, then we didn't want to be on it anyway. Given that
> Ariane 5 has a total of 37 seconds of flight experience, I for one will
> breathe easier if we go on a later flight, with one successful flight already
> on the record books. If we fly on 502, I might need to be sedated as the
> countdown reaches zero.....
>
> No guarantee that ESA will put P3D on 503 of course, but they do acknowledge
> that their last minute change in vibration specs is the reason why Amsat
> does not have P3D ready for flight. It is simply not reasonable to ask ESA
> to delay a billion dollar project to accomodate a million dollar passenger.
> They feel a political need to get 502 launched before the end of their
> accounting year. I expect that they will find room for us on a future
> flight, even if the launch contract did not provide for this particular
> contingency.
>
> Amsat in general (and Amsat-DL in particular) has had an excellent
> relationship with ESA in the past. Consider that when our satellite is
> fueled for launch, it will contain almost 200 kilograms of explosive and
> toxic rocket fuel. The fact that ESA allows an amateur group to fly a
> "homemade" satellite loaded with dangerous fuel on top of their precious

> rocket says a lot about their opinion of Amsat. And we have done the same
> thing twice before with AO-10 and AO-13. I don't know of any US launch
> company that would allow us to do that.
>
> I know you guys have a lot of money tied up in P3D (as I do), but
> launching a satellite is quite different from ordering a FT-736R from
> some ham radio dealer. You can't call them up and say "I sent you my money,
> where is my satellite?" The satellite will fly when ESA and Amsat are ready
> to fly. We are pioneers living on the frontier of ham radio and the amateur
> space movement. We have to expect that there will be some rough spots on
> the frontier.
>
> To be totally safe, postpone buying equipment until after the bird is
> safely in orbit. The ham manufacturers have designs for P3D friendly gear
> on their drawing boards (does anyone still use drawing boards?), and they
> are waiting to put the new gear into production after P3D is safely in orbit.
> So waiting until after launch will probably give you a wider selection. And
> if you are starting from scratch, don't automatically go with Mode B just
> because that was used in the past. Consider operating through P3D on the
> higher frequency bands, where antennas are smaller.
>
> Dan Schultz N8FGV

Remember that the 503 is supposed to be the first "commercial" launch of
an Ariane 5, and that it is already fully manifested with commercial
birds at this point. Of course this could change if the 502
fizzles...then we could theoretically get on 503, if Arianespace is
willing....still a lot of "ifs" and relying on the goodwill of
ESA....Sure hope we don't have the biggest amateur white elephant in
history...

Rick Tannehill W7RT

2392. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970912011400.VAA16047@ladder02.news.aol.com>
Source record: 18060

>And
>if you are starting from scratch, don't automatically go with Mode B just
>because that was used in the past.

Yes, and since our planners cannot (or will not) tell us what the
operational scenario will be after launch, we cannot possibly prepare for
ANY operations, without spending an inordinately large amount of money.

While I have been a member of AMSAT for many years, it is truly a tool
without a handle - there are techies doing things that they want to do
without any control from the vast majority of operators and amateur ops.
There is NO marketing sense in the organization.

I 'll remain a member, but there are serious problems with the leadership.

John...
WB4LNM

2393. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970912011700.VAA10223@ladder01.news.aol.com>
Source record: 18061

> but I believe
>someone should do a different job of informing the members
>about finances, negotiations, and launch delays

Well said!

> There
is no practical method to input members guidance. Public
discussion seems to be discouraged unless it is
only to offer congratulations.

Extremely well said!
John...
WB4LNM

2394. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-1209970426430001@dhcp73_113.hst.nasa.gov>
Source record: 18062

In article <5v998r$o2o$1@tilde.csc.ti.com>, mbv@ti.com (Ken Durham) wrote:

> Great response Dan. You write with authority and
> appear to have some inside knowledge of both AMSAT
> and the Amateur radio equipment industry. Do you
> know for a fact that equipment manufacturers have
> equipment on the "drawing board" for P3D operations?
> Do you have information on P3D launch that isn't
> available on the net? If so,can you tell us if the
> concrete was delivered on time and what the latest
> launch vehicle negotiations have yielded in the way
> of promises or actual results?
> Information seems to have become unavailable shortly
> after it was disclosed that P3D would have to be replaced
> by the substitute. AMSAT NA has scolded those who would
> discuss the issue in print without their sanction in the
> latest AMSAT bulletin. AMSAT volunteers and board members
> have worked very hard and deserve credit for their efforts,
> but also need to be reminded who is paying their expenses
> if they don't keep us informed of what is happening with
> the P3D project.
>
> Ken Durham K5MBV AMSAT member 28079
>

I don't mean to give anyone the impression that I speak for Amsat or
that I have any inside information. It is possible that I am wrong and
that ESA will consider the terms of the launch contract to be fulfilled
after launching the concrete block, but my analysis of past performance tells
me that they will make good for us when it is feasible. ESA has much
bigger things to worry about than whether or not P3D is onboard 502. They
are under political pressure to make the September 30 launch date, that
can be ascertained from articles in Space News and Aviation Week and is not
based on inside information. There may also still be technical problems that
might delay 502 enough that P3D could still fly on that vehicle, nothing
is certain until they light the fuse. Dr Karl Meizner of Amsat DL is
handling the negotiations with ESA, he is probably the only person who
knows the current status, and I assume that he will tell the rest of us
when he has something to report. Whether or not P3D would fly on 503 will
depend on what other payloads are on that flight. ESA considers 503 to
be a development flight also, and they have offered a possible cut rate
launch to their commercial customers, one of whom might be "brave" enough
to take the risk. This will probably be decided after 502 has flown, so
I do not expect any news about the 503 payload to be announced before then.

I do not "know for a fact" that the big equipment manufacturers have new gear on the drawing boards, that is more of the second hand rumor department and perhaps I should have labeled it as such. I do know that Downeast Microwave is redesigning their line of kits for P3D, they say as much in their catalog. The higher frequency bands on P3D will be experimenter's territory for a year or two after launch, but that will quickly change when the appliance operators learn of the advantages of working the higher frequencies and the manufacturers see that there is a market. Consumer microwave technology is already widely available and cheap, consider the low cost cell phones, GPS receivers, and direct broadcast satellite dishes that are on the market. Microwaves are not some kind of black magic as many hams still assume. P3D will make the microwave bands almost as common as 2 meters, and just in time too, before our bands are auctioned off to the commercial market due to lack of use by amateurs. You can certainly go out and buy mode B gear off the shelf if you have a burning desire to work P3D from day one, but I don't think that new satellite operators should automatically go that route. Mode B is on P3D to accomodate those who already own the equipment so that it will remain usable with the new satellite. People who don't own current satellite stations should (in my humble opinion) wait until after launch before making major purchases, unless they find a good deal on used mode B gear at the local hamfest.

I agree with you that Amsat could do a better job of keeping the general membership informed on what is happening. They do sometimes drop the ball on that.

Dan Schultz N8FGV

2395. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: John Mock - KD6PAG <kd6pag@nospam.qsl.net>
Message-ID: <34198D71.2A29@nospam.qsl.net>
Source record: 18063

Dan Schultz wrote:
>
> To be totally safe, postpone buying equipment until after the bird is
> safely in orbit. The ham manufacturers have designs for P3D friendly gear
> on their drawing boards (does anyone still use drawing boards?), and they
> are waiting to put the new gear into production after P3D is safely in orbit.
> So waiting until after launch will probably give you a wider selection. And
> if you are starting from scratch, don't automatically go with Mode B just
> because that was used in the past. Consider operating through P3D on the
> higher frequency bands, where antennas are smaller.
>
> Dan Schultz N8FGV

Or start homebrewing now and be ready when it launches. Even if you can't hack RF design/construction ('still looking for an Elmer myself), you might think about suitable antennas and/or hardware/software to control their operation. (Although, one of the neat things is that they say that one may be able to point an suitably high gain antenna at a fixed point in the sky and get a decent amount of operating time [probably alot more than a LEO bird, i suspect] because of the new orbit they are planning to use.) Let us know what you come up with!

-- KD6PAG (Networking Old-Timer, RF newbie)

2396. Re: SSB vs Landwehr Preamp?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@ea4rj.ampr.org>
Message-ID: <34197477.1B7D04DD@ea4rj.ampr.org>
Source record: 18064

Hi all,

Can't believe you don't know a word about KLM preamplifiers! They are made in USofA!

I bought an SSB Electronic SP-70 UHF preamp almost five years ago. After a couple of months it came in trouble with their switching relays (it is a mast mount unit after all). In fact, one of this contacts was unusable in rain or wet weather. The first time happened this problem, I thought the preamp was blown by my transceiver, but after the rain ceased and sun begun to heat again,the problem dissapeared.

But I discovered the KLM preamps and I believe they are at least so good that those SSB or Landwehr units, comparing gain (intermod is strong for the SSB SP-70). No problems in another 3 year of mast mount use for both KP2, 144 and 440 models.

Best,

--
Rafael, mailto:rgarcia@idr.upm.es

2397. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <341980C9.7D29A7AF@direct.ca>
Source record: 18065

WB4LNM wrote:

>> And if you are starting from scratch, don't automatically go with
>> Mode B just because that was used in the past.
>
> Yes, and since our planners cannot (or will not) tell us what
> the operational scenario will be after launch, we cannot possibly
> prepare for ANY operations, without spending an inordinately
> large amount of money.

But you *can* prepare. Become familiar with microwave operations. Optimize your IF rigs. Make some educated guesses on what modes will be most effective (Config L/S looks good), and while waiting for P3D to get up there, recrystal your toys and make some terrestrial racket on 1296 and 2304 MHz - bands that could really use some usage. You could build a Config L/S station on top of a Mode B station, since 2m and 70cm are dandy IFs. Hedge your bets, plan contingencies, and have fun...

> While I have been a member of AMSAT for many years, it is
> truly a tool without a handle - there are techies doing things
> that they want to do without any control from the vast majority
> of operators and amateur ops. There is NO marketing sense in
> the organization.

I don't see you on the presentation schedule for the Symposium in Toronto. If you have a better way, why not tell us about it? I will be sharing my thoughts on microwaves for dummies (having used myself as a test subject) Friday morning at 1140...

> I'll remain a member, but there are serious problems with the
> leadership.

Does this mean you're running for the Board? You should, if you think you can do a better job.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

2398. *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: masa@writemeNOSPAM.com
Message-ID: <3419aa96.2500302@news.total.net>
Source record: 18066
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

*** Transmit without license !! It's possible !!***

Go to Antarctica. You can do whatever you want in south pole.

Good luck.

M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : Masa@WriteMe.NOSPAMcom
URL : http://www.geocities.com/~masataka (General)
http://www.geocities.com/~masataka/main.htm (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove "NOSPAM" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2399. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-12 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <5vckh3$smj@fridge-nf0.shore.net>
Source record: 18067
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

masa@writemeNOSPAM.com (M@s@) wrote:

>*** Transmit without license !! It's possible !!***

>Go to Antarctica. You can do whatever you want in south pole.

Yeah! You sure can....so long as it falls within the guidelines of
international treaty.

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
==========

2400. Next Weekend! Hamfest in W. Conn.

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <341A0C69.7EF7@ix.netcom.com>
Source record: 18068
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.digitia.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

2401. Re: Absoloutly amazing - MUST READ !

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: martin_von_rotz*NOSPAM*@compuserve.com
Message-ID: <341858b5.1820438@news.compuserve.com>
Source record: 18069

On Sat, 06 Sep 1997 11:00:54 GMT, Abdul Safar<ASE1000@1stfamily.com>
wrote:

>
>A little while back, I was browsing these newsgroups, just like you are
>now, and came across an article similar to this that said you could make
>thousands of dollars within weeks with only an initial investment of
>$25.00! So I thought, "Yeah, right, this must be a scam,"
AND IT IS!!!

Isn't there a filter to keep these asholes off the newsgroups?
.
The Journey is the Destination

Remove the *NOSPAM* from my address

2402. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5veao4$1fu@dfw-ixnews8.ix.netcom.com>
Source record: 18070

In <5v3qm2$s6c$1@tilde.csc.ti.com> mbv@ti.com (Ken Durham) writes:
>
>
> The recent ANS Bulletin 208.01 complained that comments
>made to public forums such as newsgroups and magazines that
>were made by someone other than AMSAT NA did not represent
>the opinions of AMSAT. Futher we should be careful of what
>we say about ESA and the delays in order not to jeapordize
>negotiations.
> I'll be careful of what I say, but I will not avoid voicing
>my opinions. AMSAT may not be representing me either. We contributed
>dollars to the project, without which there would be *no* P3D!
>What is being negotiated? We want some feedback. When things were
>going well there was a great deal of patting themselves on the back
>in public forums. If they can't stand discussion, then they should
>get the job done, or we will start putting on the pressure for a new
>representation.
>
>Ken Durham K5MBV
>
>

Ken,

I have watched your tirades in silence for some time and the time has come for me to comment.

Have you ever been to Orlando to help in the lab? Do you go out to hamfests and club meetings and spread the word about satellites? Or do you just sit on your dead butt and bitch while others do the work? No one in AMSAT gets paid and I assure you the folks down at the lab put in many long hours of hard work.

In your last comment you say "we will start putting on the pressure", who are "we" do you have a mouse in your pocket? You sure as Hell don't represent me.

If fairness I'll tell you what I have done in the past year. I've been to the lab to help out 4 times (BTW I live in New Mexico not Orlando). I have been to 20 hamfests or club meetings. I have covered more than 25000 miles giving demos and talks or working AMSAT tables at hamfests. Since I've been to Orlando and seen first hand the effort and I have no issue with the folks working on the bird, perhaps you should not either. They are dedicated and hard working, very experienced and doing it all for nothing.

ESA has been a good friend to AMSAT for many years putting us in orbit for little or nothing compared to commercial launch prices. It would serve all of us well if you would learn a little bit before pontificating more.

Jerry KK5YY

2403. Balloons-Rockets & Radio-Astronomy

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341ACD16.5340@primenet.com>
Source record: 18071

```
Balloons-Rockets & Radio-Astronomy

Further Information: http://www.qth.net

--

>>>> info balloons-rockets
Balloons-Rockets is a mailing list (reflector) devoted to the
discussion of Balloons-Rockets.

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe balloons-rockets

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe balloons-rockets

To post information/questions to the list:

TO: balloons-rockets@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>> info radio-astronomy
Radio-Astronomy is a mailing list (reflector) devoted to the
discussion of Radio-Astronomy.

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe radio-astronomy

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe radio-astronomy

To post information/questions to the list:

TO: radio-astronomy@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net
```

- - - - -

2404. ARLK071 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk071.1997@arrl.org>
Source record: 18072
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK071
ARLK071 Keplerian data

ZCZC SK71
QST de W1AW
Keplerian Bulletin 71 ARLK071
From ARRL Headquarters
Newington, CT September 13, 1997
To all radio amateurs

SB KEP ARL ARLK071
ARLK071 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97254.06336062 -.00000055 00000-0 10000-3 0 5041
2 14129 26.1933 127.4733 6045096 150.5250 264.5710 2.05881096 79154
RS-10/11
1 18129U 87054A 97255.22232191 .00000023 00000-0 91971-5 0 3985
2 18129 82.9270 174.4013 0012381 348.4384 11.6498 13.72381831512172
UO-11
1 14781U 84021B 97254.98223166 .00000168 00000-0 36138-4 0 00014
2 14781 97.8432 232.7818 0012936 83.5837 276.6840 14.69580648724009
RS-12/13
1 21089U 91007A 97255.16189844 .00000055 00000-0 42281-4 0 00145
2 21089 82.9201 214.1263 0031248 55.9047 304.5062 13.74085615331109
UO-14
1 20437U 90005B 97255.21324458 .00000008 00000-0 19702-4 0 03026
2 20437 98.5149 334.9820 0011112 317.4583 42.5743 14.29970626398652
RS-15
1 23439U 94085A 97254.72700563 -.00000039 00000-0 10000-3 0 02488
2 23439 64.8175 12.9011 0147577 115.8194 245.8034 11.27528278111695
AO-16
1 20439U 90005D 97255.78482892 .00000035 00000-0 30263-4 0 928
2 20439 98.5322 338.6636 0011041 317.2302 42.8019 14.30017700398758
RS-16
1 24744U 97010A 97255.31721001 .00005068 00000-0 16703-3 0 755
2 24744 97.2665 158.7220 0008466 128.0242 232.1766 15.31868060 29428
```

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DO-17
1 20440U 90005E 97255.20230001 .00000047 00000-0 35046-4 0 01041
2 20440 98.5362 339.0168 0010506 315.3735 44.6611 14.30160812398709
WO-18
1 20441U 90005F 97255.20216801 .00000028 00000-0 27463-4 0 978
2 20441 98.5339 338.9009 0011866 317.0132 43.0120 14.30127698398709
LO-19
1 20442U 90005G 97255.16244060 .00000007 00000-0 19407-4 0 00967
2 20442 98.5391 339.5816 0011986 316.3359 43.6877 14.30243482398724
FO-20
1 20480U 90013C 97254.88641941 .00000040 00000-0 16133-3 0 09996
2 20480 99.0541 200.2040 0541308 180.9652 179.0451 12.83238693355829
AO-21
1 21087U 91006A 97255.18475199 .00000094 00000-0 82657-4 0 08541
2 21087 82.9408 347.1845 0037197 26.9635 333.3440 13.74585774332101
UO-22
1 21575U 91050B 97255.20863293 .00000074 00000-0 38962-4 0 08055
2 21575 98.2900 312.6402 0007791 0.9052 359.2148 14.37083851322984
KO-23
1 22077U 92052B 97255.21333064 -.00000037 00000-0 10000-3 0 6897
2 22077 66.0813 323.0192 0004722 193.8188 166.2698 12.86303676238943
KO-25
1 22828U 93061F 97255.14981877 .00000066 00000-0 43775-4 0 05688
2 22828 98.5361 327.7691 0010287 336.8482 23.2234 14.28190439174620
IO-26
1 22826U 93061D 97255.20651522 -.00000124 00000-0 -32569-4 0 05871
2 22826 98.5375 327.7365 0010115 350.8537 9.2473 14.27843724206501
AO-27
1 22825U 93061C 97255.73533347 .00000084 00000-0 51602-4 0 5852
2 22825 98.5393 327.9845 0008915 354.9329 5.1754 14.27736149206569
FO-29
1 24278U 96046B 97255.12817308 -.00000052 00000-0 -14282-4 0 1066
2 24278 98.5313 284.4603 0351640 321.0895 36.5404 13.52633082 52875
Mir
1 16609U 86017A 97256.14943989 .00009874 00000-0 12546-3 0 6008
2 16609 51.6556 3.8695 0004944 122.9392 237.2081 15.60090206660758

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
September 16, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2405. Plug-It Mailing List

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341ABDBE.7200@primenet.com>
Source record: 18073

```
Plug-It Mailing List

>>>> info plug-it
Plug-It is a mailing list (reflector) devoted to the
discussion of Plug-It, shameless plugs for products,
web pages, mailing lists, or other "announcements."
Personal, commercial, whatever...

(Primarily aimed at amateur radio entrepreneurs!)

* Updated your web page lately? >> Plug-It!
* New email address or web page? >> Plug-It!
* Selling a product of interest to hams? >> Plug-It!
* Small business selling to amateurs? >> Plug-It!
* Shareware or Freeware release/update? >> Plug-It!
* Club project? Personal project? >> Plug-It!

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe plug-it

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe plug-it

To post information/questions to the list:

TO: plug-it@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
```

2406. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: amateur@vub.mcgill.ca.ham
Message-ID: <341af358.6375367@news.mcgill.ca>
Source record: 18074
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

On Fri, 12 Sep 1997 23:51:40 GMT, spam_me_not@shore.net (JJ) wrote:

>masa@writemeNOSPAM.com (M@s@) wrote:
>
>>*** Transmit without license !! It's possible !!***
>
>
>>Go to Antarctica. You can do whatever you want in south pole.
>
>Yeah! You sure can....so long as it falls within the guidelines of
>international treaty.

international treaties + any laws do not apply in antarctica !!

you can do whatever you want !!

M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : amateur@vub.mcgill.ca.ham
URL : http://www.geocities.com/~masataka (General)
http://www.geocities.com/~masataka/main.htm (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2407. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: Phoenix Radio Man <Phx_radio_man@juno.com>
Message-ID: <341B0B27.4CD0@juno.com>
Source record: 18075
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

M@s@ wrote:
> international treaties + any laws do not apply in antarctica !!
> you can do whatever you want !!
>
Then explain why the UN (United Nations) has jurisdiction over
antarctica? That is an international preserve for the study of nature
and all laws and treaties stipulated to do apply.

I dare say, I think your foot just intercepted your mouth on this one.
Better get some gold bond for your gums.

2408. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <5vf48u$a4b@fridge-nf0.shore.net>
Source record: 18076
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

amateur@vub.mcgill.ca.ham (M@s@) wrote:

>On Fri, 12 Sep 1997 23:51:40 GMT, spam_me_not@shore.net (JJ) wrote:

>>masa@writemeNOSPAM.com (M@s@) wrote:
>>
>>>*** Transmit without license !! It's possible !!***
>>
>>
>>>Go to Antarctica. You can do whatever you want in south pole.
>>
>>Yeah! You sure can....so long as it falls within the guidelines of
>>international treaty.

>international treaties + any laws do not apply in antarctica !!

>you can do whatever you want !!

ROTFLMAO!

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
==========

2409. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <341B2C21.4AD5@inreach.com>
Source record: 18077
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

Phoenix Radio Man wrote:
>
> M@s@ wrote:
> > international treaties + any laws do not apply in antarctica !!
> > you can do whatever you want !!
> >
> Then explain why the UN (United Nations) has jurisdiction over
> antarctica? That is an international preserve for the study of nature
> and all laws and treaties stipulated to do apply.
>
> I dare say, I think your foot just intercepted your mouth on this one.
> Better get some gold bond for your gums.

The reason the UN has jurisdiction over Antartica is only because they say they do and there are no citizens of Antartica to disagree with them.
Go to Antartica, start your own country, and tell the UN to take a hike through the glaciers, dont forget your own army though.
;')

2410. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-13 00:00:00 UTC
From: Bill Fawns <wmfawns@tdl.com>
Message-ID: <341B5702.59F6@tdl.com>
Source record: 18078

> Ken,
>
> I have watched your tirades in silence for some time and the time has
> come for me to comment.
>
> Have you ever been to Orlando to help in the lab? Do you go out to
> hamfests and club meetings and spread the word about satellites? Or do
> you just sit on your dead butt and bitch while others do the work? No
> one in AMSAT gets paid and I assure you the folks down at the lab put
> in many long hours of hard work.
>
> In your last comment you say "we will start putting on the pressure",
> who are "we" do you have a mouse in your pocket? You sure as Hell don't
> represent me.
>
> If fairness I'll tell you what I have done in the past year. I've been
> to the lab to help out 4 times (BTW I live in New Mexico not Orlando).
> I have been to 20 hamfests or club meetings. I have covered more than
> 25000 miles giving demos and talks or working AMSAT tables at hamfests.
> Since I've been to Orlando and seen first hand the effort and I have no
> issue with the folks working on the bird, perhaps you should not
> either. They are dedicated and hard working, very experienced and doing
> it all for nothing.
>
> ESA has been a good friend to AMSAT for many years putting us in orbit
> for little or nothing compared to commercial launch prices. It would
> serve all of us well if you would learn a little bit before
> pontificating more.
>
> Jerry KK5YY

Jerry:

Thanks for your comments. Well done!!!!!!

Bill, KE6HEZ

2411. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-1409970504330001@dhcp72_113.hst.nasa.gov>
Source record: 17979

In article <19970912011400.VAA16047@ladder02.news.aol.com>, wb4lnm@aol.com (WB4LNM) wrote:

>Yes, and since our planners cannot (or will not) tell us what the
>operational scenario will be after launch, we cannot possibly prepare for
>ANY operations, without spending an inordinately large amount of money.

Speaking only for myself, I think the only honest answer that anyone can give at this point is "We don't know what the schedule will be". What schedule will people want to have?

All I can offer is some WILD GUESSES, for whatever they are worth:

In the beginning I would guess that Mode U/V (UHF up/VHF down, same thing as the old mode B on earlier satellites) will be on quite a lot, since there are many stations equipped for AO-13 that will want to pick up where they left off after AO-13's reentry. Gradually there will be more and more users on the higher bands and they will eventually outnumber the Mode U/V users. There should be enough power to run two transmitters at the same time, at least in the early years. Since the S band transmitters are supposed to be highly efficient (and there are two of them), one of them will probably be on most of the time, the other transmitter will be either the 70cm or 2 meter transmitter, but probably not both at the same time. The X band (10 GHz) and Ka band (24 GHz) transmitters will probably remain experimenter's modes
with limited operating time, similar to the schedule for mode S on AO-13. As the spacecraft ages, eventually the solar array output will fall off to the point where only one transmitter can be on at a time. The less popular modes will probably get less operating time when that day comes. Mode U/V may be a less popular mode in the future than it is today, and it may be cut back at that time in favor of higher frequency modes.

My WILD GUESS is that 1269 MHz up and 2400 MHz down will be a popular mode, along with Mode U/V. The other bands will operate on a limited schedule. I could be wrong about 10 GHz, it might take off and become very popular depending on what commercial gear becomes available. The IF matrix is designed so that any receiver can be connected to any transmitter, so there is some flexibility in scheduling uplink and downlink resources. This flexibility is the basic reason why we can't tell you what the operating schedule will be, because we simply don't know at this point in time what people will want at some future time.

There may also be technical constraints in regards to power budget and solar array illumination, most of which can't be known until we see what kind of orbit we are in. But I would guess that the schedule will be set by the number of users on each mode, which will ultimately be determined by the

availability and cost of commercially manufactured equipment for each mode.

The digital modes on RUDAK are another can or worms. We need to dedicate some of the resources for existing packet formats, while also providing resources for experimenters to develop new digital modes.

>While I have been a member of AMSAT for many years, it is truly a tool
>without a handle - there are techies doing things that they want to do
>without any control from the vast majority of operators and amateur ops.
>There is NO marketing sense in the organization.

I don't think there needs to be a conflict between "techies" and "operators". The "techies" need to experiment with new modes which will eventually be adopted by the "operators" once they see that the newer modes are better than what they have now. Techies generally don't respond well to control, they will do what they think is important regardless of what anyone else wants from them. Which is sort of how most inventors work. Nobody told Edison to invent the phonograph, nobody even knew that they needed one until Edison offered it for sale. While you may think that the techies are just playing around with esoteric technologies for their own amusement, remember that most of today's "popular" modes in amateur radio (including FM, Single Sideband, and Packet) started out as some specialized techie plaything.

Dan Schultz N8FGV

2412. Hand Check

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: Barbar <trapper@technologist.com>
Message-ID: <01bcc0d0$40558bd0$01e19ea7@trapper>
Source record: 17980
Cross-posted to: aus.radio.amsat,rec.radio.amateur.space

Sorry for the obscure reference in the subject line but it's an old
military statment to see who is still awake and listening.

basically is there anyone who can see my postings? I have had trouble in
the past, where i could see mine and others but no one saw my posts.

secondly can no one help me with my question that i posted on baseline
intereferometry? Even a steer in the right direction would be appreciated,
a book reference would be acceptable as well as any individuals.
--
Darin McIntier
trapper@technologist.com
http://trapper.koyote.com/

--
Darin McIntier
trapper@technologist.com
http://trapper.koyote.com/

2413. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <75ED88FC8BDD3EE9.4504838AF0B0F85B.E80F6B076D9A315A@library-proxy.airnews.net>
Source record: 17981

In article <5veao4$1fu@dfw-ixnews8.ix.netcom.com>, kc5egg@ix.netcom.co says...
>

>
>>
>In your last comment you say "we will start putting on the pressure",
>who are "we" do you have a mouse in your pocket? You sure as Hell don't
>represent me.

You are correct, I don't expect that I would ever be able to
represent you. I do however respect your opinion and right to
speak what you think. I also respect your efforts to promote
AMSAT and the hobby. The issue is communication between the
AMSAT board and the public, not what I have done or how much
you have done. I apologize if I haven't been able to make that
clear and have come across as complaining in general. In the
future I will try to be more specific.
Keep up the good work.

Ken K5MBV

2414. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <341c2b93.2039042@news.mindspring.com>
Source record: 17982

>>
>>
>
>Ken,
>
>I have watched your tirades in silence for some time and the time has
>come for me to comment.
>
>Have you ever been to Orlando to help in the lab? Do you go out to
>hamfests and club meetings and spread the word about satellites? Or do
>you just sit on your dead butt and bitch while others do the work? No
>one in AMSAT gets paid and I assure you the folks down at the lab put
>in many long hours of hard work.
>
>In your last comment you say "we will start putting on the pressure",
>who are "we" do you have a mouse in your pocket? You sure as Hell don't
>represent me.
>
>If fairness I'll tell you what I have done in the past year. I've been
>to the lab to help out 4 times (BTW I live in New Mexico not Orlando).
>I have been to 20 hamfests or club meetings. I have covered more than
>25000 miles giving demos and talks or working AMSAT tables at hamfests.
>Since I've been to Orlando and seen first hand the effort and I have no
>issue with the folks working on the bird, perhaps you should not
>either. They are dedicated and hard working, very experienced and doing
>it all for nothing.
>
>ESA has been a good friend to AMSAT for many years putting us in orbit
>for little or nothing compared to commercial launch prices. It would
>serve all of us well if you would learn a little bit before
>pontificating more.
>
> Jerry KK5YY

Well said. It would cost us about $50,000,000 to pay for a commercial
launch.
W4SCO
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

2415. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <682522F384A81BAF.C493E259216765DF.4970EE53EE442724@library-proxy.airnews.net>
Source record: 17983

<341c2b93.2039042@news.mindspring.com>, sco@sco-inc.com says...
>Well said. It would cost us about $50,000,000 to pay for a commercial
>launch.
>W4SCO
~~~~~~
How much has AMSAT spent so far on P3D including
the launch fee to ESA? Is a deal with another agency
similar to the one we had with ESA impossible?
Ken K5MBV
~~~~~~

2416. Re: Hand Check

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: KC7JHO <kc7jho@hotmail.com>
Message-ID: <5vhrj2$63k@news.flinthills.com>
Source record: 17984
Cross-posted to: aus.radio.amsat,rec.radio.amateur.space

I can see ya But cant help ya

Barbar wrote in article <01bcc0d0$40558bd0$01e19ea7@trapper>...

>Sorry for the obscure reference in the subject line but it's an old
>military statment to see who is still awake and listening.
>
>basically is there anyone who can see my postings? I have had trouble in
>the past, where i could see mine and others but no one saw my posts.
>
>secondly can no one help me with my question that i posted on baseline
>intereferometry? Even a steer in the right direction would be appreciated,
>a book reference would be acceptable as well as any individuals.
>--
>Darin McIntier
>trapper@technologist.com
>http://trapper.koyote.com/
>
>
>--
>Darin McIntier
>trapper@technologist.com
>http://trapper.koyote.com/

2417. Kantronics, TimeWave-AEA, PacComm, JPS Mailing Lists

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341CA1B2.413B@primenet.com>
Source record: 17985

```
Kantronics, TimeWave-AEA, PacComm, JPS Mailing Lists

Further Information: http://www.qth.net

--

>>>> info kantronics
Kantronics is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by Kantronics.

Kantronics/RF Concepts
1202 E 23rd St
Lawrence, KS 66046
Tel: 913-842-7745 (sales)
913-842-4476 (tech support)
Fax: 913-842-2031
Email: sales@kantronics.com
service@kantronics.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything Kantronics Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe kantronics

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe kantronics

To post information/questions to the list:

TO: kantronics@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>> info timewave-aea
TimeWave-AEA is a mailing list (reflector) devoted to the
discussion of products and services manufactured
```

or provided by TimeWave-AEA.

Timewave Technology Inc/AEA
2401 Pilot Knob Rd #134
St Paul, MN 55120
Tel: 612-452-5939
Fax: 612-452-4571
Email: dsp@timewave.com
techsupport@timewave.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything TimeWave-AEA Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe timewave-aea

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe timewave-aea

To post information/questions to the list:

TO: timewave-aea@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

>>>> info paccomm
PacComm is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by PacComm.

PacComm Packet Radio Systems, Inc.
4413 N Hesperides Street
Tampa, FL 33614-7618
Tel: 813-874-2980
Fax: 813-872-8696
Email: info@paccomm.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything PacComm Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe paccomm

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe paccomm

To post information/questions to the list:

TO: paccomm@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

>>>> info jps
JPS is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by JPS.

JPS Communications Inc.
5720 M Capital Blvd
Raleigh, NC 27616
Tel: 919-790-1011
Fax: 919-790-1456
Email: jps@jps.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything JPS Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe jps

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe jps

To post information/questions to the list:

TO: jps@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

>>>>

2418. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: Tom Currie <TOM.CURRIE@postoffice.worldnet.att.net>
Message-ID: <5vi94o$a9c@bgtnsc02.worldnet.att.net>
Source record: 17986
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

M@s@ wrote:
>
> On Fri, 12 Sep 1997 23:51:40 GMT, spam_me_not@shore.net (JJ) wrote:
>
> >masa@writemeNOSPAM.com (M@s@) wrote:
> >
> >>*** Transmit without license !! It's possible !!***
> >
> >
> >>Go to Antarctica. You can do whatever you want in south pole.
> >
> >Yeah! You sure can....so long as it falls within the guidelines of
> >international treaty.
>
> international treaties + any laws do not apply in antarctica !!
>
> you can do whatever you want !!
>
> ----------
>
> M@S@
> Student @ McGill University Science
> Montreal, Quebec, Canada
> E-mail : amateur@vub.mcgill.ca.ham
> URL : http://www.geocities.com/~masataka (General)
> http://www.geocities.com/~masataka/main.htm (Radio)
> http://www.geocities.com/~masataka/mcgill.htm (McGill University)
> ----------
>
> Remove ".ham" to reply.
>
> WARNING: I will not buy/response any products from unsolicited e-mails !!

Who told this bean brain how to access a newsgroup?

2419. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: "David G. Nagel" <nagel1@mail.icongrp.com>
Message-ID: <341CAD80.E5127FBC@mail.icongrp.com>
Source record: 17987
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

Sorry! You need a license from either your home country or the country
which is sponsering the area of Antartica you are operating from or the
host country(USA or Russia) for space operation. Unless you catch a lift
from France or Japan on one of their launch vehicles.

Mercenary PGP key wrote:

> masa@writemeNOSPAM.com (M@s@) wrote:
>
> >*** Transmit without license !! It's possible !!***
> >
> >
> >Go to Antarctica. You can do whatever you want in south pole.
> >
> >
> >Good luck.
>
> Sure, and build your own space shuttle and transmit from space legally
> without a license. It is so easy to get an amateur radio license,
> there is no need to illegally transmit without one.
> ---
> http://www.icom.net/~tachyon/pgp.key

2420. FTV=WEFAX,FAX,SSTV,RTTY,CW with SoundBlaster

Newsgroup: rec.radio.amateur.space
Date: 1997-09-14 00:00:00 UTC
From: "Brian E. Cauchi" <briane@geocities.com>
Message-ID: <5vggo7$m2c@news.keyworld.net>
Source record: 17988
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FTV (now in Version 1.0)can be used to receive images from Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from radio
telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
signals. It can also transmit Amateur Radio FAX and SSTV. No external
hardware, other than a radio, is required, as all the necessary signal
processing is implemented in software. The main features include:

WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
FAX operation supports APT signal recognition and scheduled reception.
No external decoder or converter box is required.
Signal analysis is provided on all modes.
Many parameters are adjustable while receiving.
Full recovery from wrong mode settings is possible.
Program works in real time (about 1 second 'DSP' time lag)

You may get more information or download a copy from my web site, on
http://www.geocities.com/SiliconValley/2504

2421. Guaranteed FREE! Advertising

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: "George R. Corona" <grose37@inficad.com>
Message-ID: <5visrg$83i$49@news.inficad.com>
Source record: 17989

Please read this first If your offended by E-Mail That you Did not ask for, then there is no reason to read any further Please Delete this now. There's is no reason to get Nasty. My children use this computer also. So if you would kindly reply with remove, I will put you into what is called my cooling list, and you will never be bothered by I or my Family again Thank you George R. Corona
Have a Great Day, and for those of you that don't mind Like myself and have gotten good & Free thinks Please read on Thanks.
==========
==========
==========
1000 Plus Free sites, and search engines. where you can put your business ads, or Personal ads, free you can't beat that deal. You ask how can this guy have the time to do this. Well most of you know the Internet, you now that you can actuality trip over these sites, but they are time consuming. Well I'm a disabled Vet, I do have the time to do this. I have spent a couple of mouths, 10 hour days looking, tripping over them, hunting them down, my computer friends word of mouth, and a lot of you guys know how it happens. You go to one free site, to add your web address, and you run into a hundred Plus more free sites. You Know. Any ways I spent a lot of time looking for these site. But that's not all I found. Look at this. of course, (1) Free Classified add sites, (2)Yellow Pages List your site free, (3) Free links, (4)Search Engines free Listings, (5) Web Page Publishers & Promoters, (6) Low Cost Classified Sites (7)Newspapers & E-Zines on the web, (8) List of Cyber Malls, (9) If you want to Accept Credit Cards? I'll show you where to go. (10) Looking for Venture Capital? (11) Bulk E-Mail Companies, Hey NO SPAM, pick the ones that have targeted E-Mail, (12) Business Associations Online, (13) Free Multi Site Submission Services, (14) Marketing & Advertising Resources. Remember I did say Free. All I ask is, Hey you guys come on wait a minute, I don't know about you guys, but I can't afford those adverting Company's, and Christmas is right around the corner, and I refuse to spam! if you can afford the big Company's advertising prices, well thank God for your blessings. I can't, and I do have my family to think of.. So if you would please can go to my web site, to down load this free information, I would be Grateful also your are under no Obligation to buy anything. I also know that some people don't like to down load, so if you like, I can sent you a 3 1/2 inch floppy Just sent $3 Dollars for US priority mail and $1 for my time and the floppy.

Thank you. George R. Corona owner of Georgina's Indian Market.
http://www.salez.net/geoindmark/index.htm 4314 North 74th Ave Phoeniz Az 85033-2554 E-mail grose@inficad.com

2422. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <341d1aca.1995891@news.mindspring.com>
Source record: 17990

>> Dan Schultz N8FGV
>
>Remember that the 503 is supposed to be the first "commercial" launch of
>an Ariane 5, and that it is already fully manifested with commercial
>birds at this point. Of course this could change if the 502
>fizzles...then we could theoretically get on 503, if Arianespace is
>willing....still a lot of "ifs" and relying on the goodwill of
>ESA....Sure hope we don't have the biggest amateur white elephant in
>history...
>
>Rick Tannehill W7RT

I think we will go on either 503 or 504. We already paid for the ride
... just a question of when.
W4SCO
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

2423. (This Weekend!) Hamfest in W. Connecticut

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <341DB8A5.36D5@ix.netcom.com>
Source record: 17991
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.space

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

2424. How can I reach Norm Thagard? I need QSL for his mission

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: Ricky Ponder <*kc4kin@geocities.com>
Message-ID: <341DC030.2C810FF2@geocities.com>
Source record: 17992

September 15, 1997

Does anyone know how I can get in touch with Norm Thagard? Or someone
at NASA who will respond to my QSL request for his mission. I spoke
to him on 3 different occasions during his MIR stint.

3/30 15:18 UTC
4/1 06:52 UTC
5/6 16:24 UTC

Frequency 145.550

I sent for a QSL to the following and never received anything.

Norm Thagard
Mail Code CB
Johnson Space Center
TX, 77058

I've also emailed serveral people at different NASA addresses and
never get a reply. Any suggestions on how I can get a QSL for these
contacts would be greatly appreciated. I have a recording of one
of the contacts, I transformed it into a Real Audio file. If you
would like to hear it go to:

http://www.geocities.com/~kc4kin/r0mir.ra

Thanks in advance for any help

email: kc4kin@geocities.com

Attention: The e-mail address in the header is bogus
to help prevent SPAM in my mailbox. If you want to
reply send email to: kc4kin@geocities.com
Remove the * from the front of the message header

Ricky L. Ponder http://www.geocities.com/~kc4kin

\\\

2425. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: Steve S <kf4nnq@hotmail.com>
Message-ID: <341DDCAB.4C56@hotmail.com>
Source record: 17993
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

Tom Currie wrote:
>
> M@s@ wrote:
> >
> > <snipped drivel>
>
> Who told this bean brain how to access a newsgroup?

Tom,
Most of us have filtered him out.

Steve S

2426. Re: P3D report from GB2RS

Newsgroup: rec.radio.amateur.space
Date: 1997-09-15 00:00:00 UTC
From: John Mock - KD6PAG <kd6pag@nospam.qsl.net>
Message-ID: <341DF7EA.732@nospam.qsl.net>
Source record: 17994

Here's an unofficial report confirming that P3D will not fly on Ariane 502. I consider cancellation by mutual consent to be good news, and a sensible choice by both parties given the unforseen circumstances. I am especially pleased with ESA's cooperativeness, both with respect to the contract, past flights, and their apparent willingness to consider future launches. It may be frustrating to some, but i'm sure the outcome could have been much worse.

-- KD6PAG

From: "Dave {Reply address in.sig}" <noone@llondel.demon.co.uk>
To: radio-info@ucsd.edu
Subject: GB2RS News 14th September 1997
Date: Mon, 15 Sep 97 20:01:56 GMT
Message-ID: <874378916snx@llondel.demon.co.uk>

Good morning / evening. It's Sunday the 14th of September [1997] and here is the GB2RS news broadcast, prepared by the RSGB and intended for all radio amateurs and short-wave listeners.

Ron Broadbent, G3AAJ, of AMSAT-UK, reports that the Phase 3D satellite will not now be on the Ariane 502 rocket, due for launch on the 30th of September. The Phase 3D contract with ESA, the European Space Agency, has been cancelled by mutual consent and the launch of Phase 3D is now being renegotiated with ESA and various other launch agencies. At the moment, options are very fluid, with the possibility of a launch in five or six months time.

...

--
GB2RS is prepared by the Radio Society of Great Britain.
Tel +44 1707 659 015 Posted to Usenet by
Fax +44 1707 645 105 dave@ llondel.demon.co.uk
http://www.rsgb.org/
==========

2427. ANNOUNCE: QwikKep 01.00 Available

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: marty@trucom.com
Message-ID: <5vkihl$mc9@thepit.trucom.com>
Source record: 17995
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space

Hello:

This is to announce the availablity of QwikKep 01.00, a program to
encourage the rapid distribution of satellite Keplerian Element Sets.

QwikKep is available at the following URLs:

http://www.trucom.com/ppages/marty
ftp://ftp.kc6ufm.dyn.ml.org/pub/QwikKep

Thanks for your attention.

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****
HAmPS Coordinator
http://www.geocities.com/CapeCanaveral/Lab/7067
****

2428. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: John Mock - KD6PAG <kd6pag@nospam.qsl.net>
Message-ID: <341E4876.5421@nospam.qsl.net>
Source record: 17996
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

*** Transmit without license !! It's possible !!***

Not a problem at 1750 KHz. People do it all the time. In the States,
you can do 10W (if i recall correctly) but your transmitting antenna
is limited in size. But your *receive* antenna can be as big as you
have real estate for. Check a recent ARRL Handbook if you want to
build a 'Lowfer' rig.

-- KD6PAG (Networking Old-Timer, RF newbie)

2429. Re: *** Transmit without license !! It's possible !! ***

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: amateur@vub.mcgill.ca.ham
Message-ID: <341e78c5.2883790@news.mcgill.ca>
Source record: 17997
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,alt.radio.scanner

On Tue, 16 Sep 1997 00:51:02 -0800, John Mock - KD6PAG
<kd6pag@nospam.qsl.net> wrote:

>*** Transmit without license !! It's possible !!***
>
>Not a problem at 1750 KHz. People do it all the time.

> In the States,
>you can do 10W (if i recall correctly) but your transmitting antenna
>is limited in size.

everything is possible in Antarctica !!

You may transmit something in U.S. military band as well !!

U.S. does not have any jurisdiction over Antarctica !!

I strongly suggest you not to do this !!
I hope you are not going to be kicked out of your country !!

M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : amateur@vub.mcgill.ca.ham
URL : http://www.geocities.com/~masataka (General)
http://www.geocities.com/~masataka/main.htm (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2430. ARLK072 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk072.1997@arrl.org>
Source record: 17998
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK072
ARLK072 Keplerian data

ZCZC SK72
QST de W1AW
Keplerian Bulletin 72 ARLK072
From ARRL Headquarters
Newington, CT September 16, 1997
To all radio amateurs

SB KEP ARL ARLK072
ARLK072 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97257.94565062 .00000084 00000-0 10000-3 0 5057
2 14129 26.2046 126.8313 6043820 151.5794 261.9955 2.05880135 79238
RS-10/11
1 18129U 87054A 97259.15929279 .00000049 00000-0 37101-4 0 04063
2 18129 82.9282 171.4945 0012069 337.8911 22.1725 13.72382261512715
UO-11
1 14781U 84021B 97258.93131641 .00000288 00000-0 56308-4 0 00024
2 14781 97.8434 236.5768 0013100 72.4704 287.7967 14.69583536724586
RS-12/13
1 21089U 91007A 97259.16680569 .00000037 00000-0 23418-4 0 00140
2 21089 82.9205 211.1561 0031117 44.9922 315.3741 13.74085567331656
UO-14
1 20437U 90005B 97259.20161715 .00000033 00000-0 29412-4 0 03054
2 20437 98.5148 338.8823 0010875 305.8614 54.1561 14.29971345399228
RS-15
1 23439U 94085A 97258.80691010 -.00000039 00000-0 10000-3 0 02487
2 23439 64.8179 6.3047 0147414 115.1431 246.4863 11.27528368112151
AO-16
1 20439U 90005D 97259.07337902 .00000000 00000-0 16939-4 0 01113
2 20439 98.5320 341.8865 0011070 307.2530 52.7641 14.30017819399225
RS-16
1 24744U 97010A 97259.17114986 .00005726 00000-0 18813-3 0 00992
2 24744 97.2656 162.5000 0008656 116.1103 244.1029 15.31915235030011
```

```
DO-17
1 20440U 90005E 97259.19014177 .00000020 00000-0 24533-4 0 01025
2 20440 98.5323 342.9255 0009903 300.3405 59.6801 14.30161268399279
WO-18
1 20441U 90005F 97259.26006650 .00000002 00000-0 17411-4 0 982
2 20441 98.5344 342.8809 0011689 305.0134 54.9949 14.30127880399286
LO-19
1 20442U 90005G 97259.22000865 .00000027 00000-0 27244-4 0 961
2 20442 98.5395 343.5641 0011784 303.9329 56.0753 14.30244248399301
FO-20
1 20480U 90013C 97258.86290630 .00000021 00000-0 11596-3 0 09978
2 20480 99.0554 203.4371 0541256 171.9867 189.0329 12.83238790356335
AO-21
1 21087U 91006A 97259.18820115 .00000094 00000-0 82657-4 0 08604
2 21087 82.9414 344.2235 0037220 16.5226 343.7133 13.74585880332659
UO-22
1 21575U 91050B 97259.17729508 .00000015 00000-0 19236-4 0 08031
2 21575 98.2909 316.4675 0007470 348.4237 11.6783 14.37083803323551
KO-23
1 22077U 92052B 97259.56733043 -.00000037 00000-0 10000-3 0 6902
2 22077 66.0820 313.9099 0004778 194.3002 165.7879 12.86303504239505
KO-25
1 22828U 93061F 97259.14315903 .00000019 00000-0 25051-4 0 05701
2 22828 98.5358 331.6719 0010081 324.9621 35.0891 14.28190566175190
IO-26
1 22826U 93061D 97259.20081327 .00000059 00000-0 41122-4 0 5820
2 22826 98.5363 331.6388 0009424 339.1639 20.9150 14.27846278207073
AO-27
1 22825U 93061C 97259.16929725 .00000017 00000-0 24484-4 0 06048
2 22825 98.5390 331.3392 0009068 343.2480 16.8407 14.27736087207051
FO-29
1 24278U 96046B 97259.56621047 -.00000042 00000-0 -41196-5 0 1076
2 24278 98.5309 288.2886 0351696 309.5922 47.4651 13.52633034 53477
MO-30
1 24305U 96052B 97259.16180384 .00000203 00000-0 20364-3 0 1422
2 24305 82.9318 287.3584 0029041 315.3589 44.5218 13.73095981 51549
Mir
1 16609U 86017A 97259.48031765 .00008269 00000-0 10591-3 0 6159
2 16609 51.6558 347.1241 0004736 127.3567 232.7857 15.60141038661272

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
September 20, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2431. NORAD Two-Line Orbital Element Sets (TLE063)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <5vn1nc$t2r$1@blackbird.afit.af.mil>
Source record: 17999

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #063 -
Alouette 1
1 00424U 62049A 97258.32218604 .00000067 00000-0 68063-4 0 3172
2 00424 80.4661 194.6453 0022823 306.3737 53.5303 13.67903217744569
ATS 1
1 02608U 66110A 97252.51315319 -.00000006 00000-0 10000-3 0 388
2 02608 14.4616 347.9656 0006247 131.8103 228.3030 1.00304306 29372
ATS 3
1 03029U 67111A 97256.31673567 -.00000119 00000-0 10000-3 0 6978
2 03029 14.8716 354.9087 0009306 271.3965 94.8175 1.00272985109312
Starlette
1 07646U 75010A 97259.11640068 -.00000339 00000-0 -15528-3 0 851
2 07646 49.8263 149.5352 0206711 296.5704 61.4137 13.82191652142025
LAGEOS
1 08820U 76039A 97258.75452894 -.00000007 00000-0 00000+0 0 3180
2 08820 109.8165 182.0676 0044625 29.8256 330.4900 6.38664498242925
GOES 2
1 10061U 77048A 97255.22060081 .00000041 00000-0 10000-3 0 8809
2 10061 12.9243 32.0293 0010829 135.0456 86.8667 1.00261296 18977
IUE
1 10637U 78012A 97242.97126301 .00000033 00000-0 10000-3 0 4072
2 10637 36.1754 76.5853 1374263 69.3187 235.0170 1.00059570 24336
GOES 3
1 10953U 78062A 97256.33705465 -.00000088 00000-0 10000-3 0 8454
2 10953 11.9494 35.0723 0002522 141.8310 187.2668 1.00272732 23598
SeaSat 1
1 10967U 78064A 97259.24335801 .00000003 00000-0 45547-4 0 6041
2 10967 107.9957 38.4816 0001900 259.0343 101.0587 14.38188698 7015

```
Nimbus 7
1 11080U 78098A 97259.11951497 -.00000049 00000-0 -68739-5 0 6979
2 11080 98.8914 103.7929 0008493 173.2688 186.8584 13.83678304954226
GOES 5
1 12472U 81049A 97256.39307282 -.00000222 00000-0 10000-3 0 162
2 12472 8.8881 45.8472 0005874 95.4905 264.5758 1.00332171 17640
Cosmos 1383
1 13301U 82066A 97258.81743824 .00000055 00000-0 46895-4 0 6126
2 13301 82.9301 159.7231 0029140 64.3689 296.0468 13.68085588759674
LandSat 4
1 13367U 82072A 97256.90999285 .00000027 00000-0 15566-4 0 985
2 13367 98.0165 298.3814 0007171 152.8648 207.2925 14.57208935806618
DMSP B5D2-1
1 13736U 82118A 97258.52133183 .00000121 00000-0 69271-4 0 3073
2 13736 98.6219 85.5340 0009080 134.2692 225.9235 14.25854387765953
IRAS
1 13777U 83004A 97258.56305664 -.00000129 00000-0 -59024-4 0 7756
2 13777 98.9730 80.5403 0012218 279.4086 80.5696 13.99274057417051
Cosmos 1447
1 13916U 83021A 97254.30431597 .00000018 00000-0 29652-5 0 7067
2 13916 82.9414 217.3569 0037834 337.5468 22.4031 13.74358728725705
TDRS 1
1 13969U 83026B 97254.27734522 -.00000301 00000-0 10000-3 0 7881
2 13969 9.6172 39.4695 0003858 104.5202 257.2829 1.00263865 25912
GOES 6
1 14050U 83041A 97256.40457556 .00000056 00000-0 10000-3 0 7163
2 14050 7.7622 49.4969 0003518 91.0464 223.8556 1.00284604110736
AO-10
1 14129U 83058B 97257.94565062 .00000084 00000-0 10000-3 0 5057
2 14129 26.2046 126.8313 6043820 151.5794 261.9955 2.05880135 79238
LandSat 5
1 14780U 84021A 97256.79579214 .00000076 00000-0 27024-4 0 6436
2 14780 98.2763 319.0132 0002597 355.2722 4.8448 14.57083529720017
UO-11
1 14781U 84021B 97258.93131636 .00000247 00000-0 49509-4 0 17
2 14781 97.8435 236.5771 0013139 72.9271 287.3371 14.69583151724585
Cosmos 1574
1 15055U 84062A 97255.58874533 .00000045 00000-0 31278-4 0 9058
2 15055 82.9552 272.2829 0027440 158.6010 201.6280 13.73652620663097
Cosmos 1602
1 15331U 84105A 97255.50184054 .00000411 00000-0 45346-4 0 5882
2 15331 82.5306 49.2051 0018367 253.9751 105.9440 14.84927263700092
ERBS
1 15354U 84108B 97257.42390964 -.00000057 00000-0 16265-4 0 3032
2 15354 56.9966 2.7652 0002900 74.0107 286.1256 14.95069512704770
NOAA 9
1 15427U 84123A 97258.89098145 .00000051 00000-0 50313-4 0 2885
2 15427 98.8971 328.6997 0015957 100.8446 259.4519 14.13880969658022
Mir
1 16609U 86017A 97259.09599239 .00007050 00000-0 91273-4 0 6144
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2 16609 51.6563 349.0574 0004661 128.5466 231.5936 15.60130632661213
SPOT 1
1 16613U 86019A 97257.84092579 -.00000044 00000-0 00000+0 0 1142
2 16613 98.7898 329.6951 0001678 79.4829 280.6538 14.20000849284839
Cosmos 1766
1 16881U 86055A 97258.11259145 .00000211 00000-0 22521-4 0 5049
2 16881 82.5178 104.3273 0017636 278.4456 81.4760 14.83882103601300
EGP
1 16908U 86061A 97257.58594815 -.00000083 00000-0 10000-3 0 2089
2 16908 50.0115 39.9894 0011333 87.6278 272.5854 12.44417061172989
NOAA 10
1 16969U 86073A 97258.96180758 .00000041 00000-0 35598-4 0 2172
2 16969 98.5507 249.6472 0014011 101.0725 259.2033 14.25055859571511
MOS-1
1 17527U 87018A 97255.54664193 -.00000043 00000-0 00000+0 0 5850
2 17527 98.8843 312.1866 0020169 149.6601 210.5725 14.00473692538303
GOES 7
1 17561U 87022A 97256.32729861 -.00000155 00000-0 10000-3 0 3862
2 17561 3.9384 66.3608 0000135 232.3958 73.3321 1.00277083 21841
Kvant-1
1 17845U 87030A 97258.71165791 .00046267 00000-0 56099-3 0 1383
2 17845 51.6561 350.9878 0004972 135.7989 224.3166 15.60144959595260
DMSP B5D2-3
1 18123U 87053A 97258.88890769 .00000019 00000-0 31965-4 0 511
2 18123 98.7632 87.5434 0015196 35.8675 324.3517 14.15490405528967
RS-10/11
1 18129U 87054A 97259.15929279 .00000049 00000-0 37101-4 0 4018
2 18129 82.9282 171.4945 0012069 337.8911 22.1725 13.72382261512715
Meteor 2-16
1 18312U 87068A 97257.23101068 .00000052 00000-0 33161-4 0 5907
2 18312 82.5571 351.9405 0013940 30.2716 329.9255 13.84103627508988
Meteor 2-17
1 18820U 88005A 97258.96996907 .00000051 00000-0 32068-4 0 3629
2 18820 82.5388 44.5113 0018310 85.1824 275.1413 13.84780514486602
DMSP B5D2-4
1 18822U 88006A 97258.89292052 .00000049 00000-0 39912-4 0 6225
2 18822 98.3861 75.2584 0007129 108.0711 252.1246 14.23239606499398
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2 19163 65.4406 70.7223 0003775 193.5107 166.5275 2.13102438 71808
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2 19215 4.1597 65.3416 0006191 130.7201 229.6512 0.96948204 21565
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1 19274U 88056A 97259.23135908 .00000437 00000-0 51065-4 0 2036
2 19274 82.5139 204.6632 0021490 63.3238 297.0176 14.82663891496949
Meteor 3-2
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2 19336 82.5380 204.4094 0016567 172.5801 187.5568 13.16983083439370
Glonass 39
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2 19503 65.3936 309.3261 0006906 145.8933 214.2331 2.13101784 70044
NOAA 11
1 19531U 88089A 97258.93098583 .00000018 00000-0 34637-4 0 1097
2 19531 99.1484 293.9637 0012658 44.0643 316.1535 14.13143636462815
TDRS 3
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2 19548 3.3734 69.4765 0003025 110.9662 156.4226 1.00264222 20019
Glonass 40
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2 19749 65.4446 70.0326 0008501 266.5597 93.2536 2.13100451 67540
Glonass 41
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2 19750 65.4234 70.0805 0007034 214.2039 145.7987 2.13101789 67571
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2 19802 55.5655 92.5291 0025185 126.6740 233.4335 2.00550882 62830
Akebono
1 19822U 89016A 97257.32728440 .00012130 00000-0 59613-3 0 9855
2 19822 75.0728 218.2571 3708482 120.9334 280.8255 7.99707202202820
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2 19851 82.5200 281.1239 0014720 143.0150 217.2027 13.84438165431290
MOP-1
1 19876U 89020B 97254.51279713 -.00000062 00000-0 00000+0 0 2847
2 19876 2.9013 70.1883 0016722 292.6703 68.0003 0.97109008 11005
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2 19883 0.7743 87.3280 0002964 103.2770 33.8351 1.00270168203666
GPS BII-02
1 20061U 89044A 97258.18985764 .00000024 00000-0 10000-3 0 4561
2 20061 53.9192 267.5820 0178738 225.3020 133.2572 2.00562885 60586
Nadezhda 1
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2 20103 82.9606 133.5678 0036040 228.2188 131.5887 13.73882029411075
GPS BII-03
1 20185U 89064A 97254.90083784 .00000030 00000-0 00000+0 0 4873
2 20185 55.3651 93.0155 0031399 45.1513 315.3182 2.00566795 59096
GMS 4
1 20217U 89070A 97257.84575466 -.00000386 00000-0 10000-3 0 6338
2 20217 2.6899 72.9337 0001243 249.6952 95.9755 1.00275485 29975
INTERCOSMOS 24
1 20261U 89080A 97255.78419193 .00000255 00000-0 68826-4 0 6179
2 20261 82.5948 341.6186 1242291 92.4212 281.9310 12.47442600362330
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2 20302 53.1589 207.3604 0055341 199.2145 160.5653 2.00557464 57899
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2 20322 98.9295 269.2848 0008051 213.2433 146.8228 14.03468146400455
Kvant-2
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2 20335 51.6561 350.9878 0004972 135.7989 224.3166 15.60144959444272
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SPOT 2
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2 20437 98.5151 334.0245 0011093 320.4373 39.5996 14.29970601398510
AO-16
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2 20440 98.5316 341.5525 0009960 305.3033 54.7216 14.30160661399071
WO-18
1 20441U 90005F 97255.20216801 .00000028 00000-0 27463-4 0 978
2 20441 98.5339 338.9009 0011866 317.0132 43.0120 14.30127698398709
LO-19
1 20442U 90005G 97259.22000865 .00000027 00000-0 27244-4 0 961
2 20442 98.5395 343.5641 0011784 303.9329 56.0753 14.30244248399301
GPS BII-06
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2 20452 54.0866 148.3496 0069990 95.9232 264.9406 2.00570285 55877
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2 20510 82.5254 164.8560 0017536 278.8016 81.1219 14.78715633406625
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2 20619 64.9829 308.3697 0024331 214.1332 145.7928 2.13102595 56985
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2 20620 64.9938 308.5380 0009024 30.5005 329.6190 2.13102749 56916
Glonass 46
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2 20712 18.0361 63.7676 7184426 1.9693 359.7045 2.35942766 53867
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AO-21
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MOP-2
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Nadezhda 3
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2 21152 82.9263 169.7614 0041807 158.4799 201.8123 13.73551076326028
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2 21216 64.7334 307.7631 0011218 212.7714 147.2626 2.13103812 50201
Glonass 51
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2 21217 64.7215 307.7668 0009016 206.5595 153.4609 2.13101943 50181
Glonass 52
1 21218U 91025C 97255.38720986 .00000012 00000-0 10000-3 0 5108
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GRO
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Meteor 3-4
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2 21577 98.2903 310.9699 0006927 4.3321 355.7926 14.36559260322936
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2 21578 98.3355 323.1620 0005153 357.5918 2.5243 14.39426569323437
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Meteor 3-5
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2 21655 82.5573 358.3683 0014316 109.0624 251.2051 13.16855584292694
UARS
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Glonass 54
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Glonass 55
1 21855U 92005C 97256.89271785 .00000043 00000-0 00000+0 0 4376
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Glonass 56
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Glonass 57
1 22057U 92047B 97257.08596716 .00000016 00000-0 00000+0 0 3934
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Glonass 58
1 22058U 92047C 97257.49422481 .00000016 00000-0 10000-3 0 2379
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TDRS 6
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GPS BIIA-18
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Glonass 59
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Glonass 61
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UFO F2
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SPOT 3
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AO-27
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IO-26
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2 24947 86.6375 62.1301 0011870 268.9881 91.0035 15.17403648 192
Iridium 31
1 24948U 97051E 97258.37789006 .00077812 00000-0 38307-2 0 67
2 24948 86.6375 62.0983 0013038 269.5531 90.4734 15.17580070 199
Iridium 32
1 24949U 97051F 97258.31196232 .00024778 00000-0 12323-2 0 57
2 24949 86.6400 62.1240 0008793 285.7659 74.3200 15.17478374 180
Iridium 33
1 24950U 97051G 97258.37777049 .00057370 00000-0 28199-2 0 69
2 24950 86.6376 62.1001 0013737 264.7418 95.3720 15.17716768 196
1997051H
1 24951U 97051H 97257.42707618 .13866903 28704-5 10615-3 0 32
2 24951 72.5813 61.6670 0012425 272.0148 88.2727 16.52215603 31
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2432. Space Communication

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341F44CD.5925@primenet.com>
Source record: 18000

There is a new Space Communications web page growing:
http://www.qsl.net/k7on/sat/sat.htm

Please review and pass along any comments and suggestions
for future development.

Any materials for submission are welcome and will be
given proper credit.

-Brian http://www.qsl.net/k7on

2433. moon bounce

Newsgroup: rec.radio.amateur.space
Date: 1997-09-16 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <341F672E.490B@inreach.com>
Source record: 18001

hi to all,
William F. Hagen kc6ufe, I would like to open a discussion on
moonbounce, such as who is doing it, what kind of power, antennas,
clubs, nets, freqs, etc. I am interested, possibly in participating, and
would eventually like to see a 2m repeater on the moon.
Glad to participate here.
whagen@inreach.com

2434. Shareware Collection *FREE*

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341F97E7.64D3@primenet.com>
Source record: 18002

I once collected and cataloged shareware available on the
Internet and came up with a compressed (zip) collection of
programs and information in about 25 or so categories.

Below are listed directories in which this material was divided,
each containing about 1Mb (compressed) of materials.

Being compressed (zip) this is a substantial collection and it
is now available all in one place.

You should be able to access this through your web browser and
I have included a link on my home page (near the bottom):
http://www.qsl.net/k7on/index.htm

Hopefully, there is something of use to about everyone in there.

Listing of Sub-Directories

ICOM Radio Control Programs For Icom Gear
CONTEST Contest Logging Programs and Information
DXSTUFF DX Programs and Information
LOGGING Logging Programs
EQPTMISC Collection of Equipment Related Information
ANTSTUFF Collection of Antenna Related Materials
KNWDCAT Kenwood Radio Control Programs
MODS_DAT Radio and Equipment Modifications
INTERNET Guide To Amateur Radio Resources on Internet
CW Morse Code Programs
EXAMS Amateur Radio Examination Programs
FCC FCC Rules and Regulations
LICENSIN Amateur Radio Licensing Information
MULTIMOD Collection of Programs for Digital Communications
PACKMISC Packet Radio Software and Information
TERMPROG Terminal Programs for Packet Radio
ANTENNA Analyzing and Designing Antennas
PROPAGAT Propagation Prediction Programs
VHFUHF VHF/UHF Programs and Information
PACSAT Packet Satellite Programs and Information
SATSTUFF Programs and Information for Satellite Enthusiasts
TELEMETR Processing and Analyzing Satellite Telemetry
TRACKING Satellite Tracking Programs
SCANNING Programs and Frequencies for Scanner Enthusiasts
SSHUTTLE Tracking and Working the Space Shuttle
SWL Shortwave Listening Programs, Frequencies, and Information
TVRO TVRO Satellite Information

ARCHIVE Collection of Archive Compression Utilities (DOS)
IMAGUTIL Collection of Image Viewing and Compression Utilities (DOS)
AWARDS Awards Tracking Information and Programs
LOG405 N6TR Log 4.05 Contest Program
YAESU Yaesu CAT Programs (Various Radios)

Brian Short k7on@qsl.net http://www.qsl.net/k7on
1994 E Laguna Dr Tempe, Az 85282 (602)839-3484

2435. Minimum requirements for sat work?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: kcc@westworld.com
Message-ID: <341f929f.56851818@news.wgn.net>
Source record: 18003

I am working on the communications and navigations subsytem of my sailboat. I am interested in providing to my associates state side my location via APRS. I am not opposed to doing standard packet and possible SSB connection, but not important if I can get through via APRS.

So considering that I don't have a lot of space for antennas, how will I be able to pull this off? Also, I would be interested in hearing any recommendations on equipment... Remember that space and power is at a premium. Please e-mail any responses...

Kim C. Callis
kcc@westworld.com
Callis & Associates
Los Angeles, CA
(310) 934-0212 voice (213) 295-2071 fax

2436. test

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: test
Message-ID: <341f4743.0@208.212.139.3>
Source record: 18004

```
test
```

2437. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: sw
Message-ID: <5vovfu$p4k@cs1.FTA-Berlin.de>
Source record: 18005

In article <19970912011400.VAA16047@ladder02.news.aol.com>, wb4lnm@aol.com (WB4LNM) wrote:
>
>>And
>>if you are starting from scratch, don't automatically go with Mode B just
>>because that was used in the past.
>
>Yes, and since our planners cannot (or will not) tell us what the
>operational scenario will be after launch, we cannot possibly prepare for
>ANY operations, without spending an inordinately large amount of money.

Ummh, there was a very informative series of articles in the recent issues of the german CQ-DL (our equivalent to your QST) covering all aspects of the P3D sattelite. The last article told about the most-likely-to-become-standard up- and downlink modes. It seems that there has to be done quite some experimentation to evaluate the quality of the links and which modes to chose. The author was honest enought to tell that he isn't able to tell anything in detail at the moment and that no one should hurry out and buy some equipment now. The one or other bands have more or less likelyhood to become up- or downlink paths, but nothing is written in stone yet.

vy 73s,

Stefan (DD6FM)

--
Stefan Wimmer Cellware Broadband
Email sw@cellware.de Rudower Chaussee 5
WWW http://www.cellware.de/ 12489 Berlin, Germany

Visit my private Homepage: Love, Rockets, Fireworks!
http://www.geocities.com/CapeCanaveral/6368/

2438. Re: FTV=WEFAX,FAX,SSTV,RTTY,CW with SoundBlaster

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <pqoKWGAMvAI0EwOR@pacsat.demon.co.uk>
Source record: 18006
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <5vggo7$m2c@news.keyworld.net>, "Brian E. Cauchi"
<briane@geocities.com> writes
> FTV (now in Version 1.0)can be used to receive images from Weather
>Satellites and Terrestrial Facsimile Stations, text transmissions from radio
>telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
>signals. It can also transmit Amateur Radio FAX and SSTV. No external
>hardware, other than a radio, is required, as all the necessary signal
>processing is implemented in software. The main features include:
>
>WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
> Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
> FAX operation supports APT signal recognition and scheduled reception.
> No external decoder or converter box is required.
> Signal analysis is provided on all modes.
> Many parameters are adjustable while receiving.
> Full recovery from wrong mode settings is possible.
> Program works in real time (about 1 second 'DSP' time lag)
>
>
> You may get more information or download a copy from my web site, on
>http://www.geocities.com/SiliconValley/2504

Hello Brian

Long time no hear! Glad to see FTV is coming along.

Good luck with the project.

73 Simon GM4PLM

+---+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---+

2439. software and transceiver

Newsgroup: rec.radio.amateur.space
Date: 1997-09-17 00:00:00 UTC
From: Robert Daniel <PAGERMAN@worldnet.att.net>
Message-ID: <34207EF1.7401@worldnet.att.net>
Source record: 18007

I am new to satelite amateur radio. Would like advice from anybody
experienced on transceivers and software for tracking. would be
thankful for pro and cons of what is available.
73s and thanks,
Robert Daniel, WA5EWS

2440. Re: moon bounce

Newsgroup: rec.radio.amateur.space
Date: 1997-09-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342148bd.11683900@news.atl.bellsouth.net>
Source record: 18008

On Tue, 16 Sep 1997 22:14:22 -0700, Bill <whagen@inreach.com> wrote:
>hi to all,
>William F. Hagen kc6ufe, I would like to open a discussion on
>moonbounce, such as who is doing it, what kind of power, antennas,
>clubs, nets, freqs, etc. I am interested, possibly in participating, and
>would eventually like to see a 2m repeater on the moon.

Maybe for use *on* the Moon, but 2m would be a bad frequency
choice for a lunar repeater to be used *from* Earth. If we could place
a repeater on the Moon (and I'd love to see that happen), it should be
at least at S band, and probably better at Ku band.

A 3m dish should do for either end of the link with a Ku band frame
regenerating repeater incorporating good hybrid FEC located on the
Moon. Using either TDMA or CDMA technique, that should allow
multiple digital voice QSOs via the lunar repeater simultaneously.
(Such a repeater would see half of Earth at any given time, so
making it single user would be very undesirable, and an analog
transponder wouldn't have sufficient margin at that distance without
a very large antenna.)

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2441. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-18 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5vs1eq$khq@news.mcn.net>
Source record: 18009

Anyone know what brand of cement was used in the Cement Block(CB)? Buying stock in the company might be a good investment. Amsat likes putting up ROCK.

Company ad Campaign: ""Concrete good Enough for Space!""

2442. Does anyone know?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-18 00:00:00 UTC
From: b068719c@bc.seflin.org
Message-ID: <5vs382$i20@nntp.seflin.org>
Source record: 18010

I would like to find a cheap way of communicating with my friends and
loved one
not like cell phone becaues of the high prices. I don't know that much
about CB
radios. So I am asking all of you becaues you would most likely know what
to do
a way that is free to use and know one eles can hear my conversation. I
did hea
about a year ago it was called a super phone. You plug it into your phone
outle
you can talk on a cellphone looking thing for upto 20 miles, But I was
not able
If anyone knows where I can buy that or something else that can help me
out ple
mail me back. thanks

P.S. I don't care if it is not fully legal.

Please help me out here!

--

Sage Sheppard
b068719c@bcfreenet.seflin.lib.fl.us

2443. (SUNDAY!) Hamfest in W. Connecticut

Newsgroup: rec.radio.amateur.space
Date: 1997-09-18 00:00:00 UTC
From: KD1YV <jimkd1yv@eat_spam.and_die.snet.net>
Message-ID: <3421C51C.2B4D@eat_spam.and_die.snet.net>
Source record: 18011
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.antennas,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.space

```
THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim
```

2444. Help Icom IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Geko <ea3cfc@redestb.es>
Message-ID: <5vs9d1bhp1@talia.mad.ibernet.es>
Source record: 18012

Dears friends
The 440 side of my Icom IC-970/H is having a problem. The readout will go blank, will not trans. or recive. When you key the mic, the readout comes on , but she doesn't trans or recive. About five seconds after I unkey the readout goes blank again .
Now this is not all the time. She comes and goes working great half the time . Two meter side hasn't acted up at all .

Help , has anybody had any of the same ?

Thank`s

Vicenso

E.mail: cerebreitor@rocketmail.com

2445. Which ones are alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: cfree36675@aol.com
Message-ID: <19970919021701.WAA00885@ladder01.news.aol.com>
Source record: 18013

Can someone tell me which of the NOAA Low Orbiting Sats are still in operation and on what frequency the are?

Thanks
73's
Chuck
WD0ASJ

2446. RE: ALINCO DR-130 SETUP FOR SALE

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Larry <lpen@mail1.nai.net>
Message-ID: <01bcc4bf$a8fd4720$92a485d0@default>
Source record: 18014

```
ALINCO 2M DR-130 MOBILE RADIO,
CUSHCRAFT 124 2M BEAM ANTENNA AND POLES,
ANTENNA ROTOR AND ACESSORIES,
12VDC 20AMP POWER SUPPLY WITH METER ,
50 FT RG-259
USA SALE ONLY!!!!
*** ALL FOR $400.00**203-743-7170
```

2447. Re: Which ones are alive?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <34226349.24ED@ix.netcom.com>
Source record: 18015

CFree36675 wrote:
>
> Can someone tell me which of the NOAA Low Orbiting Sats are still in
> operation and on what frequency the are?
>
> Thanks
> 73's
> Chuck
> WD0ASJ

Howdy Chuck --- try browsing the SATELLITES page at URL:
http://pw2.netcom.com/~ac6v/pageaag.html

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

2448. Re: TRAKBOX Problem/Question

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Seeler@upei.ca
Message-ID: <342374b5.153832043@NEWS.UPEI.CA>
Source record: 18016

On Thu, 11 Sep 1997 03:49:51 GMT, activate@now.com (virus) wrote:

>On Wed, 10 Sep 1997 06:41:17 -0400, Art Jeyes <chrishil@erols.com>
>wrote:
>
>
>>Any ideas or should I just go out and get an ICOM CT-17 level converter?
>
>RS 232 standard levels are ~+ - 12 V. .Less than + - 5V. is a little
>flaky.
>An Icom level converter?? Eeesh! Sounds expensive!
>Might wanna homebrew a couple o' inverters and a MAX 232.
>
>G'luck
>73's VE7IJQ

You should have no problems running Icom radios with the Trakbox using TTL. I run the IC-475 and 275 in that manner. Been a while but I seem to remember that there was a "gotcha" on the hardware setup to do so - can not remember as it has been a while.

Will have to go back through my notes. Let me know if you still need the info, as I have the trakbox out to upgrade the EPROm this weekend so I can do some checking for you.

Dave Seeler, VY2DCS
Seeler@upei.ca

2449. ESA press release re Ariane 502

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: sw
Message-ID: <5vu3i5$gha@cs1.FTA-Berlin.de>
Source record: 18017

Looking at the ongoing discussion about P3D and ESA, I thought the following
press release might be of interest:

==========
From: MAILRP@ESA.HQ.ESA.FR
Subject: Relations, Esa Public Press Release Nr.28-97 - ARIANE 5
Date: Thu, 18 Sep 1997 07:52:59 MET
Organization: Space

No. 28-97, Paris, 17 September 1997

JOINT ESA/CNES PRESS RELEASE

ARIANE 502 - Launch preparations

Preparations for the second Ariane-5 qualification flight
(A502) are going ahead simultaneously at the Ariane
5 launch complex (ELA-3) at the Guiana Space Centre,
Europe's spaceport in Kourou in French Guiana, and at the
main industrial sites in Europe.

The launcher preparation campaign began on 16 June in
Guiana (see ESA/CNES press release of the same date) and is
proceeding satisfactorily. The data output from the Launcher
Countdown Rehearsal, which took place on 5 September, has
now been analysed and the results are correct and in
accordance with predictions.

However, in line with the overriding concern for rigour and
achievement of maximum reliability on this second flight,
additional studies and tests at launcher system level and below
have proven necessary. While these have now almost all been
completed with satisfactory results, some checks relating to
analysis of the launcher's dynamic behaviour have yet to be
completed.

It will not therefore be possible to announce a new target date
for the launch - previously scheduled to take place on or soon
after 30 September 1997 - until 25 September at the earliest,
when the final steps in the launch campaign have been
finalised.
==========
Stefan (DD6FM)

--
Stefan Wimmer Cellware Broadband
Email sw@cellware.de Rudower Chaussee 5

WWW http://www.cellware.de/ 12489 Berlin, Germany

Visit my private Homepage: Love, Rockets, Fireworks!
http://www.geocities.com/CapeCanaveral/6368/

2450. FS:ICOM IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Geko <geko@redestb.es>
Message-ID: <5vtffilld2@talia.mad.ibernet.es>
Source record: 18018

Hola a todos:
Vendo emisora Icom tribanda todo modo (FM,CW,SSB,AM)
Marca ICOM modelo IC-970/H,de 144,432 y 1200 MHz
esta completamente nueva,es una maravilla de emisora para trabajar
DX,Satelites,Tropo,Rebote Lunar,Meteor Scatter etc.. dispone del
modulo de 1200 IC-UX97 instalado,tiene 50 Watios de potencia,y esta lista
para
trabajar ATV en 1200,la vendo por dificultad para la instalacion de antenas
El precio es de 480.000 ptas,solo se ha utilizado unas pocas veces,todavia
tiene el Display con el precinto original !!
Si estais interesados podeis llamar al Tfno: (93) 6685309 Movil:(908)794175
o por E-mail a ea3cfc@redestb.es

Un saludo

Ramon

E.mail: ea3cfc@redestb.es

2451. Re: Does anyone know?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5vuetl$6m6$1@tilde.csc.ti.com>
Source record: 18019

Sage, GTE was advertising something like that about
8 months ago, but I haven't seen anything recently.
It wasn't called 'Superphone" though. It seemed to
be a cell phone without broad area coverage or roaming
capability. The price wasn't mentioned.
Call GTE. If you can get past the expert on the phone to
a real human, you might be able to find out if the service
is still available. ...good luck
Ken

2452. WTD: 2M all-mode (IC290H?)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Tim Zibrat <timmy_z@nauticom.net>
Message-ID: <3422FFA9.6DC59362@nauticom.net>
Source record: 18020
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.ham-radio.swap

Hello all,

I am looking for an _affordable_ 2M all-mode (SSB-CW-FM). I used to
have an Icom IC290H that I would like to find again. Please, no dual
band satellite radios, I can't afford one, yet!

Please email me at: k3tz@nauticom.net

Also, would you consider a trade for a mint condition Icom IC281H?

Thanks for reading & 73,
Tim
K3TZ

--
****
* * *
* No SPAM email reply: * Whether the chicken *
* timmy_z@nauticom.net * crossed the road, or the *
* K3TZ * road moved beneath the *
* TRA# 3348 level 1 * chicken depends on your *
* NAR# 64753 level 2 * frame of reference. *
* AMSAT# 22105 * *
* * *
****
* http://www.nauticom.net/users/timmy_z/index.html *
****

2453. FS: Almost New DSP-2232

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Thomas E Johnson <n2rif@kwiknet.net>
Message-ID: <01bcc509$e0febe20$e78d56cf@Kwiknet.ppp>
Source record: 18021

Hello All;
I am selling "like new mint" AEA DSP-2232 Digital Signal Processor
"Mutli-Mode Data Controller" 2mos old still under Timewave warranty
With all original boxes, docs, warranty card, receipt & etc.
Please Re Me Via: email n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
I am asking $550 + shipping obo.
Thank you for reading my bulletin. Thomas J or just T.j. -73

2454. FS: Almost New Icom IC-820H

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Thomas E Johnson <n2rif@kwiknet.net>
Message-ID: <01bcc509$a46e4980$e78d56cf@Kwiknet.ppp>
Source record: 18022

Hello All;
I am selling "like new mint" Icom IC-820H dual band allmode vhf-uhf satellite transciever. Still under warranty 2 months old. With all original boxes, docs, warranty card, receipt & etc. I'm asking $920 +shipping obo. Plus [if interested] optional "SM-8" amplified desk mic $85 + shipping obo.
Please Re me via: Email n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2455. ICOM IC-970/H FAILURE

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: Geko <geko@redestb.es>
Message-ID: <5vtfb1lld1@talia.mad.ibernet.es>
Source record: 18023

The 440 side of my Icom IC-970 is having a problem. The readout will go
blank, will not trans. or recive. When you key the mic, the readout comes
on , but she doesn't trans or recive. About five seconds after I unkey
the readout goes blank again .
Now this is not all the time. She comes and goes working great
half the time . Two meter side hasn't acted up at all .

Help , has anybody had any of the same ?
Any idea ??

Thank=B4s

Vicenzo

E.mail: cerebreitor@rocketmail.com

2456. List of over 100 UFO crashes now on CSETI Website

Newsgroup: rec.radio.amateur.space
Date: 1997-09-19 00:00:00 UTC
From: "A.J. Craddock" <webmaster@cseti.org>
Message-ID: <34236358.2C79@cseti.org>
Source record: 18024

A list of over 100 UFO crashes can now be found on the CSETI Website under "What's New".

This is probably the most comprehensive list ever published, combining information from many public and protected sources, and includes events as recent as July of this year.

These events involve Unidentified Flying Objects in the most literal sense. We would appreciate explanations from knowledgeable list members regarding events definitely known to have been the result of meteors (or plane crashes) so that they can be removed from the list.

Tony Craddock
Web Administrator
CSETI
http://www.cseti.org

2457. Loking for some good KCT links for my homepage!! (was forgoten my URL) sorry

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Geert <pass@glo.be>
Message-ID: <01bcc57b$b99aa3e0$65b630ce@pass.glo.be>
Source record: 17929

Hello

I'm looking for some good links for my homepage can somebody help?

vissit my homepage and PLAESE SIGN my guestbook !!!!!!!!!!!

http://user.glo.be/~pass

Geert Pirens (onl2057)

73!

2458. Loking for good KCT links for my homepage.

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Geert <pass@glo.be>
Message-ID: <01bcc57b$4dd53940$65b630ce@pass.glo.be>
Source record: 17930

Hello

I'm loking for some good links for my homepage can somebody help?

vissit my homepage and PLAESE SIGN my guestbook !!!!!!!!!!!

Geert Pirens (onl2057)

73!

2459. PacComm spirit-2 tnc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Paul Garland <pgarland@tcp.co.uk>
Message-ID: <01bcc5bc$4a5a80e0$8c0150c3@default>
Source record: 17931

Hi

I've just acquired the above tnc are they any good for Sat use with the
Wisp program
Who long does it take to sort out???? Regarding the Shorting links etc....
What are your comments?

Cheers Paul

2460. Re: How can I reach Norm Thagard? I need QSL for his mission

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Tom@astro.net
Message-ID: <6011j0$c6t$1@news.mhv.net>
Source record: 17932

In article <341DC030.2C810FF2@geocities.com>, Ricky Ponder <*kc4kin@geocities.com> wrote:
>September 15, 1997
>
> Does anyone know how I can get in touch with Norm Thagard? Or someone
>at NASA who will respond to my QSL request for his mission. I spoke
>to him on 3 different occasions during his MIR stint.
>
>
>3/30 15:18 UTC
>4/1 06:52 UTC
>5/6 16:24 UTC
>
>Frequency 145.550
>
>I sent for a QSL to the following and never received anything.

Try e-mailing Dave Larsen, Mir's U.S. QSL manager:

doc@volcano.net

Address:

Dave Larsen
P.O. Box 1501
Pine Grove, California 95665

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2461. Re: PacComm spirit-2 tnc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34241716.15A1@primenet.com>
Source record: 17933

You might try the Paccomm Mailing List at QTH.Net
For information: http://www.qth.net

Also, visit my home page: http://www.qsl.net/k7on

Paul Garland wrote:
>
> Hi
>
> I've just acquired the above tnc are they any good for Sat use with the
> Wisp program
> Who long does it take to sort out???? Regarding the Shorting links etc....
> What are your comments?
>
> Cheers Paul

2462. i need an antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Gervais <gfillio1@quebectel.com>
Message-ID: <01bcc55d$e8efeec0$b824a98e@default>
Source record: 18025

hi everearyone, i need a plan for an antenna which i can use to listen to the Mir on packet and experience the satellite. on the Mir is a kind of antenna and to talk via the satellite (Oscar Type) which antenna will i use?

so i am waiting any helping hand!

VE2CKN
Gervais
Rimouski,Quebec
--
Mailto:gfillio1@quebectel.com

2463. antanna

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Gervais <gfillio1@quebectel.com>
Message-ID: <01bcc55e$46aa60e0$b824a98e@default>
Source record: 18026

hi.
can any one help me building an antenna for listening to Mirc and if
possible talking via the satellite .ps i know i need a beam to work the
satellite but which one?

73/s VE2CKN
Gervais
Rimouski,Quebec

--
Mailto:gfillio1@quebectel.com

2464. Re: Balloons-Rockets & Radio-Astronomy

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: laser1020@aol.com
Message-ID: <19970920013301.VAA13979@ladder01.news.aol.com>
Source record: 18027

CAN I JOIN IT?

2465. Re: ALINCO DR-130 SETUP FOR SALE

Newsgroup: rec.radio.amateur.space
Date: 1997-09-20 00:00:00 UTC
From: Larry <lpen@mail1.nai.net>
Message-ID: <01bcc57c$809fbca0$77a485d0@default>
Source record: 18028

Larry <lpen@mail1.nai.net> wrote in article
<01bcc4bf$a8fd4720$92a485d0@default>...
> ALINCO 2M DR-130 MOBILE RADIO,
> CUSHCRAFT 124 2M BEAM ANTENNA AND POLES,
> ANTENNA ROTOR AND ACESSORIES,

> 12VDC 20AMP POWER SUPPLY WITH METER ,
> 50 FT RG-259
> USA SALE ONLY!!!!
> *** ALL FOR $400.00**203-743-7170 email lpen@mail1.nai.net
>

2466. Starting new college SIG (club) in OR. Pls Hlp!

Newsgroup: rec.radio.amateur.space
Date: 1997-09-21 00:00:00 UTC
From: geoffg@iname.com
Message-ID: <34248293.122760464@news.teleport.com>
Source record: 17934

Hello all! I am more than just interested in creating a new special interest group relating to aerospace at Mt Hood Community College, and I am looking for all the help that I can get. If you are interested, please visit

www.teleport.com/~geoffg

Please note that this club _HAS NOT_ been formed, even though the web site may (should) lead you to believe that it has. The information center of the college does not open until Monday and until then I won't even be sure if it is possible to form this group, but I want the web site to be ready as soon as I gain permission (knock on wood).

I am still working on the page, and hope to have much more up by later today and sunday, after that I'm back to school and will not be able to get much done except on weekends (17 credits + managing a new SIG = Time debt). I would really love to hear from you, and I will post any ideas on the "Help" page ASAP.

For those who are wondering, Mt Hood Community College (MHCC) is located in Gresham, Oregon.

And lastly: Should I do anything with that logo? (To big, ugly, whatever, First pic as you load page)

Thanks for any help!
Geoff Granum
geoffg@iname.com

2467. Re: PacComm spirit-2 tnc

Newsgroup: rec.radio.amateur.space
Date: 1997-09-21 00:00:00 UTC
From: Art Jeyes <chrishil@erols.com>
Message-ID: <34252298.5E37@erols.com>
Source record: 17935

Paul Garland wrote:
>
> Hi
>
> I've just acquired the above tnc are they any good for Sat use with the
> Wisp program
> Who long does it take to sort out???? Regarding the Shorting links etc....
> What are your comments?
>
> Cheers Paul
Paul,

I have been using a Spirit for about 2 years. It is a solid TNC,
and has been 100% reliable. I have noticed one problem area
and it has been confirmed by other SPirit users. This problem is
that although the Spirit does great on KO-23 & 35 -- it is terrible
on UO-22. I thought it was my receiver (an ICOM 970) but I have
heard the same complaint from someone with a Yaesu 736...

73
Art -- AA3GU

2468. Jupiter and Chart?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-21 00:00:00 UTC
From: Howard Kanare <hkanare@sprintmail.com>
Message-ID: <3424F146.29EC@sprintmail.com>
Source record: 17936

We completed our half-wave loop antenna (John Potter Shields' design with screen reflector backing) for Jupiter/Io emissions and obtained a used Yaesu FRG8800 receiver. On the roof and aimed at Jupiter, coaxed to the receiver, we've been listening at the times provided by David Knisely of the Prairie Astronomy Club (http://www.4w.com/pac) but have yet to hear anything other than noise. Assuming the connections are all good (the antenna seems to function and we pick up lots of ham transmissions) what else should we know about listening for Jupiter emissions?

Does anyone know of a wall chart (or table/graph in a book) that shows celestial radio emissions of various objects as function of wavelength?

Thanks for the advice.

-- Jenny & Howard Kanare
Wilmette, Illinois

2469. ANS-264 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-09-21 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <6042sv$i08@cronkite.polaristel.net>
Source record: 17937

Please notify listserv@amsat.org if you would like to subscribe, un-subscribe or change your Internet address for any of the AMSAT lists. You may request to be added or deleted from the following lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such requests to the lists themselves.

SB SAT @ AMSAT $ANS-264.01
ESA INFO ON ARIANE 502

HR AMSAT NEWS SERVICE BULLETIN 264.01 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-264.01

ESA RELEASES INFORMATION ON ARIANE 502 FLIGHT SCHEDULE

No. 28-97, Paris, 17 September 1997
JOINT ESA/CNES PRESS RELEASE
ARIANE 502 - Launch preparations

ANS provides the following just as it was received from ESA:

Preparations for the second Ariane-5 qualification flight (A502) are going ahead simultaneously at the Ariane 5 launch complex (ELA-3) at the Guiana Space Centre, Europe's spaceport in Kourou in French Guiana, and at the main industrial sites in Europe.

The launcher preparation campaign began on 16 June in Guiana (see ESA/CNES press release of the same date) and is proceeding satisfactorily. The data output from the Launcher Countdown Rehearsal, which took place on 5 September, has now been analyzed and the results are correct and in accordance with predictions.

However, in line with the overriding concern for rigour and achievement of maximum reliability on this second flight, additional studies and tests at launcher system level and below have proven necessary. While these have now almost all been completed with satisfactory results, some checks relating to analysis of the launcher's dynamic behavior have yet to be completed.

It will not therefore be possible to announce a new target date for the launch - previously scheduled to take place on or soon after 30 September 1997 - until 25 September at the earliest, when the final steps in the launch campaign have been

finalized.

Keep tuned to ANS for further updates.
Official information on P3D can be found in ANS
bulletin ANS-250.01

/EX

SB SAT @ AMSAT $ANS-264.02
BoD ELECTION RESULTS

HR AMSAT NEWS SERVICE BULLETIN 264.02 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-264.02

AMSAT-NA Corporate Secretary Martha Saragovitz has announced
the results of the annual election for the AMSAT Board of
Directors. A total of 1386 members cast ballots in this year's
election and the results are as follows:
Bill Tynan, W3XO.....1234*
Stan Wood, WA4NFY.....1161*
Dick Daniels, W4PUJ.....1114*
Joe Holman, AD7D..... 933*
Barry Baines, WD4ASW..... 842#
The four candidates receiving the highest number of votes
(*) were elected to serve on the Board for two years. The fifth
highest vote getter (#) will serve as the alternate until the
next election. The newly elected board will meet at the site of
the AMSAT-NA Annual Meeting in October. At that time they will
elect AMSAT-NA Officers.

[ANS thanks Bill Hook, W3QBC, and Martha Saragovitz
for this report.]

/EX

SB SAT @ AMSAT $ANS-264.03
SPUTNIK EVENT

HR AMSAT NEWS SERVICE BULLETIN 264.03 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-264.03

To celebrate the 40th Anniversary of the launch of Sputnik 1 on
Saturday October 4th, MX1ASE and GX0AUK will be on voice
mode for 24 hours on all available satellites. Operations continue
as time permits until 2359 UTC November 3rd the 40th anniversary of
the launch of Sputnik 2.

Joining the event Leo Labutin, UA3CR, and Andy Miranov, PK3KPK, from
the Russian Satellite Ground Station near Moscow. Andy will be on CW
on the RS birds and Leo on Voice and CW on FO-20 and FO-29.

The organizers thank JARL for their help in switching FO-29 to mode JA on Saturday 4th for the event.

Calling "CQ SPUTNIK" the preferred downlinks for MX1ASE and GX0AUK are AO-10 145.910, RS-12 145.910/29.430, RS-15 29.370, FO-20/29 435.860, and AO-27 436.800

A contact with any of the participating calls and a station can apply for a limited edition Anniversary Award Certificate. A4 size printed in color and endorsed with your name or call sign. Certificates cost £4 or $10 U.S. including postage. The moneys raised will be used to purchase much needed antennas and rotators for the Russian Ground Station which commands the RS satellites. SWL's are invited to apply and also anyone who wishes to make a donation. Donations of £4 ($10) qualify for a certificate.

Address for applications: John, G7HIA, Chestnuts, Desford Lane Kirkby Mallory, Leicestershire LE9 7QF ENGLAND.

The organizers would like to thank Mike Ellis of Eagle Antennas and Yaesu / Martin Lynchire & Son for special prices on the equipment requested by the ground station.

[ANS thanks John Heath for this update.]

/EX

SB SAT @ AMSAT $ANS-264.04
EME RECORD

HR AMSAT NEWS SERVICE BULLETIN 257.04 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-264.04

On Sunday September 21st (UTC) on 144.028 MHz, Dave Blaschke, W5UN, and Graham Daubney, F/G8MBI, achieved the first single-yagi to single-yagi EME QSO in history.

W5UN was using an old KLM 17LBX (one of the few which survived from the destruction by tornado of his first array) and F/G8MBI was using one of Mike Stahl's 2M-8WLs. Both stations were running maximum legal power and neither employed ground gain. Success was achieved on the third schedule attempt.

[ANS thanks Ray Soifer, W2RS, for this news.]

/EX

SB SAT @ AMSAT $ANS-264.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 257.05 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT

BID: $ANS-264.05

MIR
(Simplex 437.650 MHz. FM voice and packet.)
MIREX will be running the test from September 6, until September 28 1997
world wide. After the completion of the test, they will switch the MIR PMS
frequency back to the current 2-meter frequency on September 29th.
See ANS Bulletin ANS-250.02 for more information. Test frequency is
437.650 MHz.

MIR 70 cm experiment programming for an FT-736r
Start of pass at 60 end at 70
channel RX repeater offset freq offset resulting TX
60. 437.660 minus 00.020 437.640 MHz
61. 437.658 minus 00.016 437.642
62. 437.656 minus 00.012 437.644
63. 437.654 minus 00.008 437.646
64. 437.652 minus 00.004 437.648
65. 437.650 simplex 00.000 437.650
66. 437.648 plus 00.004 437.652
67. 437.646 plus 00.008 437.654
68. 437.644 plus 00.012 437.656
69. 437.642 plus 00.016 437.658
70. 437.640 plus 00.020 437.660

[ANS thanks Richard L. Elverum, KB0VBZ , for this information.]

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Not operational at this time.

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.

RS-12
(Uplink 21.21-21.25 MHz CW/SSB, Downlink 29.41-29.45 MHz or
145.91-145.95 MHz CW/SSB)
Operational.
RS-12 continues to provide good signals to North America, in spite
of the increased daytime activity on 15 m. Ops are encouraged to
listen to 15 m before they transmit, however. There may be a simplex
QSO in progress on the frequency you have chosen."
[ANS thanks Dick Montgomery, N3DV, for this update.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
IW9ELR, heard the 435.504 MHz beacon-telemetry of
RS16.
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally.

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally.
Both Kitsats are yielding download efficiencies greater than 90%.
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
Operating normally.
This information can be found at www.umbra.com
AO-27 TEPR (Timed Eclipse Power Regulation) States are as follows
As of July 6, 1997
TEPR STATE Time TX Status
---
1 n/a OFF
2 n/a OFF
3 --- OFF
As of 9/21/97 the TEPR State are set to:
Tepr 4 - 12.5 Minutes
Tepr 5 - 18.0 Minutes
6 --- OFF
Current Information about AO-27 can be found at www.umbra.com

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time).

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5).

It should noted that TEPR states 1,2 and 3 happen during the Night Time passes and TEPR states 4,5 and 6 happen during the Day time passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground stations.

Users are asked not to transmit on 145.85 MHz if they do not hear the satellite's downlink so as to avoid possible interference to other satellite uplinks and downlinks on adjacent frequencies.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud BPSK)
Operational.
The latest FO-29 Schedule.
Sept 19 (Fri) 00:51z JD9600
Sept 26 (Fri) 08:09z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-264.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 264.06 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 21,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-264.06

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz CW/USB)
Operational.
AO-10 IS spinning very slowly. Drag doesn't slow down its rotation, but magnetic damping around perigee does. It may well be wobbling a bit, since its nutation dampers probably don't work very well at this slow spin rate (about 1.5 RPM or so). However, Stacey Mills, W4SM, wouldn't describe its motion as TUMBLING. If it were tumbling, solar illumination would be truly chaotic and the transponder activity would come and go in a nearly random

fashion. There would be no twice yearly periods of good/bad AO-10 transponder/beacon function as there now are. So the majority of AO-10's motion must continue to be around the Z-axis which remains relatively stable in its orientation (see Web page below for some caveats regarding possible movement of AO-10's Z-axis orientation in the last year).

The QSB is mainly experienced during periods of high (90 deg) squint, when the omni antenna is routinely masked and unmasked by the three lobes of the space frame. During these times, for reasons that aren't entirely clear, switching polarization improves the downlink signal.
See: http://www.cstone.net/~w4sm/AO-10.html
for more info.
[ANS thanks Stacey Mills, W4SM, for this report.]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally. OSCAR-11 REPORT 14 September 1997
During the period 19 August to 13 September excellent signals have once again been received from the 145.826 MHz beacon. Telemetry nominal. The battery voltage has been maintained in the range 13.9 to 14.4 volts. The internal temperatures are slowly increasing from the minimum values observed at the end of June (battery -0.4C, telemetry electronics -1.6 C). The battery temperature is now 8.4C, and telemetry electronics 6.8C. The increased temperature is due to a reduction in solar eclipse times, which is expected to continue into October.

The WOD survey of channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage) dated 25 June was transmitted until the end of August. The timing of this WOD coincided with the maximum eclipse times. This WOD is now available from my web site (details below). At the end of August a further survey of the same channels was taken, dated 26 August. This was quickly followed by channels 21, 31, 41, 51 (equipment currents) dated 30 August, and then by channels 10, 20,30, 40, dated 03 September, which are now being transmitted.

A single AMSAT-UK bulletin dated 21 June, by Richard G3RWL has been transmitted. This featured Sputnik-1 40th anniversary, MIR frequencies, and RS-10 news, and the Keplerian elements for OSCAR-11.

Considerable interest is now being shown in the mode-S beacon, as operators prepare for Phase-3D. Reports indicate that it is a very weak signal, and therefore ideal for testing converters, once they have been set up using the much stronger signal from DOVE. Reports have indicated that the signal from OSCAR-11 is around 24 dB below that of DOVE. There are however considerable variations in the comparisons which vary between -15 dB and -36 dB! Before the beacon partially failed the signal was measured at -3 dB below DOVE.

Hans, HB9AQZ, reports hearing the beacon using a 26 turn helix, mounted in the shack, and pointing through a double glass window. Ib OZ1MY in Copenhagen heard the beacon with two 16 turn helixes, feeding an

SSB down converter and pre-amp (combined noise figure 1.5 dB). Trevor, VK4AFL, reports S3 signals with a 60 cm dish, two turn helix feed, D.E.M converter and pre-amp. Victor, OE1VKW, reports S3-4 signals using a 67 element antenna, horizontal polarization, and UEK-2000 SAT. On the same equipment DOVE was received at S7-8. Thanks for all the reports.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and delivering half power. Any reports of reception on 2401 MHz. would be most welcome. Please e-mail g3cwv@amsat.org.

The 435.025 MHz. beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, ie. within range of Guildford, UK. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit Clive's web site. It contains some software for capturing data, and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded, as new data is captured. The URL is -

http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
Below is a data sample of the +Z Array temperatures
when its position is toward the sun.

uptime is 1098/06:45:16. Time is Sat Sep 20 12:11:56 1997
IR Detector 255.000 C +Z Array V 22.608 V
-Z Array Cur -0.022 A +Z Array Cur 0.240 A

+Z Array Temp -0.607 D (Time is 12:06:56 1997)
+Z Array Temp 19.967 D (Time is 12:14:56 1997)

(** a thermal gradient of +20.574 D in 8 min.)

Total Array C= 0.240 Bat Ch Cur= 0.040 Ifb= 0.042 I+10V= 0.217
TX:010B BCR:85 PWRC:59E BT:3C WC:25 EDAC:4B

Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE has returned to 2 meters.
Operational software has again been successfully loaded into DOVE (DO-17)
by the DOVE command team. WD0E started the software at 09/17/97 19:40 UTC
and reports it seems to be running OK. Reports on the condition of the
batteries for the next 24 hours would be appreciated. Please send them to
wd0e@amsat.org. Jim reports it remains to be seen how long the intermittent
watchdog timer in the satellite will allow this software to run.
The s-band transmitter is on to facilitate testing of s-band equipment on
the ground, particularly for those working toward P3D S capability. Power
level on the 2 meter transmitter is about 1W day and night. Telemetry is
currently being sent every 60 seconds, but this could change due to power
management needs.
[ANS thanks Jim White, WD0E, for this update.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operating normally.
.Below is a data sample of the birds temperatures.
Uptime is 822/22:07:24. Time is Sat Sep 20 12:12:34 1997
Bat 1 Temp 0.131 D Bat 2 Temp 0.131 D
Baseplt Temp 0.692 D RC PSK BP Temp 0.692 D
RC PSK HPA Tmp 2.374 D
RC PSK TX Out 0.950 W

Total Array C= 0.140 Bat Ch Cur=-0.063 Ifb= 0.041 I+10V= 0.211
TX:01A BCR:80 PWRC:36E BT:3C WC: 0
<To add 6,83 minutes to the clock of the satellite>Graphic and general
information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)

UO-22 is operating normally.
Chris Jackson, G7UPN / ZL2TPO, has reloaded the Store and Forward communications task on the UO-22 On-Board Computer. This task includes incremental checksums which should make uploading slightly faster.
In the old task, once an upload was complete, the spacecraft had to perform the checksum on the complete file. Depending on the file length, this could take quite a long time. With the new task, the checksum is computed on the fly - while the data is actually being uploaded. Thus there is no need to recompute it at the end of the transfer and this checksum delay is then removed.

However, all files that were started before Chris Jackson, G7UPN / ZL2TPO, loaded the task around 1000 UTC on the 19th will receive a corrupt body checksum error when the upload is completed. If the file is uploaded again, it should be accepted. If trying to upload a large file that was started before the above time, then start again.

If anyone gets persistent body checksum errors while uploading files to UO-22 would they please let Chris Jackson know as soon as possible

[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB, 1200 Baud PSK.)
It's message says IHT97 software loaded. WOD not enabled.
.Its signal is very weak
[ANS thanks Charles Parmelee for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX
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BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2470. Re: i need an antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EGwLG5.20I@pe1chl>
Source record: 17938

In <01bcc55d$e8efeec0$b824a98e@default> "Gervais" <gfillio1@quebectel.com> writes:

>hi everearyone, i need a plan for an antenna which i can use to listen to
>the Mir on packet and experience the satellite. on the Mir is a kind of
>antenna and to talk via the satellite (Oscar Type) which antenna will i
>use?

For your first experiments with Mir: just use an omnidirectional antenna
for the band where you are going to listen (70cm or 2m). Preferably not
one of those high-gain "white sticks" but a plain groundplane or crossed
dipole.

For other satellites and serious work: use crossed yagi's with switchable
polarization (right-hand and left-hand circular) and put them on an
azimuth/elevation rotator so you can point them at any point in the sky.
You can control the rotator from a computer with a tracking program,
or just keep the antenna sort of pointed using the manual controls and
the s-meter on your equipment.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2471. New APT decode program!!

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970922141801.KAA28215@ladder01.news.aol.com>
Source record: 17939

Greetings weather sat enthusiasts..
there is a NEW APT decodeing program, using the soundcard as a demodulator!

It is called WavSat.

It appears to be very similar to WXSat, but I have not had a chance to
fully explore it. It does have an integrated sat tracking program, which
can be used for unattended image capture sessions.

Get it here:

http://members.aol.com/jkktl/ham.htm

Jim
K2TL

2472. NO CODE "HAM CRAM" Review/EXAM

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: "Richard F. Gillette" <w9pe@starnetinc.com>
Message-ID: <3426ADAE.84D6CEC0@starnetinc.com>
Source record: 17940
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equiptment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.misc

Harper College in Palatine, IL will hold their one-day NO CODE Amateur Radio Review Course and Exam on Oct. 18, 1997. If you or someone you know or work with want an easy way to a License, this is it! Start at 08:30 review Radio, one hour lunch break, review Law and Operating Practices, then take the Exam at 16:30. Every subject on the exam is covered, hence if you have any physics or math background or have a radio background this is the "HAM CRAM " course for you.

Total course including pre course notes and exam $20.00.

Call 847-925-6994 for details.

Please copy and post at work and on local northern Illinois BBSs and nets.

Thank you;

--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 oOO=={}==OOoo=

2473. Old equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: "William F. Erhardt" <erhardt@mt.net>
Message-ID: <01bcc77d$ed29a4a0$5e427fce@default>
Source record: 17941

I have the following equipment for sale and I don't know its value. If anyone has a need for this equipment, make an offer as its just taking up room in the shop

1. Aircraft Radio Transmitter
Type CCT 5208
Freq 3 - 4 mc
Stromberg Carlson dated Feb 5, 1942
Serial # 1139

2. U.S. Army Receiver BC-454
Western Electric

3. Antenna Tuner for Model BC-610

Bill Erhardt KA7YAO

2474. NORAD Two-Line Orbital Element Sets (TLE066)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <606qt4fqf1@blackbird.afit.af.mil>
Source record: 17942

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #066 -
Alouette 1
1 00424U 62049A 97258.32218604 .00000067 00000-0 68063-4 0 3172
2 00424 80.4661 194.6453 0022823 306.3737 53.5303 13.67903217744569
ATS 1
1 02608U 66110A 97260.48841324 -.00000015 00000-0 10000-3 0 394
2 02608 14.4542 347.9013 0007383 122.6043 237.4583 1.00305897 29459
ATS 3
1 03029U 67111A 97260.30567490 -.00000128 00000-0 10000-3 0 6980
2 03029 14.8706 354.8655 0009370 271.6723 94.5359 1.00272988109355
Starlette
1 07646U 75010A 97262.22537852 -.00000030 00000-0 87211-4 0 860
2 07646 49.8267 137.2680 0206552 306.7051 51.5021 13.82193795142458
LAGEOS
1 08820U 76039A 97258.75452894 -.00000007 00000-0 00000+0 0 3180
2 08820 109.8165 182.0676 0044625 29.8256 330.4900 6.38664498242925
GOES 2
1 10061U 77048A 97259.53017036 .00000033 00000-0 10000-3 0 8811
2 10061 12.9292 31.9815 0010581 133.9455 203.5487 1.00262747 19016
IUE
1 10637U 78012A 97242.97126301 .00000033 00000-0 10000-3 0 4072
2 10637 36.1754 76.5853 1374263 69.3187 235.0170 1.00059570 24336
GOES 3
1 10953U 78062A 97256.33705465 -.00000088 00000-0 10000-3 0 8454
2 10953 11.9494 35.0723 0002522 141.8310 187.2668 1.00272732 23598
SeaSat 1
1 10967U 78064A 97263.41668405 .00000044 00000-0 58946-4 0 6057
2 10967 107.9972 47.1216 0002056 261.3904 98.7006 14.38190166 7612

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Nimbus 7
1 11080U 78098A 97263.53044284 .00000018 00000-0 53673-4 0 6982
2 11080 98.8909 107.9629 0008710 161.5561 198.5921 13.83679340954838
GOES 5
1 12472U 81049A 97259.38333186 -.00000230 00000-0 10000-3 0 176
2 12472 8.9038 45.7034 0005851 96.7376 263.5381 1.00331423 17672
Cosmos 1383
1 13301U 82066A 97263.20557856 .00000031 00000-0 19195-4 0 6131
2 13301 82.9330 156.5101 0029156 52.7632 307.6182 13.68085525760274
LandSat 4
1 13367U 82072A 97261.37322882 .00000072 00000-0 25724-4 0 993
2 13367 98.0158 302.6773 0007511 140.4156 219.7593 14.57210202807269
DMSP B5D2-1
1 13736U 82118A 97263.57380670 .00000097 00000-0 59159-4 0 3110
2 13736 98.6221 90.5045 0009163 120.0649 240.1435 14.25855678766676
IRAS
1 13777U 83004A 97261.56625866 -.00000109 00000-0 -44991-4 0 7787
2 13777 98.9730 83.4818 0012054 270.5105 89.4661 13.99273804417470
Cosmos 1447
1 13916U 83021A 97254.30431597 .00000018 00000-0 29652-5 0 7067
2 13916 82.9414 217.3569 0037834 337.5468 22.4031 13.74358728725705
TDRS 1
1 13969U 83026B 97260.50176839 -.00000312 00000-0 10000-3 0 7900
2 13969 9.6267 39.4087 0004012 122.9502 325.6353 1.00261785 25979
GOES 6
1 14050U 83041A 97259.42370013 .00000049 00000-0 10000-3 0 7173
2 14050 7.7666 49.4721 0003915 91.0903 233.8418 1.00285708110766
AO-10
1 14129U 83058B 97257.94565062 .00000084 00000-0 10000-3 0 5057
2 14129 26.2046 126.8313 6043820 151.5794 261.9955 2.05880135 79238
LandSat 5
1 14780U 84021A 97261.19072075 .00000015 00000-0 13589-4 0 6444
2 14780 98.2761 323.3784 0002291 341.3263 18.7848 14.57083955720654
UO-11
1 14781U 84021B 97262.94848163 .00000241 00000-0 48503-4 0 21
2 14781 97.8439 240.4377 0013099 61.1702 299.0814 14.69585332725170
Cosmos 1574
1 15055U 84062A 97260.10481539 .00000011 00000-0 -43987-5 0 9068
2 15055 82.9544 268.9478 0028096 146.0739 214.2222 13.73652418663717
Cosmos 1602
1 15331U 84105A 97259.88186443 .00000462 00000-0 51319-4 0 5895
2 15331 82.5310 45.1004 0018389 237.3192 122.6248 14.84931423700746
ERBS
1 15354U 84108B 97261.70323759 .00000115 00000-0 31886-4 0 3047
2 15354 56.9965 345.6603 0003145 66.2456 293.8903 14.95073167705413
NOAA 9
1 15427U 84123A 97261.79241637 .00000085 00000-0 68341-4 0 2926
2 15427 98.8969 331.5862 0015998 92.9636 267.3364 14.13882000658439
Mir
1 16609U 86017A 97263.45154655 .00005317 00000-0 70177-4 0 6276
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2 16609 51.6541 327.1501 0004108 148.2123 211.9121 15.60214503661893
SPOT 1
1 16613U 86019A 97261.71633893 -.00000044 00000-0 00000+0 0 1165
2 16613 98.7893 333.5415 0001406 56.8832 303.2479 14.20001174285384
Cosmos 1766
1 16881U 86055A 97258.11259145 .00000211 00000-0 22521-4 0 5049
2 16881 82.5178 104.3273 0017636 278.4456 81.4760 14.83882103601300
EGP
1 16908U 86061A 97261.76223956 -.00000083 00000-0 10000-3 0 2090
2 16908 50.0131 27.1448 0011432 100.7703 259.4421 12.44417000173507
NOAA 10
1 16969U 86073A 97261.77031132 .00000067 00000-0 46809-4 0 2205
2 16969 98.5510 252.3844 0014103 93.3710 266.9083 14.25056681571916
MOS-1
1 17527U 87018A 97261.54795328 -.00000218 00000-0 00000+0 0 5867
2 17527 98.8810 318.0133 0019942 135.3535 224.9785 14.00468360539148
GOES 7
1 17561U 87022A 97259.36657674 -.00000160 00000-0 10000-3 0 3878
2 17561 3.9462 66.2969 0000199 203.9647 119.0045 1.00276412 21875
Kvant-1
1 17845U 87030A 97261.65808109 .00008864 00000-0 11287-3 0 1423
2 17845 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690595728
DMSP B5D2-3
1 18123U 87053A 97261.71636203 .00000055 00000-0 50323-4 0 551
2 18123 98.7628 90.3218 0015124 27.9024 332.2957 14.15491127529368
RS-10/11
1 18129U 87054A 97263.16917138 .00000039 00000-0 26024-4 0 4027
2 18129 82.9288 168.5333 0011431 326.9612 33.0830 13.72382333513267
Meteor 2-16
1 18312U 87068A 97261.35151324 .00000091 00000-0 68506-4 0 5910
2 18312 82.5554 348.6704 0013751 19.3724 340.7955 13.84104378509557
Meteor 2-17
1 18820U 88005A 97261.78788676 .00000052 00000-0 33214-4 0 3642
2 18820 82.5390 42.2693 0018308 77.7302 282.5907 13.84780744486995
DMSP B5D2-4
1 18822U 88006A 97261.49410675 .00000062 00000-0 45531-4 0 6249
2 18822 98.3864 77.7379 0007179 101.5670 258.6315 14.23240209499767
Glonass 34
1 19163U 88043A 97260.58605792 .00000011 00000-0 10000-3 0 2156
2 19163 65.4447 70.4378 0003759 193.0195 166.9978 2.13102433 71983
Glonass 36
1 19165U 88043C 97259.70544780 .00000019 00000-0 10000-3 0 6229
2 19165 65.4105 70.4083 0009060 357.6363 2.3861 2.13101892 72584
METEOSAT 3
1 19215U 88051A 97262.56075891 -.00000093 00000-0 00000+0 0 3375
2 19215 4.1655 65.3067 0007874 143.5690 216.6872 0.96946926 21637
OKEAN 1
1 19274U 88056A 97263.61805414 .00000436 00000-0 50918-4 0 2045
2 19274 82.5147 200.5565 0021265 50.8698 309.4403 14.82667415497598
Meteor 3-2
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1 19336U 88064A 97258.23162682 .00000051 00000-0 10000-3 0 6019
2 19336 82.5380 204.4094 0016567 172.5801 187.5568 13.16983083439370
Glonass 39
1 19503U 88085C 97263.02133746 -.00000025 00000-0 10000-3 0 5055
2 19503 65.3911 309.1683 0007109 148.3659 211.7501 2.13101802 70145
NOAA 11
1 19531U 88089A 97261.83391761 .00000040 00000-0 46482-4 0 1124
2 19531 99.1482 296.9295 0012579 36.2884 323.9135 14.13144364463225
TDRS 3
1 19548U 88091B 97250.73669212 -.00000192 00000-0 10000-3 0 3005
2 19548 3.3734 69.4765 0003025 110.9662 156.4226 1.00264222 20019
Glonass 40
1 19749U 89001A 97259.77385550 .00000018 00000-0 10000-3 0 7182
2 19749 65.4244 69.9404 0006771 266.6023 93.3396 2.13101231 67588
Glonass 41
1 19750U 89001B 97258.42063715 .00000032 00000-0 10000-3 0 6276
2 19750 65.4234 70.0805 0007034 214.2039 145.7987 2.13101789 67571
GPS BII-01
1 19802U 89013A 97260.83871559 .00000010 00000-0 00000+0 0 4682
2 19802 55.5649 92.4088 0024594 122.8813 237.4223 2.00551177 62892
Akebono
1 19822U 89016A 97261.83008040 .00011868 00000-0 59644-3 0 9911
2 19822 75.0668 215.5821 3706774 117.4831 284.9407 7.99810321203187
Meteor 2-18
1 19851U 89018A 97263.58572285 .00000061 00000-0 41323-4 0 5898
2 19851 82.5186 273.9747 0015385 118.9468 241.3237 13.84438935432531
MOP-1
1 19876U 89020B 97258.63083916 -.00000113 00000-0 00000+0 0 2850
2 19876 2.9104 70.7658 0014411 287.4128 72.3263 0.97110233 11040
TDRS 4
1 19883U 89021B 97257.75449759 -.00000286 00000-0 10000-3 0 3589
2 19883 0.7743 87.3280 0002964 103.2770 33.8351 1.00270168203666
GPS BII-02
1 20061U 89044A 97260.18415380 .00000003 00000-0 10000-3 0 4574
2 20061 53.9187 267.4969 0182786 224.5753 134.0118 2.00562840 60626
Nadezhda 1
1 20103U 89050A 97261.73569621 .00000015 00000-0 -31843-6 0 1536
2 20103 82.9594 130.5083 0036229 215.6987 144.1745 13.73881715411641
GPS BII-03
1 20185U 89064A 97260.38492912 .00000015 00000-0 00000+0 0 4883
2 20185 55.3702 92.7963 0029647 46.5362 313.8422 2.00567431 59207
GMS 4
1 20217U 89070A 97263.33047037 -.00000391 00000-0 10000-3 0 6355
2 20217 2.7136 73.0872 0000986 241.3840 284.0698 1.00272443 30031
INTERCOSMOS 24
1 20261U 89080A 97255.78419193 .00000255 00000-0 68826-4 0 6179
2 20261 82.5948 341.6186 1242291 92.4212 281.9310 12.47442600362330
GPS BII-04
1 20302U 89085A 97262.04454058 .00000002 00000-0 10000-3 0 4859
2 20302 53.1610 207.0653 0060472 201.7884 158.0555 2.00557628 58037
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Meteor 3-3
1 20305U 89086A 97263.26294121 .00000044 00000-0 10000-3 0 8996
2 20305 82.5541 166.4945 0005431 281.0527 78.9981 13.04421517378187
COBE
1 20322U 89089A 97260.50023080 -.00000272 00000-0 -14571-3 0 3364
2 20322 98.9296 273.6236 0007973 199.9731 160.1126 14.03465752401074
Kvant-2
1 20335U 89093A 97261.65808109 .00008864 00000-0 11287-3 0 218
2 20335 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690444730
GPS BII-05
1 20361U 89097A 97257.57493995 -.00000045 00000-0 00000+0 0 2639
2 20361 56.2519 35.3576 0096523 145.4333 215.2041 2.00567698 47424
COSMOS 2054 (Altair-1)
1 20391U 89101A 97256.24914161 -.00000186 00000-0 00000+0 0 5532
2 20391 4.6785 60.5880 0002507 119.3309 241.0028 1.00254860 28546
SPOT 2
1 20436U 90005A 97261.76944050 -.00000044 00000-0 00000+0 0 2765
2 20436 98.7204 335.1596 0001732 87.4975 272.6400 14.20032920396925
UO-14
1 20437U 90005B 97254.23364375 .00000018 00000-0 23846-4 0 2966
2 20437 98.5151 334.0245 0011093 320.4373 39.5996 14.29970601398510
AO-16
1 20439U 90005D 97260.19288550 -.00000001 00000-0 16412-4 0 939
2 20439 98.5322 342.9843 0011044 303.9342 56.0795 14.30017878399389
DO-17
1 20440U 90005E 97262.19851459 .00000016 00000-0 22970-4 0 927
2 20440 98.5323 345.8752 0009991 291.7014 68.3122 14.30161538399700
WO-18
1 20441U 90005F 97259.26006650 .00000002 00000-0 17411-4 0 982
2 20441 98.5344 342.8809 0011689 305.0134 54.9949 14.30127880399286
LO-19
1 20442U 90005G 97263.27757614 .00000018 00000-0 23524-4 0 970
2 20442 98.5375 347.5448 0011625 291.4111 68.5831 14.30244786399887
GPS BII-06
1 20452U 90008A 97260.96540066 .00000014 00000-0 10000-3 0 3746
2 20452 54.0866 148.1054 0071289 96.2787 264.6042 2.00570564 55994
MOS-1B
1 20478U 90013A 97261.71072858 -.00000044 00000-0 00000+0 0 783
2 20478 99.0801 330.3430 0006329 75.8803 284.3065 13.93979757308433
DEBUT
1 20479U 90013B 97260.34614210 .00000052 00000-0 18418-3 0 892
2 20479 99.0558 204.9239 0541423 167.8852 193.5892 12.83354650356542
FO-20
1 20480U 90013C 97253.87280559 .00000019 00000-0 11341-3 0 9945
2 20480 99.0536 199.3797 0541278 183.2558 176.4967 12.83238387355695
MOS-1B R/B
1 20491U 90013D 97261.62057151 -.00000661 00000-0 -11748-2 0 3803
2 20491 99.0290 284.3537 0469913 300.3527 55.1909 13.02996284361565
LACE
1 20496U 90015A 97263.18926133 .00003366 00000-0 98227-4 0 7916
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2 20496 43.1023 94.6918 0009703 178.6563 181.4325 15.37190754424587
Nadezhda 2
1 20508U 90017A 97261.55003864 .00000067 00000-0 55571-4 0 1530
2 20508 82.9515 265.0426 0044163 168.0343 192.1872 13.73526638378816
OKEAN 2
1 20510U 90018A 97260.35762470 .00000262 00000-0 32577-4 0 6124
2 20510 82.5254 161.0227 0017327 263.4999 96.4250 14.78717714407236
GPS BII-07
1 20533U 90025A 97252.27475290 .00000040 00000-0 00000+0 0 3560
2 20533 54.2686 269.8428 0032786 47.1881 313.1270 1.91041397 54337
PegSat
1 20546U 90028A 97261.52247409 .00015850 00000-0 23539-3 0 1305
2 20546 94.1083 254.6257 0051837 28.6635 331.7461 15.53569851416003
HST
1 20580U 90037B 97256.91369690 .00000536 00000-0 42852-4 0 9872
2 20580 28.4673 191.5287 0014223 37.2265 322.9307 14.86486560206267
MACSAT 2
1 20608U 90043B 97261.75257022 .00000166 00000-0 26189-4 0 2960
2 20608 89.9272 169.3725 0103013 252.9314 106.0582 14.65029134393420
Glonass 44
1 20619U 90045A 97261.54735209 -.00000046 00000-0 10000-3 0 4312
2 20619 64.9927 308.2484 0026608 211.0889 148.7899 2.13101989 57076
Glonass 45
1 20620U 90045B 97259.31963846 .00000008 00000-0 10000-3 0 4043
2 20620 64.9939 308.3008 0009311 29.1675 330.9697 2.13102738 57060
Glonass 46
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2 20635 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690415562
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2 20638 52.9902 33.2952 0013920 85.0702 275.1875 15.07694795401495
Meteor 2-19
1 20670U 90057A 97261.71898478 .00000068 00000-0 47317-4 0 3975
2 20670 82.5463 343.6932 0017304 49.9488 310.3187 13.84132258365174
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2 20712 18.0498 61.7190 7184901 5.7448 359.2324 2.35944264 53988
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2 20724 55.1839 90.2901 0137292 193.3145 166.4197 2.00563804 50613
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2 20788 98.8273 257.1306 0015614 303.5531 56.4143 14.01420577360244
Meteor 2-20
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2 21007 65.3920 69.3091 0033496 177.6787 182.3737 2.13101957 52763
Glonass 49
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2 21152 82.9300 166.4749 0042378 146.3403 214.0463 13.73550464326635
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2 21217 64.7215 307.7668 0009016 206.5595 153.4609 2.13101943 50181
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2 21263 98.5361 272.2682 0013626 28.3346 331.8572 14.22749229329534
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TDRS 5
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2 21639 0.0370 77.3629 0003089 334.2643 281.5170 1.00271997 22422
Meteor 3-5
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2 21655 82.5543 355.3082 0014545 98.6875 261.5895 13.16855034293260
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Glonass 54
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Glonass 55
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2 21855 65.3036 68.8367 0006890 212.3127 147.6817 2.13103773 43867
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Glonass 57
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Glonass 61
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2 22782 82.5500 346.4935 0022841 139.4238 220.8631 13.83081112204033
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Nadezhda 4
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2 23560 98.5498 335.7181 0001139 89.4589 270.6316 14.32244684126288
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CERISE
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2 23607 98.1427 193.4670 0005666 188.2686 171.8411 14.67047134116966
TDRS 7
1 23613U 95035B 97259.52829306 .00000075 00000-0 10000-3 0 3972
2 23613 1.6144 80.7178 0003403 61.3564 232.4031 1.00277358 7958
Glonass 74
1 23620U 95037A 97261.91114915 .00000017 00000-0 00000+0 0 3387
2 23620 64.8054 188.6337 0018173 171.7950 188.2468 2.13102922 16789
Glonass 75
1 23621U 95037B 97263.02833665 .00000016 00000-0 00000+0 0 3516
2 23621 64.8202 188.6010 0018406 182.0623 177.9489 2.13102307 16802
Glonass 76
1 23622U 95037C 97262.14746005 .00000017 00000-0 00000+0 0 3511
2 23622 64.8149 188.6261 0036083 167.1537 192.9523 2.13102508 16786
Prognoz-M2
1 23632U 95039A 97262.37845160 -.00000443 00000-0 00000+0 0 1591
2 23632 71.1920 246.9380 7161823 333.9010 5.3750 0.26362819 2040
SICH-1
1 23657U 95046A 97261.70004627 .00000191 00000-0 25853-4 0 1976
2 23657 82.5362 138.5055 0028529 4.0491 356.0940 14.73582571110352
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RADARSAT
1 23710U 95059A 97260.87900329 .00000114 00000-0 61032-4 0 3179
2 23710 98.5791 267.0501 0001032 55.6003 304.5277 14.29974176 97655
Glonass 79
1 23734U 95068A 97259.45052137 .00000004 00000-0 00000+0 0 3397
2 23734 64.8143 188.6356 0017976 320.5123 39.3584 2.13102080 13698
Glonass 78
1 23735U 95068B 97261.96050731 .00000017 00000-0 00000+0 0 3209
2 23735 64.8095 188.5362 0008056 218.0911 141.8666 2.13124458 13745
Glonass 77
1 23736U 95068C 97263.43894088 .00000013 00000-0 00000+0 0 3177
2 23736 64.7995 188.4967 0007950 203.0055 156.9795 2.13101941 13774
XTE
1 23757U 95074A 97259.85164602 .00000981 00000-0 52523-4 0 1747
2 23757 22.9862 182.7443 0013994 127.2941 232.8821 14.97892305 94014
Polar
1 23802U 96013A 97259.09514702 .00000122 00000-0 00000+0 0 1574
2 23802 86.3757 21.0959 6534657 263.9428 23.8931 1.35671000 7768
1996010E
1 23824U 96010E 97261.74163062 .00011650 00000-0 15216-1 0 3295
2 23824 47.7904 102.9777 6769833 167.0693 227.9251 2.87201053 14448
GPS BIIA-25
1 23833U 96019A 97263.58364200 -.00000077 00000-0 00000+0 0 2378
2 23833 54.5266 329.1693 0008306 252.4524 107.5477 2.00565187 10919
Priroda
1 23848U 96023A 97261.65808109 .00008864 00000-0 11287-3 0 4620
2 23848 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690 80132
MSX
1 23851U 96024A 97261.82119525 -.00000047 00000-0 00000+0 0 2699
2 23851 99.4215 257.7417 0008618 347.4078 12.6852 13.97397508 71554
SAX
1 23857U 96027A 97263.21108938 .00001699 00000-0 90757-4 0 996
2 23857 3.9564 349.9297 0013795 212.3210 147.6024 14.91919195 75952
MSTI 3
1 23868U 96031A 97263.22888888 .00003625 00000-0 72579-4 0 1874
2 23868 97.1165 91.7797 0007773 294.2761 65.7677 15.47364605 75925
TOMS-EP
1 23940U 96037A 97260.24410955 .00004975 00000-0 21392-3 0 1501
2 23940 97.4151 166.0727 0011968 174.7080 185.4283 15.23045956 67158
GPS BIIA-26
1 23953U 96041A 97263.50493138 -.00000014 00000-0 00000+0 0 1988
2 23953 55.2473 89.8130 0023529 340.7635 19.1857 2.00573575 8708
ADEOS
1 24277U 96046A 97259.25749696 -.00000087 00000-0 -17873-4 0 2199
2 24277 98.5923 335.1958 0001089 4.6701 355.4489 14.27028194 56355
FO-29
1 24278U 96046B 97259.56621047 -.00000042 00000-0 -41196-5 0 1076
2 24278 98.5309 288.2886 0351696 309.5922 47.4651 13.52633034 53477
FAST
1 24285U 96049A 97259.81118750 .00003958 00000-0 38846-3 0 1283
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2 24285 82.9971 356.3618 2205694 191.3151 162.9217 10.82480585 42331
1996049B
1 24286U 96049B 97263.27056667 .00005014 00000-0 48119-3 0 1398
2 24286 83.0089 354.9659 2204896 184.4775 173.2999 10.83055290 42717
Microsat
1 24291U 96050A 97261.82600799 .00044397 66846-5 38803-3 0 2871
2 24291 62.7900 187.1929 0480585 164.3551 197.3379 14.91246117 56877
MO-30
1 24305U 96052B 97263.16960063 .00000203 00000-0 20364-3 0 1438
2 24305 82.9301 284.3924 0028701 303.9510 55.8874 13.73096677 52092
GPS BIIA-27
1 24320U 96056A 97263.36865260 -.00000004 00000-0 00000+0 0 1121
2 24320 54.5045 269.7323 0048263 103.8640 256.7686 2.00559154 7360
SAC-B/HETE
1 24645U 96061A 97261.72380127 .00001021 00000-0 58221-4 0 973
2 24645 37.9748 23.2549 0048860 316.8207 42.8731 15.15187610 48258
ZEYA
1 24744U 97010A 97261.26138462 .00005131 00000-0 16872-3 0 779
2 24744 97.2655 164.5492 0008962 110.9467 249.2733 15.31934177 30331
DMSP B5D2-9
1 24753U 97012A 97261.71870790 .00000071 00000-0 62057-4 0 1785
2 24753 98.9227 305.7490 0009091 139.3871 220.7972 14.12999565 23598
MINISAT 01
1 24779U 97018A 97262.09219867 .00002189 00000-0 10581-3 0 407
2 24779 150.9776 16.9179 0014261 86.1794 274.0429 14.98431923 22611
CELESTIS
1 24780U 97018B 97259.90148364 .00001985 00000-0 84754-4 0 449
2 24780 150.9733 4.7108 0020020 65.0175 295.2502 14.99676542 22304
GOES 10
1 24786U 97019A 97263.37069625 -.00000124 00000-0 00000+0 0 1166
2 24786 0.1876 276.4454 0002424 351.8642 120.2962 1.00271576 1512
Feng Yun 2B
1 24834U 97029A 97260.74513644 -.00000357 00000-0 00000+0 0 633
2 24834 1.0186 261.4230 0000688 344.4916 123.3780 1.00267931 991
Progress M-35
1 24851U 97033A 97261.65808109 .00008864 00000-0 11287-3 0 960
2 24851 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690 11793
GPS BIIR-02
1 24876U 97035A 97263.01091208 -.00000004 00000-0 00000+0 0 398
2 24876 54.9381 149.8222 0023163 249.3547 110.4882 2.00531353 1227
SeaStar
1 24883U 97037A 97253.50277945 -.00000045 00000-0 -77444-7 0 621
2 24883 98.2171 350.8709 0001313 175.6082 184.5126 14.55478438 6039
Soyuz TM-26
1 24886U 97038A 97261.65808109 .00008864 00000-0 11287-3 0 558
2 24886 51.6549 336.1688 0003631 142.2469 217.7483 15.60189690 6885
Lewis
1 24909U 97044A 97263.58294838 .00944959 48143-3 13108-2 0 1015
2 24909 97.5573 160.8802 0016596 158.5337 201.6823 16.05816721 4504
1997044B
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1 24910U 97044B 97263.62763678 .00254898 29109-4 50134-3 0 473
2 24910 97.5533 160.8906 0012872 142.9146 217.3026 15.99939122 4518
PAS 5
1 24916U 97046A 97252.29905086 -.00000297 00000-0 00000+0 0 160
2 24916 0.0634 331.2810 0010057 42.0483 24.8391 1.00267802 260
1997046B
1 24917U 97046B 97241.72441838 .14159534 12766-4 13208-3 0 221
2 24917 51.6124 344.3576 0027304 285.5614 74.6937 16.48788224 289
1997046C
1 24918U 97046C 97240.75012334 .32786074 12513-4 10952-2 0 169
2 24918 51.5821 349.9015 0020942 278.3655 81.5213 16.42299161 126
1997046D
1 24919U 97046D 97262.26409371 -.00000171 00000-0 00000+0 0 89
2 24919 14.6214 353.4999 4807938 4.1459 358.7439 1.79819323 393
FORTE
1 24920U 97047A 97258.89910030 -.00000080 00000-0 -10448-4 0 133
2 24920 69.9544 235.5969 0023293 145.8393 214.4234 14.22578009 2456
1997047B
1 24921U 97047B 97260.44019743 -.00000028 00000-0 13016-4 0 123
2 24921 69.9701 232.1440 0021016 143.6190 216.6354 14.23018136 2684
1997043G
1 24922U 97043G 97242.89556158 .23765398 00000-0 26026+0 0 26
2 24922 86.6008 36.6939 0036407 294.4198 82.8553 15.56189057 1393
1997043H
1 24923U 97043H 97246.91832298 .20726521 00000-0 23841+0 0 110
2 24923 86.6416 34.9237 0036250 310.9726 52.9533 15.54674041 2001
1997043J
1 24924U 97043J 97258.32609006 .01753876 00000-0 47479-1 0 171
2 24924 86.6630 29.9680 0030280 281.3309 134.3409 15.34168082 3718
Iridium MFS
1 24925U 97048A 97257.87209324 .00000083 00000-0 72914-5 0 142
2 24925 86.3309 120.3040 0003736 286.1483 73.9429 14.80570377 1977
Iridium MFS
1 24926U 97048B 97259.90166697 .00000078 00000-0 67156-5 0 94
2 24926 86.3348 119.3766 0005487 283.2765 76.7845 14.80376166 2277
1997048C
1 24927U 97048C 97263.15810973 .00248245 14058-4 75859-3 0 381
2 24927 86.2249 116.6793 0264728 86.3573 276.7816 15.53592040 2879
1997048D
1 24928U 97048D 97249.84742244 .14514163 -27914-5 40942-2 0 142
2 24928 85.9971 123.5259 0160959 146.9081 222.5737 16.03152591 812
1997048E
1 24929U 97048E 97249.86652026 .11867471 -22707-5 46465-2 0 144
2 24929 86.0960 123.4827 0204980 142.4103 220.3566 15.90869611 811
1997048F
1 24930U 97048F 97263.59970231 .00725516 -15146-5 44927-3 0 505
2 24930 86.3372 116.5379 0259453 95.4806 267.6117 15.74472382 2950
HOT BIRD 3
1 24931U 97049A 97261.75167819 .00000057 00000-0 00000+0 0 102
2 24931 0.0627 344.3234 0094127 113.6933 210.4623 1.00844099 236
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Meteosat 7
1 24932U 97049B 97262.75495291 -.00000114 00000-0 00000+0 0 208
2 24932 1.7903 290.0109 0001988 284.3190 45.9717 1.00269380 187
1997049C
1 24933U 97049C 97249.22714088 .00040954 00000-0 53782-2 0 61
2 24933 6.9394 133.6479 7293638 180.6318 177.3461 2.28275832 77
1997049D
1 24934U 97049D 97259.67732599 .00044663 00000-0 59777-2 0 82
2 24934 6.9741 129.1378 7286172 189.3991 141.2054 2.29161200 319
GE-3
1 24936U 97050A 97263.39462258 -.00000245 00000-0 00000+0 0 353
2 24936 0.0197 76.6483 0000853 92.3886 249.4103 1.00264150 191
1997050B
1 24937U 97050B 97262.60271118 .00003417 00000-0 38653-2 0 70
2 24937 19.0962 332.5941 7643766 186.1390 150.6686 1.81821725 274
Iridium 27
1 24944U 97051A 97263.52436105 -.00066092 00000-0 -34279-2 0 171
2 24944 86.6493 59.8230 0013048 243.0377 116.9521 15.16466686 981
Iridium 28
1 24945U 97051B 97263.45808181 -.00042130 00000-0 -21702-2 0 164
2 24945 86.6375 59.8414 0013386 247.4728 112.5061 15.16601956 979
Iridium 29
1 24946U 97051C 97261.47841781 -.00049252 00000-0 00000+0 0 63
2 24946 86.6380 60.7189 0015450 258.2641 101.7490 15.16869083 708
Iridium 30
1 24947U 97051D 97262.99519448 -.00051033 00000-0 -26100-2 0 214
2 24947 86.6405 60.0513 0014133 246.2463 113.7228 15.16880879 907
Iridium 31
1 24948U 97051E 97263.45922821 -.00338526 00000-0 -19627-1 0 209
2 24948 86.6254 59.8337 0003231 208.7738 151.2759 15.13899592 966
Iridium 32
1 24949U 97051F 97262.46669698 -.00051704 00000-0 -26260-2 0 202
2 24949 86.6370 60.2812 0014437 243.0133 116.9651 15.17122868 813
Iridium 33
1 24950U 97051G 97263.52173749 -.00049247 00000-0 -25000-2 0 209
2 24950 86.6402 59.8140 0015016 240.4817 119.4895 15.17122031 970
1997051H
1 24951U 97051H 97257.42707618 .13866903 28704-5 10615-3 0 32
2 24951 72.5813 61.6670 0012425 272.0148 88.2727 16.52215603 31
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2475. Which NOAA Sats are active?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-22 00:00:00 UTC
From: cfree36675@aol.com
Message-ID: <19970922231700.TAA01240@ladder01.news.aol.com>
Source record: 17943

Which of the NOAA Low Orbiting Weather Sats are currently active and on
what frequencies can they be found?

73's
Chuck
WD0ASJ

2476. Re: Which NOAA Sats are active?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-23 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <3427B011.40AFF91F@ix.netcom.com>
Source record: 17944

CFree36675 wrote:

> Which of the NOAA Low Orbiting Weather Sats are currently active and on
> what frequencies can they be found?
>
> 73's
> Chuck
> WD0ASJ

NOAA 12 ON 137.50MHz
NOAA 14 ON 137.62
METEOR 2-21 OFF
METEOR 3-5 ON 137.85
* OKEAN 4 (1-7) ON 137.40
* SICH 1 ON 137.40 .

* not in US only over Russia

Regards,
Rolf

2477. Look at my homepage

Newsgroup: rec.radio.amateur.space
Date: 1997-09-23 00:00:00 UTC
From: Geert <pass@glo.be>
Message-ID: <01bcc853$8f7547c0$7db630ce@pass.glo.be>
Source record: 17945
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Hello

Look at my homepage and PLEASE sign my guestbook.

73!

2478. ARLK074 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-23 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk074.1997@arrl.org>
Source record: 17946
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK074
ARLK074 Keplerian data

ZCZC SK74
QST de W1AW
Keplerian Bulletin 74 ARLK074
From ARRL Headquarters
Newington, CT September 23, 1997
To all radio amateurs

SB KEP ARL ARLK074
ARLK074 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97261.82815087 .00000041 00000-0 10000-3 0 05079
2 14129 26.2150 126.1882 6042917 152.6428 259.5744 2.05880409079312
RS-10/11
1 18129U 87054A 97266.15835256 .00000071 00000-0 61239-4 0 04280
2 18129 82.9284 166.3241 0011231 318.4572 41.5730 13.72382883513674
UO-11
1 14781U 84021B 97265.94432992 .00000210 00000-0 43250-4 0 00270
2 14781 97.8443 243.3173 0013037 52.6993 307.5398 14.69586598725616
RS-12/13
1 21089U 91007A 97266.22999888 .00000043 00000-0 29937-4 0 95
2 21089 82.9227 205.9251 0030567 26.3697 333.9006 13.74085960332623
UO-14
1 20437U 90005B 97266.19876057 .00000020 00000-0 24574-4 0 03232
2 20437 98.5143 345.7241 0010312 282.7987 77.2055 14.29972241400229
RS-15
1 23439U 94085A 97266.16848084 -.00000039 00000-0 10000-3 0 02626
2 23439 64.8209 354.4027 0147256 113.8251 247.8178 11.27528180112986
AO-16
1 20439U 90005D 97266.21023037 .00000041 00000-0 32801-4 0 01119
2 20439 98.5325 348.8836 0010756 285.0091 74.9905 14.30018909400245
RS-16
1 24744U 97010A 97266.16024128 .00005819 00000-0 19064-3 0 01103
2 24744 97.2673 169.3605 0009546 96.9724 263.2605 15.31990919031081
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DO-17
1 20440U 90005E 97264.64719135 -.00000043 00000-0 -36964-7 0 01107
2 20440 98.5332 348.2777 0009750 282.5084 77.5007 14.30160946400059
WO-18
1 20441U 90005F 97266.18647706 .00000040 00000-0 32228-4 0 01159
2 20441 98.5336 349.6751 0011256 281.5192 78.4729 14.30129013400279
LO-19
1 20442U 90005G 97266.21581411 .00000013 00000-0 21842-4 0 01200
2 20442 98.5379 350.4286 0011508 282.3955 77.5930 14.30245206400307
FO-20
1 20480U 90013C 97265.88021995 -.00000022 00000-0 17916-4 0 00138
2 20480 99.0573 209.1433 0541533 156.1418 206.5827 12.83238298357234
AO-21
1 21087U 91006A 97266.17603564 .00000094 00000-0 82657-4 0 08710
2 21087 82.9415 339.0532 0036846 357.5863 2.5108 13.74586097333610
UO-22
1 21575U 91050B 97266.20948014 .00000092 00000-0 44991-4 0 8028
2 21575 98.2892 323.2405 0006860 326.9926 33.0806 14.37085656324561
KO-23
1 22077U 92052B 97266.17607701 -.00000037 00000-0 10000-3 0 07123
2 22077 66.0822 300.0743 0004324 187.4503 172.6447 12.86303836240357
KO-25
1 22828U 93061F 97266.14901643 .00000048 00000-0 36770-4 0 05994
2 22828 98.5348 338.5184 0009670 303.1838 56.8417 14.28191699176196
IO-26
1 22826U 93061D 97266.20835873 .00000027 00000-0 28165-4 0 05952
2 22826 98.5365 338.4852 0008712 319.5414 40.5116 14.27847042208079
AO-27
1 22825U 93061C 97260.64099671 -.00000043 00000-0 77903-8 0 05914
2 22825 98.5390 332.7773 0008757 339.4569 20.6260 14.27735529207261
FO-29
1 24278U 96046B 97266.14934400 -.00000023 00000-0 15904-4 0 01231
2 24278 98.5304 293.9688 0351112 292.4779 63.9539 13.52633070054365
MO-30
1 24305U 96052B 97266.08436167 .00000203 00000-0 20364-3 0 01570
2 24305 82.9296 282.2361 0028916 296.3321 63.4846 13.73097444052491
Mir
1 16609U 86017A 97266.46190888 .00006333 00000-0 82260-4 0 6374
2 16609 51.6568 312.0098 0004299 156.5607 203.5558 15.60255195662362

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
September 27, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2479. P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-23 00:00:00 UTC
From: mbv@ti.com
Message-ID: <609ddo$g9v$1@tilde.csc.ti.com>
Source record: 17947

Has anyone heard if the P3D mods were done in time to get it on the rescheduled launch or if the substitute was mounted instead?

Ken K5MBV

2480. Re: Look at my homepage

Newsgroup: rec.radio.amateur.space
Date: 1997-09-23 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <34280DDC.1157@flash.net>
Source record: 17948
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Geert wrote:
>
> Hello
>
> Look at my homepage and PLEASE sign my guestbook.
>
> 73!

It would make it a whole lot easier to visit your homepage if
you posted its URL.

2481. SLC, Swapmeet/Hamfest

Newsgroup: rec.radio.amateur.space
Date: 1997-09-24 00:00:00 UTC
From: rmra@inconnect.com
Message-ID: <342872e9.2192050@news.inconnect.com>
Source record: 17949

Fallfest is being sponsored by the RMRA (Rocky Mountain Radio
Association)

and is being held Sat. Oct 4th, 1997 at 9AM until 1 PM
at 3749 South Main Street at the HARMONY PARK white rec bldg.

We also have several open booth spaces and tables for your goods, new,
used, or swap...these booths are free , just email me asap for
your's..

Marc KB7YJJ
rmra@inconnect.com

2482. Re: Which NOAA Sats are active?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-24 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19970924124701.IAA23032@ladder02.news.aol.com>
Source record: 17950

Right now, only NOAA 12 and 14 are active.

you can get a complete frequency list here:

http://members.aol.com/jkktl/ham.htm

2483. Re: Look at my homepage

Newsgroup: rec.radio.amateur.space
Date: 1997-09-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3428d630.0@newshost.pcug.org.au>
Source record: 17951
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Bill Harris <billharr@flash.net> wrote:
>
>It would make it a whole lot easier to visit your homepage if
>you posted its URL.

As a further suggestion, people inviting others to look at their home page could include a few lines telling the reader what their home page is about - eg QRP, homebrew, CW, VHF or operating. This is so the reader can determine whether they are likely to be interested in its contents without having to go to the page itself.

Every time someone announces a new home page without a description, I ignore the message and don't look at their page. When people include a brief description, my interest/curiousity is aroused, and I'll often look at it. I think there's many other readers who think similarly.

73,
--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

2484. FS: Special Low Prices on Tubes and Electronic Test Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-09-24 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <60b5oh$8ac$27@ha1.rdc1.occa.home.com>
Source record: 17952

NOS Tubes
5R4WGB, 1 to 99 @ $3.25 ea, 100 or more @ $3.00ea
EL84/6BQ5(Eastern European),1 to 99 @$3.75 ea,100 or more @$3.50ea

Used Tubes Untested, Pulled from Surplus Equipment, sold "as is"
6AN8A, 6CL6, 8136, and/or 8532W $0.50 each
12AU7 $1.75 each
6080 $2.00 each

Test Equipment
BOONTON 190A "Q" meter, working, but may need minor repairs
and/or calibration $75.00

Microwave Components
(2) "X" Band waveguide A/B switch (SPDT) - DB Products #XWM5003
NOS, never used $40.00 each
(1) HP11517a mixer 12.4 TO 40 GHz, looks clean but not tested,
sold "as is" $100.00

Free Shipping in the USA on all of the above, on orders of $10.00 or over.
Orders under $10.00 add $4.00 for shipping. Sale prices valid until 10-6-97
or while supply lasts.

2485. No Scam Second Income

Newsgroup: rec.radio.amateur.space
Date: 1997-09-24 00:00:00 UTC
From: John <John_deLeeuw@bc.sympatico.ca>
Message-ID: <60bkn0eno649@news.bctel.net>
Source record: 17953

Hello,

If you are someone who is tired of "Get-Rich-Quick" Schemes yet is still interested in earning a simple, legitimate second income without spending a lot of time or money, you may want to read further.

If you are like most people, you don't have time to go to meetings, talk to a lot of people, or sit by the phone and sell products.

For the first time available, you can join a company that will literally:

Close Your Sales For You!!

Our staff of marketing professionals advertise, recruit, and close all sales for everyone who joins the company. Checks are mailed out each Friday.

This is NOT one of those Scams, or Schemes you may hear about so often. But rather, it is a display of the newest technology that ensures your success, and is designed for those who do not like to sell.

Because of it's simplicity and affordability, people from all over are now earning thousands of dollars from the comfort of their homes!!

We Can Help You Do The Same!!

This is a respectable program created by a respectable comany for people who do not have a lot of time on their hands, yet are interested in earning a legitimate second income.

If you are excited about changing your financial future and would like to hear the rest of the story, please call us at:

1-800-811-2141 Code 45513
Office Hours: Mon-Sat 8am - 10pm

Checks are mailed each Friday!!
People are making money in the first week!!
We can help you do the same!!

//
//If this has reached you in error please accept our most sincere apologies. If you would like us to delete your address from our mailings, simply hit reply and type "remove" in the subject. You will automatically be blocked from future mailings. Thank you for your time.
//
//

2486. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <60cofg$2ob@sjx-ixn3.ix.netcom.com>
Source record: 17954

In <5vs1eq$khq@news.mcn.net> fiscus@mcn.net (Vincent Fiscus, KB7ADL)
writes:
>
>
>Anyone know what brand of cement was used in the Cement Block(CB)?
Buying
>stock in the company might be a good investment. Amsat likes putting
up ROCK.
>
>
>Company ad Campaign: ""Concrete good Enough for Space!""
>

Vince,

Please share with us what you have EVER done to help get an amateur satellite into space. Or perhaps you just could share share with us what you have done to promote amateur satellites in general.

Bitching about what others have/are doing does not count in either catagory.

Nothing is too difficult for those who don't have to do it.

This is the internet and you certainly have a right to voice your opinion, and I have a right to voice my opinion of you.

Jerry KK5YY

2487. Re: Look at my homepage

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: bust@spammers.net
Message-ID: <3429d1e7.5287739@news.mnsinc.com>
Source record: 17955
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

On 23 Sep 1997 19:05:35 GMT, "Geert" <pass@glo.be> wrote:

>Hello
>
>Look at my homepage and PLEASE sign my guestbook.
>
>
>73!

OK! But uh - did you forget to tell us that your web page is at:

http://www.mnsinc.com/bry/

???

(remove the word REMOVE from my e-mail address to respond!)

2488. Re: Real P3D - Not Concrete Satellite

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <342a241c.2094109@news.mindspring.com>
Source record: 17956

We know for sure that 502 is not going to launch on Sept 30th. On the 25th we might hear when the new launch date will be scheduled for. If the delay is long enough we (P3D) might still fly on 502.

W4SCO

2489. ESAJOINT ESA/CNES PRESS RELEASE

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: sw
Message-ID: <60djri$npi@cs1.FTA-Berlin.de>
Source record: 17957

Hi folks,

from sci.space.tech:

JOINT ESA/CNES PRESS RELEASE
Nr. 30-97 Paris, 24 September 1997

Ariane 502, final steps before launch

The verification process relating to analysis of the launcher's control loop (see ESA/CNES joint press release of 17 September) has taken longer than expected. Moreover, final qualification of the flight program software will require two additional weeks to complete. For these reasons, the launch campaign for the second Ariane-5 qualification flight at Europe's spaceport in Kourou, French Guiana, is being put on hold from 26 September, aiming at a launch on 15 October 1997 at the earliest. The campaign will be resumed seven days before launch, with the filling of the upper stage.

The Launcher Countdown Rehearsal performed in Kourou earlier in September gave good results. Meanwhile, the qualification process continued in Europe, where computer programs that simulate the real flight conditions of Ariane 502 indicated a risk of oscillation that could increase the consumption of the oil that feeds the displacing actuators used to steer the main engine.
To lower the risk of unwanted oscillations on this specific flight, two activities are being conducted in parallel:
a:verification of the validity of the data used in the mathematical model that simulates flight
b:introduction of a corrective measure using a filter to eliminate unwanted oscillations.

Incorporating this filter, contained in an electronic box fitted in the main stage, would entail additional qualification tests that would put the target launch date back by a further one or two weeks.

The choice of course of action and a decision on a new target date for the second test flight of Ariane 5 are expected to be confirmed early in October.

So, is this delay another chance to get P3D up with this flight?

Stefan (DD6FM)

--
Stefan Wimmer Cellware Broadband
Email sw@cellware.de Rudower Chaussee 5
WWW http://www.cellware.de/ 12489 Berlin, Germany

Visit my private Homepage: Love, Rockets, Fireworks!
http://www.geocities.com/CapeCanaveral/6368/

2490. ARLS030 NASA gives KC5VPF the green light for Mir stay

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls030.1997@arrl.org>
Source record: 17958
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS030
ARLS030 NASA gives KC5VPF the green light for Mir stay

ZCZC AS30
QST de W1AW
Space Bulletin 030 ARLS030
From ARRL Headquarters
Newington, CT September 25, 1997
To all radio amateurs

SB SPACE ARL ARLS030
ARLS030 NASA gives KC5VPF the green light for Mir stay

Ham radio aboard Mir will continue at least for another four months. US astronaut David Wolf, KC5VPF, will get to replace his colleague Mike Foale, KB5UAC, aboard the Russian space station. Under intense political pressure to consider discontinuing the presence of US astronauts aboard the ailing and aging space station, NASA Administrator Dan Goldin gave the okay September 25 for Wolf's Mir stay. Approval came only hours before the shuttle Atlantis was to be launched from Cape Canaveral on mission STS-86 and a rendezvous with Mir. Wolf will continue the permanent US presence on the station that began in 1996 with Shannon Lucid.

Goldin cited separate scientific reviews of the situation aboard Mir in his decision to deliver Wolf to Mir as originally planned. ''We move forward not only because it is safe, but for the important scientific and human experience we can gain only from Mir,'' Goldin said. He added that, as NASA looks toward next June's launch of the first element of the International Space Station, ''nothing can beat the hands-on, real-time training aboard Mir.''

Early this year, a fire broke out aboard Mir. The spacecraft also has had various mechanical problems, including malfunctions of its oxygen-generating and carbon dioxide scrubbing systems. In late June, a collision with an unmanned Progress supply rocket during a docking maneuver damaged the spacecraft's Spektr module and disrupted scientific research. Among subsequent problems, Mir has suffered from repeated computer system failures, including a failure earlier this week. The Atlantis is to carry a new computer to Mir.

Wolf, 41, is both an electrical engineer and a medical doctor. A native of Indianapolis, Wolf is single. He has been an astronaut since 1990 and served as a mission specialist aboard the shuttle Columbia in late 1993.

Meanwhile, astronaut Andy Thomas is scheduled to replace Wolf aboard Mir in January. Thomas just received his Amateur Radio call sign. He's KD5CHF, which he says stands for ''Cosmonauts Having Fun.'' He will take the place of Wendy Lawrence, KC5KII, in the Mir rotation.
NNNN
/EX

2491. Re: Help Icom IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: Chuck Vaughn <aa6g@aa6g.org>
Message-ID: <342ABB29.1AF0@aa6g.org>
Source record: 17959

Geko wrote:
>
> Dears friends
> The 440 side of my Icom IC-970/H is having a problem. The readout will go
> blank, will not trans. or recive. When you key the mic, the readout comes
> on , but she doesn't trans or recive. About five seconds after I unkey
> the readout goes blank again .
> Now this is not all the time. She comes and goes working great
> half the time . Two meter side hasn't acted up at all .
>
> Help , has anybody had any of the same ?

I had this exact same problem with my IC-970A a few years back. ICOM
assured me that they knew what was wrong and could fix it despite
it being intermittant. And you what? They did fix it and it's been
fine for a couple years now.

It's so long that I don't remember exactly what they fixed.

I'd give them call and arrange to send it to them.

73, Chuck Vaughn - AA6G
<aa6g@aa6g.org>

2492. Dove DO-17 Telemetry Questions.

Newsgroup: rec.radio.amateur.space
Date: 1997-09-25 00:00:00 UTC
From: njmcmillan@bigpond.com
Message-ID: <342ae38b.1697676@news.bigpond.com>
Source record: 17960
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.space

Could some kind soul point me to a WWW or FTP (prefered) site where I might glean some information/software for the DOVE telemetry. I have an old decoding program from NK6K (I think) which decodes the >TLM frames, but no info on the >STATUS or other blocks. No Idea either on the equations used, 'tho' I have the feeling they're in the ax^2 +bx+c form, In which case I haven't got a clue as to the constants.

An FTP site is prefered as I suffer a rural telephone connection which delivers 4800bd on a GOOD day.

Hopefully the intermittant timer behaves as it is a particularly useful 'bird' for demonstrating the rudiments of satelite operation.

73 de Norm VK2XCI at Mount Hope, NSW, Australia. QF27wd
njmcmillan@bigpond.com
Voice of The Edge of The Outback

2493. "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19970925.204100.27334.3.harrymue@juno.com>
Source record: 17961

--------- Begin forwarded message ----------
From: "Judy Kimbrel" <ostrich@thegrid.net>
To: "Tony Causseaux" <ramshakl@connectnet.com>,"Tom & Sharon"
<thumphrey@mailbag.com>,"Mike Aziere" <fireside@webzone.net>, "Mark"
<TulsaMarkG@aol.com>,"Magpie" <woodsman@microtech.com.au>, "Laura"
<flame@ctaz.com>,"Larry & Joyce" <larryg@thegrid.net>, "Jim"
<jgreg@superior.net>,"harry" <harrymue@juno.com>, "Harn"
<harnet@golden.adams.net>,"Hal Grey" <greyh@mcagcc.usmc.mil>, "graham"
<gtait@jigsaw.net.au>,"fox" <djfox@hotmail.com>, "Elise"
<Shaia1@hotmail.com>,"Carl & Bonnie" <carbon@pixi.com>,"Brian & Sheila"
<bgprud@internorth.com>
Subject: good thought to ponder on..
Date: Mon, 22 Sep 1997 11:23:35 -0700
Message-ID: <199709231743.KAA17112@gridsat.thegrid.net>

A visitor from the past...

I had a dream the other night, I didn't understand,
A figure walking through the mist, with flintlock in his hand.
His clothes were torn and dirty, as he stood there by my bed.
He tookoff his three-cornered hat, and speaking low he said:

"We fought a revolution, to secure our liberty.
We wrote the constitution as a shield from tyranny.
For future generations, this legacy we gave.
In this, the land of the free and home of the brave."

"The freedom we secured for you, we hoped you'd always keep.
But tyrants labored endlessly, while your parents were asleep.
Your freedom gone, your courage lost, you're no more than a slave,
In this, the land of the free and home of the brave."

"You buy permits to travel, and permits to own a gun.
Permits to start a business, or to build a place for one.
On land that you believe you own, you pay a yearly rent,
Although, you have no voice in choosing, how the moneys spent."

"Your children must attend a school that doesn't educate,
Your christian values can't be taught, according to the state.
You read about the current news, in a regulated press,
You pay a tax you do not owe, to please the i.r.s."

"Your money is no longer made of silver of gold.
You trade your wealth for paper, so your life can be controlled.
You pay for crimes that make our nation turn from God in shame,
You've taken satan's number, as you've traded in your name."

"You've given government control, to those who do you harm,
So they can padlock churches and steal the family farm.
And keep our country deep in debt, put men of God in jail.
Harass your fellow countrymen, while corrupted courts prevail."

"Your public servants don't uphold the solemn oath they've sworn,
Your daughters visit doctors so their children won't be born.
Your leaders ship their artillery, and guns to foreign shores,
and send your sond to slaughter, fighting other peoples wars."

"Can you regain the freedom, for which we fought and died,
Or don't you have the courage, or the faith to stand with pride?
Are there no more values, for which you'll fight to save?
Or do you wish your children, live in fear and be a slave?"

"Sons of the republic, arise and take a stand!
Defend the constitution, the supreme law of the land.
Preserve our great republic, and each God-given right,
and pray to God to keep the torch of freedom burning bright."

As I woke he vanished, in the mist from which he came,
His words were true, we are not free, we have ourselves to blame.
For even now as tyrants, trample each God-given right.
We only watch and tremble, too afraid to stand and fight.

If he stood by your bedside, in a dream, while you're asleep,
And wonders what remains of our rights he fought to keep?
What would be your answer, if he called out from the grave?
Is this still the land of the free and home of the brave??????

homepage: http://www.geocities.com/CapeCanaveral/Hangar/2227

--------- End forwarded message ----------

2494. P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <342bffad.693999@news.mindspring.com>
Source record: 17962

We will not be on 502 not matter how long the delay is. The Germans are not coming to do final integration until January. The most up-to-date info is on AMSAT BB and you can get a thorough review of the situation at the Space Symposium.

2495. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <342d015d.1126035@news.mindspring.com>
Source record: 17963

sco@sco-inc.com (SCO) wrote:

>We will not be on 502 not matter how long the delay is. The
>Germans are not coming to do final integration until January. The
>most up-to-date info is on AMSAT BB and you can get a thorough
>review of the situation at the Space Symposium.

I guess we can blame the germans if we don't launch on 502. Why are
they not already here doing whatever they need to do???

2496. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <342c351e.2441499@news.mindspring.com>
Source record: 17964

laura halliday <ve7ldh@direct.ca> wrote:

>SCO wrote:
>>
>> sco@sco-inc.com (SCO) wrote:
>>
>> >We will not be on 502 not matter how long the delay is. The
>> >Germans are not coming to do final integration until January. The
>> >most up-to-date info is on AMSAT BB and you can get a thorough
>> >review of the situation at the Space Symposium.
>>
>> I guess we can blame the germans if we don't launch on 502. Why are
>> they not already here doing whatever they need to do???
>
>Sigh. Any rocket launch is the product of an elaborate, detailed
>launch campaign. The time to integrate P3D into Ariane 502 was
>some time ago, and was precisely specified - you don't just show
>up at Kourou with a satellite under your arm and say "Launch this,
>please".
>
>Yes, we missed the time to integrate P3D, but the circumstances
>are such that we're in good shape for a later launch. Patience!
>
>...laura

Our 'dummy sat' (concrete) is already there. All that would have had
to be done was swap the dummy for the real thing (if we had it ready).
The headlines after the launch of 502 will read: "AMSAT launches
Concrete Rock" are not my idea of good publicity for HAMS. We should
at the least have had a beacon on the dummy so we could track it.

2497. FS: Kenwood SM-220 Station Monitor

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: trs@trsc.com
Message-ID: <MPG.e95f9e1ce503fef989682@news.pics.com>
Source record: 17965
Cross-posted to: rec.radio.amateur.space,rec.radio.swap

For sale: Kenwood SM-220 Station Monitor, no BS-8 panadaptor. Clean. Used primarily for tuning digital signals with DES/Universal M-series decoders. $250 + s/h & ins.
See http://www.trsc.com/4sale.html for picture.
de W2XQ
--

Thomas R. Sundstrom trs@trsc.com
TRS Consultants http://www.trsc.com
PO Box 2275, Vincentown, NJ 08088-2275, USA
+1 609 859 2447 | Fax +1 609 859 3226
< Contributing Editor, Radio Netherlands' (www.rnw.nl) Media Network >
< Contributing Editor, "Radio & Communications", ACP Symes Magazines >
< Contributing Editor, Suite 101's (www.suite101.com) "Radio" >

2498. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-26 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <342C1F50.21A15BB0@direct.ca>
Source record: 17966

SCO wrote:
>
> sco@sco-inc.com (SCO) wrote:
>
> >We will not be on 502 not matter how long the delay is. The
> >Germans are not coming to do final integration until January. The
> >most up-to-date info is on AMSAT BB and you can get a thorough
> >review of the situation at the Space Symposium.
>
> I guess we can blame the germans if we don't launch on 502. Why are
> they not already here doing whatever they need to do???

Sigh. Any rocket launch is the product of an elaborate, detailed
launch campaign. The time to integrate P3D into Ariane 502 was
some time ago, and was precisely specified - you don't just show
up at Kourou with a satellite under your arm and say "Launch this,
please".

Yes, we missed the time to integrate P3D, but the circumstances
are such that we're in good shape for a later launch. Patience!

...laura

2499. NORAD Two-Line Orbital Element Set: Space Shuttle (97269.27083333)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <60hu46$8cp$1@blackbird.afit.af.mil>
Source record: 17967

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

MIR
1 16609U 86017A 97269.08791867 .00004578 00000-0 61148-4 0 6471
2 16609 51.6537 298.8033 0003833 164.6041 195.5025 15.60278275662771
STS 86
1 24964U 9755A 97269.27083333 -.00002225 10894-4 53012-5 0 22
2 24964 51.6551 298.0292 0060298 95.8874 143.5308 15.81221107 22
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2500. ARLK075 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk075.1997@arrl.org>
Source record: 17968
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK075
ARLK075 Keplerian data

ZCZC SK75
QST de W1AW
Keplerian Bulletin 75 ARLK075
From ARRL Headquarters
Newington, CT September 27, 1997
To all radio amateurs

SB KEP ARL ARLK075
ARLK075 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-86
1 24964U 97055A 97269.72700014 -.00000069 00000-0 45597-5 0 54
2 24964 51.6533 295.6653 0038230 47.6169 270.4431 15.70578330 94
AO-10
1 14129U 83058B 97268.62244806 -.00000050 00000-0 10000-3 0 5070
2 14129 26.2316 125.2061 6034251 154.4198 255.2304 2.05881396 79457
RS-10/11
1 18129U 87054A 97269.14753502 .00000038 00000-0 25584-4 0 04258
2 18129 82.9281 164.1144 0010778 309.0383 50.9814 13.72382778514086
UO-11
1 14781U 84021B 97268.94017451 .00000213 00000-0 43673-4 0 00173
2 14781 97.8446 246.1969 0013005 43.5855 316.6371 14.69588041726050
RS-12/13
1 21089U 91007A 97269.14265549 .00000043 00000-0 29202-4 0 00454
2 21089 82.9227 203.7651 0030384 18.8336 341.3938 13.74085974333023
UO-14
1 20437U 90005B 97269.20753164 .00000015 00000-0 22514-4 0 03225
2 20437 98.5138 348.6649 0010185 272.7916 87.2109 14.29972672400652
RS-15
1 23439U 94085A 97269.18406422 -.00000039 00000-0 10000-3 0 02571
2 23439 64.8210 349.5280 0147206 113.2343 248.4163 11.27528220113320
AO-16
1 20439U 90005D 97269.21890216 .00000037 00000-0 31039-4 0 00984
2 20439 98.5325 351.8326 0010588 275.4622 84.5343 14.30019392400676
```

```
RS-16
1 24744U 97010A 97269.16479210 .00004795 00000-0 15741-3 0 00875
2 24744 97.2648 172.3032 0009281 89.1456 271.0849 15.32018526031547
DO-17
1 20440U 90005E 97269.26469623 .00000046 00000-0 34479-4 0 931
2 20440 98.5332 352.8074 0010227 267.2300 92.8079 14.30162759400718
WO-18
1 20441U 90005F 97269.19491705 .00000044 00000-0 33780-4 0 01090
2 20441 98.5345 352.6273 0011130 271.4726 88.5183 14.30129735400709
LO-19
1 20442U 90005G 97269.15405192 .00000030 00000-0 28355-4 0 01088
2 20442 98.5380 353.3117 0011429 273.0108 86.9768 14.30245775400723
FO-20
1 20480U 90013C 97268.84307264 -.00000016 00000-0 30225-4 0 00077
2 20480 99.0575 211.5517 0541475 149.4466 213.9391 12.83238452357611
AO-21
1 21087U 91006A 97269.16042286 .00000094 00000-0 82657-4 0 08732
2 21087 82.9418 336.8455 0036428 349.5548 10.4847 13.74586192334029
UO-22
1 21575U 91050B 97269.20337984 .00000077 00000-0 39913-4 0 08233
2 21575 98.2882 326.1235 0006837 316.1159 43.9485 14.37086262324990
KO-23
1 22077U 92052B 97269.13057594 -.00000037 00000-0 10000-3 0 07008
2 22077 66.0816 293.8875 0004011 184.9261 175.1711 12.86303866240738
KO-25
1 22828U 93061F 97269.16153358 .00000062 00000-0 42302-4 0 05805
2 22828 98.5343 341.4615 0009652 294.6257 65.3917 14.28192445176620
IO-26
1 22826U 93061D 97269.15152708 -.00000000 00000-0 17372-4 0 05914
2 22826 98.5354 341.3596 0008636 310.6321 49.4110 14.27847278208498
AO-27
1 22825U 93061C 97269.40110899 .00000045 00000-0 35676-4 0 5887
2 22825 98.5364 341.3330 0008062 310.5210 49.5648 14.27737101208516
FO-29
1 24278U 96046B 97269.10807568 -.00000018 00000-0 20466-4 0 01181
2 24278 98.5304 296.5219 0351122 284.8022 71.4460 13.52633219054767
Mir
1 16609U 86017A 97269.98459595 .00004310 00000-0 57925-4 0 6505
2 16609 51.6533 294.2915 0003739 169.3486 190.7587 15.60285951662911

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
September 30, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2501. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <342d5d84.803081@news.mindspring.com>
Source record: 17969

Dennis Erwin Thurlow <geosynq@antispam.trader.com> wrote:

>laura halliday wrote:
>> you don't just show
>> up at Kourou with a satellite under your arm and say "Launch this,
>> please".
>
>Rocketry has suffered from non-creative thinking for decades.
>There is no good reason why it couldn't be done this way.

I propose that what AMSAT (and Ham sat) do is design a two part launch system. One part will be the launch vehicle. the second part will be the working satellite. The launch vehicle will be easily duplicated so we can build one each year. The sat itself will fit inside the launch vehicle and separate after achieving orbit. That way we will be able to make different sats for different purposes; how about an ATV repeater in space?, maybe a CW repeater in space?, maybe another FM repeater?, etc. We would then have a standard launch system at reduced cost. The various sats would then just need to be designed to fit inside our own launch revhicle.

To go a step further we could design three (3) launch vehicles: one for ESA, one for the Russian system, and one for NASA launches aboard the shuttle. This would gives us maximum launch capability and allow us to rapidly replace a broken sat.

W4SCO

2502. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342D542D.4B73@antispam.trader.com>
Source record: 17970

laura halliday wrote:
> you don't just show
> up at Kourou with a satellite under your arm and say "Launch this,
> please".

Rocketry has suffered from non-creative thinking for decades.
There is no good reason why it couldn't be done this way.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2503. Re: "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: oddjob@cix.co.uk
Message-ID: <memo.19970927210046.30779A@oddjob.compulink.co.uk>
Source record: 17971

What a load of RUBISH.

oddjob@cix.co.uk
Steve Walters: G7VFY: 0956-544202

2504. Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-27 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342DDE78.3576@antispam.trader.com>
Source record: 17972

This is an EDITED version of what SCO wrote:

> I propose that what AMSAT (and Ham sat) do is design a two part launch
> system. One part will _fit_ the launch vehicle. The second part will be
> the working satellite. The _part that fits the_ launch vehicle will be easily
> duplicated so _AMSAT can mass produce them for use or sale_.
> The sat itself will fit inside the launch vehicle and _may or may not_
> separate after achieving orbit. That way we will be able
> to make different sats for different purposes; how about an ATV
> repeater in space?, maybe a CW repeater in space?, maybe another FM
> repeater?, etc. We would then have a standard launch system at
> reduced cost. The various sats would then just need to be designed
> to _the specs of the part that_ fit[s] inside _the_ launch vehicle.
>
> To go a step further we could design three (3) _parts to fit the_
> launch vehicles: one for ESA [Arriane 5], one for the Russian [Soyez]
> system, and one for NASA launches aboard the shuttle. This would give us
> _and others_ maximum launch capability and allow us _or others_ to rapidly
> replace a broken sat.

My editing changes the POV slightly, but in general this is a great idea, SCO!
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2505. mark-ad1.msp (1/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: shadow@lisco.com
Message-ID: <342ec1fa.8489494@franklin.se-iowa.net>
Source record: 17879
Body handling: Inline uuencoded payload not displayed: mark-ad1.msp

```
[Inline uuencoded payload not displayed: mark-ad1.msp]
```

2506. mark-ad1.msp (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: shadow@lisco.com
Message-ID: <342ec1e2.8465269@news.lisco.com>
Source record: 17880

OBSERVAGON TM

* 7, 10, and 15 ft. Rotating Domes *
* Unique Design *
* Inert PVC or Metal Construction *
* Sturdy and Lightweight *
* Stand alone or On Building *
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* Sensibly Priced *

10 Foot PVC Dome For ONLY $1800

(picture of dome is attached)

Contact: STELLAR STRUCTURES, INC.
12790 N. 39 th Ave. E. #240
Kellogg, IA 50135
Phone: (515) 236-9151
E-mail: shadow@se-iowa.net

2507. QSL.Net/QTH.Net Available

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <342F016F.66F7@primenet.com>
Source record: 17881

QSL.Net/QTH.Net Available

It is taking some time for the new DNS entry
to propagate, but you *CAN* access QSL.Net as:
209.60.242.81

And QTH.Net as: 209.60.242.87

Just enter:
http://209.60.242.81/

It may be a few days before the IP number gets
associated with the QSL/QTH domains.

-Brian shortckt@primenet.com

2508. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2809970628190001@wd1v.mv.com>
Source record: 17882
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John Seney
http://www.mv.com/ipusers/wd1v

2509. Re: Conflicting Sat Tracking Programs??

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: pwinter@best.com
Message-ID: <60nh0u$908$1@shell5.ba.best.com>
Source record: 17883

In article <01bccc57$cdda7b40$162148ce@dd13528.ncn.net>,
Daren <dd13582@cedarnet.org> wrote:
>I am using STSPLUS and SPYSAT programs with the same keps file and the
>programs are giving me two different positions for the MIR station for the
>same time period. Has anyone else run into this problem?? Does anyone have
>any more ideas for me. I'm thinking about downloading a 3 tracking program
>to see if I can get to of them to agree.

If you want to figure out which one is correct (assuming that one of
them is!) without running a third program, find NASA TV either on
your cable TV system or on the Web (shuttle.nasa.gov) and watch for
the real-time maps of the Mir/shuttle location.

Patty

================================ N6BIS ================================
"Due South" is back!! For a list of U.S. syndicated stations, see
http://fly.HiWAAY.net/~warydbom/duesouth/3seasus.htm
========== patty@wintertime.com ======= Sunnyvale, Calif. =============

2510. QwikKep v01.01 Available

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: marty@trucom.com
Message-ID: <60ka2i$shu@thepit.trucom.com>
Source record: 17973
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space

QwikKep version 01.01 is now available for download at:

http://www.trucom.com/ppages/marty
ftp://ftp.kc6ufm.dyn.ml.org

This new version makes the following changes:

1) Makes a more rigorous check of the integrety of the input data files
to prevent problems due to editing and/or damage to the files.

2) Removes the pauses on errors and documents the returned error codes.

3) Cosmetic changes to the bulletin footers.

If you are using version 01.00 you should download the newest version.

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****
HAmPS Coordinator
http://www.geocities.com/CapeCanaveral/Lab/7067
****

2511. * SpaceNews 29-Sep-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc0929.1997@ampr.org>
Source record: 17974
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC0929
* SpaceNews 29-Sep-97 *

BID: $SPC0929

=========
SpaceNews
=========

MONDAY SEPTEMBER 29, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR/ATLANTIS DOCKING SUCCESSFUL *
==================================
Space Shuttle "Atlantis" successfully docked with the Mir space station on
27-Sep-97. Astronaut Mike Foale, KB5UAC, will return to the US on Atlantis,
and his work on Mir will be continued by Astronaut Dave Wolf, who was brought
to Mir by the Space Shuttle. In addition to exchanging crew members, the
docking mission also transferred supplies between both spacecraft.

The nighttime launch of Atlantis was visible to many living along the east
coast of the United States on the evening of 25-Sep-97 (26-Sep-97 UTC).
Main engine cutoff (MECO) appeared to occur just off the east coast of
New Jersey.

* RS-12 IN MODE A *
===================
The RS-12 satellite has switched its transponder to Mode A (145.910 MHz to
145.950 MHz up, 29.410 MHz to 29.450 MHz down.

* SINGLE YAGI EME *
===================
On the morning of 21-Sep-97, Dave Blaschke, W5UN, and Graham Daubney,
F/G8MBI, achieved the first single-yagi to single-yagi EME QSO in history.
Ths historic contact took place on 144.028 MHz.

W5UN used an old KLM 17LBX antenna (one of the few that survived the
destruction of a tornado when part of his first array) and F/G8MBI used
one of Mike Stahl's 2M-8WLs. Both stations were running maximum
legal power and neither employed ground gain. Success was achieved
on the third schedule attempt.

Congratulations to both on this historic achievement.

[Info via Ray, W2RS]

* SPUTNIK SPECIAL EVENT *

To celebrate the 40th Anniversary of the launch of Sputnik 1, MX1ASE and GX0AUK will be on voice mode for 24 hours on all available satellites starting on Saturday 04-Oct-97. Operations will continue as time permits until 2359 UTC on 03-Oct-97, the 40th anniversary of the launch of Sputnik 2.

Joining the event will be Leo Labutin, UA3CR, and Andy Miranov, RK3KPK, from the Russian Satellite Ground Station near Moscow. Andy will be active on the RS birds using CW, and Leo will be active on both voice and CW on FO-20 and FO-29. Organizers thank the JARL for their help in switching FO-29 to Mode JA on Saturday 04-Oct-97 for the event.

Prefered downlinks for the event are as follows. On:

AO-10: 145.910 MHz
RS-12: 145.910/29.430 MHz
RS-15: 29.370 MHz
FO-20/29: 435.860 MHz
AO-27: 436.800 MHz

Stations participating in the special event will call "CQ SPUTNIK".

A contact with any of the participating calls and you can apply for a limited edition Anniversary Award Certificate. The certificate is A4 in size, printed in color, and endorsed with your name or callsign.

Applications may be obtained from:

John Heath, G7HIA
Chestnuts
Desford Lane
Kirkby Mallory
Leicestershire LE9 7QF
ENGLAND

Please e-mail John at 100675.3601@compuserve.com for details.

[Info via John Heath, G7HIA]

* ARIANE 5 LAUNCH DELAY *

An Orbital Report On-Line special report dated 24-Sep-97 reports that the second Ariane 5 qualification flight (L502 vehicle/V101 flight) has been postponed to 15-Oct-97 at the earliest. The launch campaign will be put on hold on 26-Sep-97 and resume 7 days before launch with the propellant filling of the Storable Propellant upper Stage (EPS). The launcher, already fully integrated in Kourou, is ready for the final phase of the launch campaign.

This 2-week delay is required to complete the qualification of the vehicle's flight software. Moreover, simulations have shown that oscillations might appear in the Vulcain engine's Thrust Vector Control (TVC) system and increase the consumption of hydraulic fluid by the actuators.

There is little concern regarding actual early depletion of the hydraulic fluid reserve during flight but in some scenarios, these oscillations could cause the consumption to exceed the large margins specifically set for this qualification flight. These margins should be eased on future commercial missions.

CNES, the French space agency, and the European Space Agency are currently reviewing the computational model used for the simulation. If the risk of oscillations is assessed, a filter might be introduced in the electronics of the Vulcain's TVC system in order to suppress unwanted oscillations. This modification would require additional qualification tests and could result in an additional one to two-week delay.

[Info via the Orbital On-Line Report]

* KO-23 NEWS *
==============
The KITSAT-OSCAR-23 satellite is currently experiencing some heat-induced signal distortion of its downlink signal. The spacecraft is currently in full sunlight, and eclipses will not begin again until 08-Oct-97. Until that time, many groundstations will experience difficulty copying KO-23's 9600 bit per second downlink signal.

[Info via Stacy E. Mills, M.D. (W4SM)]

* ITAMSAT-OSCAR-26 NEWS *
=========================
Following the summer holidays, the ITAMSAT-OSCAR-26 satellite was returned to the air. Controllers will try to load BBS software on the satellite soon. In the meantime, the satellite is transmitting the following beacon message (using 1200 bps BPSK):

*** 26th September 1997 *** Happy birthday ITAMSAT!
Today IO-26 is 4 years old and all sub-systems are OK
Best wishes from the IT-AMSAT team

[Info via Daniele, IK2XRO, and Piercarlo, IW2EGC, of the ITAMSAT Command Team]

* MIR FREQUENCY CHANGE NEWS *
============================
The MIREX three week 70-cm experiment was very successful. The experiment ran from 08-Sep-97 through 28-Sep-97, and MIREX was able to gather some interesting data as a result of the experiment. Mir PMS and voice operations have now returned to 145.985 MHz simplex FM. Some preliminary results have concluded that the Mir crew did not experience any interference caused by other equipment on Mir to the 70-cm Amateur Radio Station. Over 110 different stations from around the world successfully contacted the Mir PMS while it was active on the 70-cm band. 70-cm transmissions from Mir did not appear to cause any interference to any equipment on Mir, and simple groundstations were proven to be able to contact Mir on voice provided that adjustments for Doppler shift were made on the ground.

More information will be made available once survey data from groundstations
who attempted contact with Mir on 70-cm is compiled.

[Info via Miles Mann, WF1F]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2512. RS10/11 and RS-15

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue@stic.net>
Message-ID: <19970928.034133.wb5rue@stic.net>
Source record: 17975

I am new to this satellite stuff...
I've only been a ham 21 years, so I guess it's about time. :)
I know that RS-12 has recently changed to mode A but
have RS-10/11 and RS-15 also changed? I just tried to hear
both on a recent pass a few minutes ago but couldn't hear
either one's beacons. Are they still active?
Thanks
Kevin, WB5RUE
wb5rue@stic.net

2513. Re: QwikKep v01.01 Available

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: Charles Brabham <n5pvl@texoma.net>
Message-ID: <01bccc0b$eaedf0a0$0b7141ce@default>
Source record: 17976
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space

Marty Albert <marty@trucom.com> wrote in article
<60ka2i$shu@thepit.trucom.com>...
> QwikKep version 01.01 is now available for download at:
>
<snip>

Quick-Kep turned out to be a tasteless joke. It produces 46k bulletins DUPLICATING info you can and will get much faster, quicker, and more reliably via the genuine AMSAT bulletins. The enormous message size is there so Marty's "packet" bulletins will travel the Landline Lid "net" efficiently, but will tie up genuine amateur radio digital network links.

In other worfds, it's another LandLine Lid attempt to undermine amateur packet radio, this time by flooding the network with grossly oversized bulletins containing redundant, useless information.

What a jerkoid stunt. But then again, what more can one expect from one of TAPR's pet LandLine Lids? Marty devotes the majority of his time, it appears, to the ideal of convincing all hams to communicate via non-ham means of communication. That is, when he is not deliberately trying to cause widespread problems across the genuine ham radio digital net.

LandLine Lids like Marty use non-ham means to bypass and route around ALL known types of ham radio digital communications, and that most certainly includes AMSAT stations. -- If a LandLine Lid is allowed to move messages over the Internet which were intended to be moved by the AMSAT station, what is that AMSAT station supposed to do with no traffic? AMSAT stations are quite expensive to build and maintain, but of course a LandLine Lid's Internet access is dirt cheap.. Once it's been "routed around" thoroghly enough by the proliferation of non-hams like Marty Albert, no AMSAT station will stay on the air for long.

AMSAT: Beware of "favors" from LandLine Lids. Ask any HF forwarder what their "help" will do for (to) you.

Users of FBB BBS can set up their REJECT file to reject all non-standard and bogus AMSAT bulls like this:

R * * AMSAT * #* 0

This lets genuine AMSAT bulls through and rejects garbage, including KC6UFM's "Quik-Keps" and most other bogus AMSAT bulls.

--
73 DE Charles Brabham N5PVL
Packet Radio: N5PVL @ N5PVL.#NTX.TX.USA.NOAM

E-Mail : n5pvl@texoma.net
WWWeb : http://www.texoma.net/~n5pvl

2514. Re: QwikKep v01.01 Available

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342E7DBE.3EC@antispam.trader.com>
Source record: 17977
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space

Charles Brabham wrote:
> AMSAT stations
> are quite expensive to build and maintain, but of course a LandLine Lid's
> Internet access is dirt cheap.

But it does require a phone. So I consider myself a "true" ham because my
goal is wireless connection. _And_ because I want to build the station myself.
It's the only way tounderstand how it works...or to afford it.

I'll take http over cw any day.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2515. Re: RS10/11 and RS-15

Newsgroup: rec.radio.amateur.space
Date: 1997-09-28 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19970928202900.QAA01517@ladder02.news.aol.com>
Source record: 17978

In article <19970928.034133.wb5rue@stic.net>, Kevin Muenzler WB5RUE
<wb5rue@stic.net> writes:

>I am new to this satellite stuff...
>I've only been a ham 21 years, so I guess it's about time. :)
>I know that RS-12 has recently changed to mode A but
>have RS-10/11 and RS-15 also changed? I just tried to hear
>both on a recent pass a few minutes ago but couldn't hear
>either one's beacons. Are they still active?

I was not aware that RS-12 had been switched to mode A.... it's been in
mode KT for some time now. RS-10 went silent last spring, and chances are
it won't be back. RS-15 is suffering from battery charging problems, so
may have been down when you listened for it. HOPEFULLY, RS-16 will be
activated soon, and we'll have a working mode A bird again.......

73 de KA3HSW

2516. Re: "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bccc6c$de5cf6e0$7a60b6cd@cbx-nt>
Source record: 17884

What part?
--
Christopher Cox
KC8FRJ
TRA#4901

Stephen Walters <oddjob@cix.co.uk> wrote in article
<memo.19970927210046.30779A@oddjob.compulink.co.uk>...
> What a load of RUBISH.
>
>
> oddjob@cix.co.uk
> Steve Walters: G7VFY: 0956-544202
>

2517. Conflicting Sat Tracking Programs??

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Daren <dd13582@cedarnet.org>
Message-ID: <01bccc57$cdda7b40$162148ce@dd13528.ncn.net>
Source record: 17885

Hello,
I am using STSPLUS and SPYSAT programs with the same keps file and the programs are giving me two different positions for the MIR station for the same time period. Has anyone else run into this problem?? Does anyone have any more ideas for me. I'm thinking about downloading a 3 tracking program to see if I can get to of them to agree.

Thanks for any response.
Daren
dd13528@ncn.net

2518. Re: building satellites - was Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342FAA5C.8E5@antispam.trader.com>
Source record: 17886

Philip Chien wrote:
> Oh? And how is your satellite going to mate on to a particular vehicle
> which doesn't have the proper mounting plate, electrical bus or anything
> else you happen to require?

The sat fits an "adapter". Design an adapter for each likely vehicle.
Design it for the worst possible ride and the structural materials and
specs will be identical. Electrical bus? You think the rocket control
electronics are different from the electronics in a sat? Just feed the
adapter a single voltage. Any voltage convenient. The adapter's transverter
input can vary, but the sat end is standardized. There are no other requirements.
You don't get anything else. Deal with it.

> And how are you going to show all of the
> safety documentation and other paperwork which shows that you've met that
> vehicle's requirements?

They already have it for the adapter. When you show up with the sat, hand
them the paperwork for the sat.

> vehicle company starts to do many different types of analysis (e.g.
> coupled loads, center of gravity, moment arms, etc.)

The standardised sat specs are identical every time. True, this puts some
constraints on the satellite. Deal with it.

> It is _NOT_ trivial.

But it could be.

> happens to be going the correct direction to meet your requirements.

What requirements? You get orbit. Whatever orbit.

> your suggestion may work 50 years from now, it just isn't feasible today.

A determined crew could build and certify the adapters, and distribute the
standardised sat requirements in less than 2 years.

> try your suggestion on them - and see if they can keep a straight face.

I doubt they'd understand it. Decades of inertia.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2519. ANS-271 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <60oaeb$r7b$1@news3.mr.net>
Source record: 17887

Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT
lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.

SB SAT @ AMSAT $ANS-271.01
ARIANE 502 LAUNCH DELAYED

HR AMSAT NEWS SERVICE BULLETIN 271.01 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.01

By a press release, September 24, ESA and the French space agency, CNES
announced that the flight test of the second Ariane 5 vehicle would be
delayed until mid-October.

The following is the exact wording of the ESA/CNES release:

JOINT ESA/CNES PRESS RELEASE

Nr. 30-97 Paris, 24 September 1997

Ariane 502, final steps before launch

The verification process relating to analysis of the launcher's
control loop (see ESA/CNES joint press release of 17 September) has taken
longer than expected. Moreover, final qualification of the flight program
software will require two additional weeks to complete. For these reasons,
the launch campaign for the second Ariane-5 qualification flight at
Europe's spaceport in Kourou, French Guiana, is being put on hold from 26
September, aiming at a launch on 15 October 1997 at the earliest. The
campaign will be resumed seven days before launch, with the filling of the
upper stage.

The Launcher Countdown Rehearsal performed in Kourou earlier in September
gave good results. Meanwhile, the qualification process continued in
Europe, where computer programs that simulate the real flight conditions of
Ariane 502 indicated a risk of oscillation that could increase the
consumption of the oil that feeds the displacing actuators used to steer
the main engine.

To lower the risk of unwanted oscillations on this specific flight, two
activities are being conducted in parallel:
a: verification of the validity of the data used in the mathematical model
that simulates flight

b: introduction of a corrective measure using a filter to eliminate unwanted oscillations.

Incorporating this filter, contained in an electronic box fitted in the main stage, would entail additional qualification tests that would put the target launch date back by a further one or two weeks.

The choice of course of action and a decision on a new target date for the second test flight of Ariane 5 are expected to be confirmed early in October.

End of ESA/CNES press release.

Some have asked if this delay means that Phase 3D may yet fly on Ariane 502. The answer to this is a definite NO. The 502 launch vehicle is already assembled on the pad at Kourou and there is no chance that Phase 3D can be accommodated on it.

Negotiations are proceeding between Phase 3D Project Leader Dr. Karl Meinzer DJ4ZC of AMSAT-DL and various parties in Europe concerning another launch opportunity for the satellite. It is not expected that any word on this will be forthcoming until after the launch of A-502. Although Phase 3D will not be aboard A-502, all in the amateur satellite community should be hoping for a very successful flight. The Ariane 5 program is important to ESA, and offers many potential future launch opportunities for amateur spacecraft.

Keep tuned to ANS for further information.

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SB SAT @ AMSAT $ANS-271.02
DAVID WOLF, KC5VPF, ON MIR

HR AMSAT NEWS SERVICE BULLETIN 271.02 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.02

Ham radio aboard MIR will continue at least for another four months. US astronaut David Wolf, KC5VPF, will get to replace his colleague Mike Foale, KB5UAC, aboard the Russian space station. Under intense political pressure to consider discontinuing the presence of US astronauts aboard the ailing and aging space station, NASA Administrator Dan Goldin gave the okay September 25 for Wolf's MIR stay. Approval came only hours before the shuttle Atlantis was to be launched from Cape Canaveral on mission STS-86 and a rendezvous with MIR. Wolf will continue the permanent US presence on the station that began in 1996 with Shannon Lucid.

Goldin cited separate scientific reviews of the situation aboard MIR in his decision to deliver Wolf to MIR as originally planned. ''We move forward not only because it is safe, but for the important scientific and human experience we can gain only from MIR,'' Goldin

said. He added that, as NASA looks toward next June's launch of the first element of the International Space Station, ''nothing can beat the hands-on, real-time training aboard MIR.''

Early this year, a fire broke out aboard MIR. The spacecraft also has had various mechanical problems, including malfunctions of its oxygen-generating and carbon dioxide scrubbing systems. In late June, a collision with an unmanned Progress supply rocket during a docking maneuver damaged the spacecraft's Spektr module and disrupted scientific research. Among subsequent problems, MIR has suffered from repeated computer system failures, including a failure earlier this week. The Atlantis is to carry a new computer to MIR.

Wolf, 41, is both an electrical engineer and a medical doctor. A native of Indianapolis, Wolf is single. He has been an astronaut since 1990 and served as a mission specialist aboard the shuttle Columbia in late 1993.

[ANS thanks the ARRL fore this information.]

/EX

SB SAT @ AMSAT $ANS-271.03
ASUSat

HR AMSAT NEWS SERVICE BULLETIN 271.03 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.03

ASUSat which is now in the integration phase will be an easysat. It will have an FM repeater which is hoped will be as good as the one on AO-27. The FM repeater will have an uplink in the VHF band, 145.990 MHz, and a downlink in the UHF band, 436.700 MHz. The difference between the AO-27 and the ASUSat is that the repeater will be PL operated so the Transmitter will go on the air only if a user wants to access it using a PL. This enables ASUSat to improve its power budget, and make the transmitter a bit stronger then AO-27's.

In addition the ASUSat team will be able to make their digital comm system available to the general public. ASUSat does not have Pacsat type application on board, as ASUSat does not have a Ram-Disk. The ASUSat team is considering new experiments, such as an APRS store/dump digital repeater (9600 FSK). Right now the ASUSat team does not have a launch scheduled, but they have a good chance of getting a lift from their sponsors at OSC in mid 1998.

[ANS thanks Assi Friedman, 4Z7ABA/KC7WSZ, of Arizona State University for this news.]

/EX

SB SAT @ AMSAT $ANS-271.04
MIREX 70CM SURVEY

HR AMSAT NEWS SERVICE BULLETIN 271.04 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.04

The MIREX team would like stations who have worked it MIR PMS system on 70cm to help them collect data on experiences with working the 70cm PMS station (Sept 8 - 28, 1997).

MIREX Survey form:

Name
Call
State
Country
Email address
Packet address

Station for 2-meters
Transceiver
Channel Step size
Preamp
Antenna
ERP

Station for 70cm
Transceiver
Channel Step size
Preamp
Antenna
ERP

Modem type
Max Packet Modem speed
Does your radio station currently support 9600 baud Modems

Have you worked MIR on packet.
How many times per month average

Which frequencies did you use:
Success rate:
1. Almost impossible to connect or transfer data
2. Could connect and transfer data sometimes
3. Good reliable connects, easy to transfer data

Frequency Success rate Comments:
145.550

145.800 - 145.200

145.985

437.650

Do you compensate for Doppler when using 2-meters

Do you compensate for Doppler when using 70cm

What type of experiments would you like to see on ISS

QRM: Besides the normal QRM associated with other stations trying to
connect to the MIR PMS.

What types of QRM do you receive while working MIR and on which frequency
(Commercial traffic, Repeaters etc.).

What is the name and mode of your first Amateur Radio Satellite

Comments and observations should be directed to Dr. Dave Larsen, N6CO at:

doc@volcano.net (Internet) -or- n6co@n0ary.ca (Packet)

[ANS thanks Miles Mann, WF1F, of the MIREX team for this report.]

/EX

SB SAT @ AMSAT $ANS-271.05
RS-12 IN MODE A

HR AMSAT NEWS SERVICE BULLETIN 271.05 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.05

Bob Dannals, W2GG, reports via DX PacketCluster that the RS-12
transponder is now operating in Mode A, uplink 145.910-950,
downlink 29.410-450. Modes K and T are not operational,
he reports. Roy Soifer, W2RS, told ANS that excellent signals were received
using Mode A This is the message that was on the Beacon , during the 06:09z
pass on September 27.
CQ CQ CQ DE RS12 RX 21 RX145 TX 29 MHZ"

Despite what the CW beacon says, W2GG and W2RS have been unable to access
RS-12 through the 21 MHz uplink. The 145 MHz uplink, however, works very
well.

[ANS thanks Roy Soifer, W2RS, and Bob Dannals, W2GG, for this story.]

/EX

SB SAT @ AMSAT $ANS-271.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 271.06 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.06

MIR
(Simplex 437.650 MHz. FM voice and packet.)
MIREX will be running the test from September 6, until September 28 1997
world wide. After the completion of the test, they will switch the MIR PMS
frequency back to the 2-meter frequency on September 29th.

See ANS Bulletin ANS-250.02 for more information. Test frequency is
437.650 MHz.
(Simplex 145.985 MHz, FM) after September 29th..

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Not operational at this time.

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.

RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz .)
Operational, now in mode A.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

RS-16
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23's download efficiency is way down. A quick look
at one of my programs shows that KO-23's orbit is once again in full
sunlight and eclipses won't begin again until October 8th. The
recurring problem of heat-induced signal distortion has returned for a bit.
[ANS thanks Stacey Mills, W4SM and Jim Weisenberger, AA7KC,
for this report.]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)

KO-25 operating normally
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25.]

AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM (As of April 1, 1997)
The AO-27 Control team has turned AO-27 to digital
Telemetry gathering mode until Saturday 1997-Oct-4. During this time the
Analog Repeater will not be available for use. The AO-27 Control team asks
that Amateurs do not try to transmit to AO-27 during this Time. The time
spent this week gathering Telemetry will ensure a long life for AO-27..

If you have a AFSK TNC, the AO-27 command team asks that you set it up to
listen to AO-27 this week and if you can save a KISS log (best way is to
download AO27TLM from amsat) you can e-mail the log to N4USI@amsat.org.
Any data collected will be helpful to use in determining the health of
the satellite. West coast and not US stations will be most helpful.

This week marks the 4th Year AO-27 has been in orbit. Happy Birthday and
Long live A0-27.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational.
The latest FO-29 Schedule.
Sept 26 (Fri) 08:09z JA
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

/EX

SB SAT @ AMSAT $ANS-271.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 271.07 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 28,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-271.07

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational, Some FM'ing has been reported during the past week.
AO-10 IS spinning very slowly. Drag doesn't slow down its rotation, but
magnetic damping around perigee does. It may well be wobbling a bit, since
its nutation dampers probably don't work very well at this slow spin rate
(about 1.5 RPM or so). However, Stacey Mills, W4SM, wouldn't describe its
motion as TUMBLING. If it were tumbling, solar illumination would be truly

chaotic and the transponder activity would come and go in a nearly random fashion. There would be no twice yearly periods of good/bad AO-10 transponder/beacon function as there now are. So the majority of AO-10's motion must continue to be around the Z-axis which remains relatively stable in its orientation (see Web page below for some caveats regarding possible movement of AO-10's Z-axis orientation in the last year).

The QSB is mainly experienced during periods of high (90 deg) squint, when the omni antenna is routinely masked and unmasked by the three lobes of the space frame. During these times, for reasons that aren't entirely clear, switching polarization improves the downlink signal.
See: http://www.cstone.net/~w4sm/AO-10.html
for more info.
[ANS thanks Stacey Mills, W4SM, for this report.]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally. OSCAR-11 REPORT 14 September 1997
During the period 19 August to 13 September excellent signals have once again been received from the 145.826 MHz beacon. Telemetry nominal. The battery voltage has been maintained in the range 13.9 to 14.4 volts. The internal temperatures are slowly increasing from the minimum values observed at the end of June (battery -0.4C, telemetry electronics -1.6 C). The battery temperature is now 8.4C, and telemetry electronics 6.8C. The increased temperature is due to a reduction in solar eclipse times, which is expected to continue into October.

The WOD survey of channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage) dated 25 June was transmitted until the end of August. The timing of this WOD coincided with the maximum eclipse times. This WOD is now available from my web site (details below). At the end of August a further survey of the same channels was taken, dated 26 August. This was quickly followed by channels 21, 31, 41, 51 (equipment currents) dated 30 August, and then by channels 10, 20,30, 40, dated 03 September, which are now being transmitted.

A single AMSAT-UK bulletin dated 21 June, by Richard G3RWL has been transmitted. This featured Sputnik-1 40th anniversary, MIR frequencies, and RS-10 news, and the Keplerian elements for OSCAR-11.

Considerable interest is now being shown in the mode-S beacon, as operators prepare for Phase-3D. Reports indicate that it is a very weak signal, and therefore ideal for testing converters, once they have been set up using the much stronger signal from DOVE. Reports have indicated that the signal from OSCAR-11 is around 24 dB below that of DOVE. There are however considerable variations in the comparisons which vary between -15 dB and -36 dB! Before the beacon partially failed the signal was measured at -3 dB below DOVE.

Hans, HB9AQZ, reports hearing the beacon using a 26 turn helix, mounted in the shack, and pointing through a double glass window. Ib OZ1MY

in Copenhagen heard the beacon with two 16 turn helixes, feeding an SSB down converter and pre-amp (combined noise figure 1.5 dB). Trevor, VK4AFL, reports S3 signals with a 60 cm dish, two turn helix feed, D.E.M converter and pre-amp. Victor, OE1VKW, reports S3-4 signals using a 67 element antenna, horizontal polarization, and UEK-2000 SAT. On the same equipment DOVE was received at S7-8. Thanks for all the reports.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and delivering half power. Any reports of reception on 2401 MHz. would be most welcome. Please e-mail g3cwv@amsat.org.

The 435.025 MHz. beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, ie. within range of Guildford, UK. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit Clive's web site. It contains some software for capturing data, and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded, as new data is captured. The URL is -

http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this information.]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
Below is a data sample of temperatures from the bird..
uptime is 1105/06:40:56. Time is Sat Sep 27 12:07:36 1997
+X (RX) Temp 3.629 D RX Temp -5.448 D
Bat 1 Temp 3.024 D Bat 2 Temp 1.814 D
Baseplt Temp 1.814 D RC PSK BP Temp 0.603 D
RC PSK HPA Tmp 1.814 D +Y Array Temp -1.817 D
PSK TX HPA Tmp 0.603 D +Z Array Temp 13.311 D

RC PSK TX Out 0.428 W
Total Array C= 0.244 Bat Ch Cur= 0.030 Ifb= 0.055 I+10V= 0.227
TX:010B BCR:83 PWRC:59E BT:3C WC:25 EDAC:9A
Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE has returned to 2 meters.
Operational software has again been successfully loaded into DOVE (DO-17)
by the DOVE command team. WD0E started the software at 09/17/97 19:40 UTC
and reports it seems to be running OK. Reports on the condition of the
batteries for the next 24 hours would be appreciated. Please send them to
wd0e@amsat.org. Jim reports it remains to be seen how long the intermittent
watchdog timer in the satellite will allow this software to run.
The s-band transmitter is on to facilitate testing of s-band equipment on
the ground, particularly for those working toward P3D S capability. Power
level on the 2 meter transmitter is about 1W day and night. Telemetry is
currently being sent every 60 seconds, but this could change due to power
management needs.
[ANS thanks Jim White, WD0E, for this update.]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operating normally.
.Below is a data sample of the birds temperatures.
uptime is 829/22:04:56. Time is Sat Sep 27 12:10:06 1997
+X (RX) Temp -1.552 D RX Temp -0.991 D
Bat 1 Temp 1.252 D Bat 2 Temp 0.131 D
Baseplt Temp 0.131 D RC PSK BP Temp 4.618 D
RC PSK HPA Tmp 5.740 D +Y Array Temp -3.235 D
PSK TX HPA Tmp 3.496 D +Z Array Temp -2.113 D

RC PSK TX Out 0.986 W
Total Array C= 0.194 Bat Ch Cur= 0.010 Ifb= 0.057 I+10V= 0.170
TX:01A BCR:7E PWRC:36E BT:3C WC: 0
<To add 6,83 minutes to the clock of the satellite>
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
UO-22 is operating normally.

Chris Jackson, G7UPN / ZL2TPO, has reloaded the Store and Forward communications task on the UO-22 On-Board Computer. This task includes incremental checksums which should make uploading slightly faster. In the old task, once an upload was complete, the spacecraft had to perform the checksum on the complete file. Depending on the file length, this could take quite a long time. With the new task, the checksum is computed on the fly - while the data is actually being uploaded. Thus there is no need to recompute it at the end of the transfer and this checksum delay is then removed.

However, all files that were started before Chris Jackson, G7UPN / ZL2TPO, loaded the task around 1000 UTC on the 19th will receive a corrupt body checksum error when the upload is completed. If the file is uploaded again, it should be accepted. If trying to upload a large file that was started before the above time, then start again.

If anyone gets persistent body checksum errors while uploading files to UO-22 would they please let Chris Jackson know as soon as possible

[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]

IO-26 (ITAMSAT)
Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB, 1200 Baud PSK.)
The actual beacon is:
26th September 1997 Happy birthday ITAMSAT!
Today IO-26 is 4 years old and all sub-systems are OK
Best wishes from the IT-AMSAT team
[ANS thanks Daniele, IK2XRO, and Piercarlo, IW2EGC,
ITMSAT Command Station for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts, WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2520. Re: building satellites - was Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <342FC643.1FE212D3@direct.ca>
Source record: 17888

Dennis Erwin Thurlow wrote:

> (snip)
>
> A determined crew could build and certify the adapters, and
> distribute the standardised sat requirements in less than 2 years.

Are you volunteering to lead such a project?

> > try your suggestion on them - and see if they can keep a straight face.
>
> I doubt they'd understand it. Decades of inertia.

Again: if you don't like the current state of the art - which
seems to do a pretty good job of lobbing things into orbit -
what are you going to do to change it? Cheap shots on USENET
are easy. The grunt work of actually doing something about it
is hard.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

2521. Re: Conflicting Sat Tracking Programs??

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Roger Koss <kossr@edl1.ksc.nasa.gov>
Message-ID: <342FD159.5ECF@edl1.ksc.nasa.gov>
Source record: 17889

Daren wrote:
>
> Hello,
> I am using STSPLUS and SPYSAT programs with the same keps file and the
> programs are giving me two different positions for the MIR station for the
> same time period. Has anyone else run into this problem?? Does anyone have
> any more ideas for me. I'm thinking about downloading a 3 tracking program
> to see if I can get to of them to agree.
>
> Thanks for any response.
> Daren
> dd13528@ncn.net

Daren:
Check to make sure that both programs are using the same Time Zone and
offset (eg, UTC-4 hours=EDT), and that both programs know which time
zone the computer is in...

73 de Roger, KD4ITU

2522. building satellites - was Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <60mt1m$o5e$1@ddi2.digital.net>
Source record: 17890

>laura halliday wrote:
>>> you don't just show
>>> up at Kourou with a satellite under your arm and say "Launch this,
>>> please".
>>
>>Rocketry has suffered from non-creative thinking for decades.
>>There is no good reason why it couldn't be done this way.

Oh? And how is your satellite going to mate on to a particular vehicle which doesn't have the proper mounting plate, electrical bus or anything else you happen to require? And how are you going to show all of the safety documentation and other paperwork which shows that you've met that vehicle's requirements?

In the real world when you sign your launch services contract the launch vehicle company starts to do many different types of analysis (e.g. coupled loads, center of gravity, moment arms, etc.) to determine an appropriate ride on its upcoming manifest. To say nothing about finding and matching appropriate co-passengers in the case of secondary launches or multiple payload vehicles. It is _NOT_ trivial.

Space travel is _NOT_ taking a box down to UPS and asking them to ship it to some orbital destination. And even then you're going to have a *mighty* long wait before you happen to find a space UPS truck which happens to be going the correct direction to meet your requirements.

While your suggestion may work 50 years from now, it just isn't feasible today. If you like I can put you in contact with the program managers of each of the major commercial launch service providers in the world. And you can try your suggestion on them - and see if they can keep a straight face.

W4SCO said:

>I propose that what AMSAT (and Ham sat) do is design a two part launch
>system. One part will be the launch vehicle. the second part will be
>the working satellite. The launch vehicle will be easily duplicated so
>we can build one each year. The sat itself will fit inside the launch
>vehicle and separate after achieving orbit. That way we will be able
>to make different sats for different purposes; how about an ATV
>repeater in space?, maybe a CW repeater in space?, maybe another FM
>repeater?, etc. We would then have a standard launch system at
>reduced cost. The various sats would then just need to be designed to
>fit inside our own launch revhicle.

I don't think you mean 'launch vehicle' (e.g. Delta, Atlas, Ariane, Pegasus, etc.) what you're talking about is a satellite bus. And that's exactly what does exist in a couple of variations.

The microsat bus was designed to work with the Ariane auxiliary payload (ASAP) adapter. The first four microsats were AO-16, DO-17, WO-18, and LU-19. They included packet communications, digital voice, science data collection, etc. Later microsats were built by Italy, Mexico, and Interferometrics. A couple of others are under construction. For each particular satellite most of the components were identical (e.g. batteries, computer, etc.) with a special TSFR (This space for rent) with that particular satellite's special functions.

The microsat bus is available for license for commerical satellite operators, with those funds going back in to AMSAT's funds for future satellites. At one point there was a potential for a constellation of many microsats for a commercial little LEO packet network, but they weren't successful (couldn't get frequency assignments?)

And the University of Surrey has been using their UoSAT bus since OSCAR 9 for many different applications.

And many of us have discussed what we would want to do with the backup Phase 3-D spaceframe, or future spacecraft built with that design. There are many good features in the hexagon shape and many potential uses for future spacecraft.

>To go a step further we could design three (3) launch vehicles: one
>for ESA, one for the Russian system, and one for NASA launches aboard
>the shuttle. This would gives us maximum launch capability and allow
>us to rapidly replace a broken sat.

two notes here -

Satellite busses are normally generic enough to work with many different launch vehicles. The UoSat bus has flown on the Delta, Ariane, and some Russian launch vehicles.

Shuttle launches are _NOT_ practical for amateur satellites. There's a bunch of appeal to having satellites ready-to-go whenever a shuttle flight has excess space, but it just doesn't work out that way. If your satellite flies on the shuttle it has several orders of magnitude more safety restrictions, documentation, and paperwork. Which is certainly understandable - if a satellite failure causes an ELV to explode we've lost the ELV (which would have been lost anyway) and destroyed whatever the primary satellites are. But if a satellite falure causes a reusable launch vehicle to fail then you've lost the RLV too. And if the RLV happens to be the space shuttle, then it's a $2 Billion vehicle - plus the lives of the astronauts. Hence the extra restrictions to ensure that absolutely nothing will go wrong. The SEDSAT amateur satellite was to have flown on the STS-85 mission this summer, but couldn't make the safety requirements to ensure the safety of the shuttle due to their tether deployer mechanism. The good news is SEDSAT was transfered to a Delta launch. The shuttle can theroetically eject small satellites

overboard (NUSAT, GLOMR, BREMSAT and a couple of classified satellites which may or may not exist) but at the shuttle's altitude they only have a useful lifetime of about a year or so before they reenter. And those ejectables cannot have any hazardous substances (e.g. propellants). NUSAT and GLOMR had relatively inexpensive launches, but the current rates for a Hitchhiker Junior (which is where ejectable GAS-class satellites would fall) is expected to be about $500,000. At that price I'll go with a piggyback on an ELV and also get the longer lifetime.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

2523. NORAD Two-Line Orbital Element Set: Space Shuttle (97272.25000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <60pasbbjo1@blackbird.afit.af.mil>
Source record: 17891

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

MIR
1 16609U 86017A 97272.22629111 -.00024739 00000-0 -29175-3 0 6615
2 16609 51.6525 283.0198 0003951 172.8443 187.2610 15.60254574663263
STS 86
1 24964U 9755A 97272.25000000 -.00000233 00000-0 34680-5 0 115
2 24964 51.6537 282.9013 0004407 175.7984 317.5813 15.60286199 482
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2524. Re: building satellites - was Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3430236C.62C4@antispam.trader.com>
Source record: 17892

laura halliday wrote:
>
> Dennis Erwin Thurlow wrote:
>
> > (snip)
> >
> > A determined crew could build and certify the adapters, and
> > distribute the standardised sat requirements in less than 2 years.
>
> Are you volunteering to lead such a project?

Are you volunteering to finance it?

> > > try your suggestion on them - and see if they can keep a straight face.
> > I doubt they'd understand it. Decades of inertia.

> Again: if you don't like the current state of the art - which
> seems to do a pretty good job of lobbing things into orbit -
> what are you going to do to change it?

I've been working on it for years, using my own limited funds. I did the sat
first. Took it to an IEEE conference at Sarnoff-Princeton. Those GE and Marconi
guys didn't get it.
A cheap sat is useless without a cheap ride, and there were no cheap rides,
so I decided to focus on building a small rocket myself. Still working on it, but
I'd be glad to knock off long enough to lead the described endevour. Just need the bucks.

> Cheap shots on USENET are easy.

This isn't a cheap shot. I proposed a solution.

> The grunt work of actually doing something about it is hard.

Yea. Tell me about it.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2525. Helix Antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <34300dc3.4900346@news.mindspring.com>
Source record: 17893

I am looking for companies that make Helical (helix) circular
polarized antennas for the 1.2g and 2.4g ham bands for use on P3D.

Please email me if you know of any.

W4SCO
sco@sco-inc.com

2526. Re: RS10/11 and RS-15

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: orion@xnycap.rr.com
Message-ID: <342f2049.44199103@news-server>
Source record: 17894

On Sun, 28 Sep 1997 03:41:33 +0000 (GMT), Kevin Muenzler WB5RUE
<wb5rue@stic.net> wrote:

>I am new to this satellite stuff...
>I've only been a ham 21 years, so I guess it's about time. :)
>I know that RS-12 has recently changed to mode A but
>have RS-10/11 and RS-15 also changed? I just tried to hear
>both on a recent pass a few minutes ago but couldn't hear
>either one's beacons. Are they still active?
>Thanks
>Kevin, WB5RUE
>wb5rue@stic.net

Kevin, RS-10 is out of commission. There's a slim possibility it will
be back up sometime. RS-15 is having problems also. I don't know about
RS-12.

--
Butch N2YMJ

To reply, delete the
x from my address.

2527. Re: "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: oddjob@cix.co.uk
Message-ID: <memo.19970929235213.41143A@oddjob.compulink.co.uk>
Source record: 17895

All of it. Self indulgent paranoid twaddle...

You American like to make out you are soooo hard done by....

I hope we can stay ON topic for a change.

oddjob@cix.co.uk
Steve Walters: G7VFY: 0956-544202

In article <01bccc6c$de5cf6e0$7a60b6cd@cbx-nt>, cobox@netexp.net
(Christopher Cox) wrote:

> What part?
> --
> Christopher Cox
> KC8FRJ
> TRA#4901
>
> Stephen Walters <oddjob@cix.co.uk> wrote in article
> <memo.19970927210046.30779A@oddjob.compulink.co.uk>...
> > What a load of RUBISH.
> >
> >
> > oddjob@cix.co.uk
> > Steve Walters: G7VFY: 0956-544202
> >
>

2528. NORAD Two-Line Orbital Element Sets (TLE071)

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <60pc8a$c10$1@blackbird.afit.af.mil>
Source record: 17896

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #071 -
Alouette 1
1 00424U 62049A 97271.19530628 .00000067 00000-0 68063-4 0 3209
2 00424 80.4656 181.9468 0022293 271.9362 87.9231 13.67904304746325
ATS 1
1 02608U 66110A 97260.48841324 -.00000015 00000-0 10000-3 0 394
2 02608 14.4542 347.9013 0007383 122.6043 237.4583 1.00305897 29459
ATS 3
1 03029U 67111A 97270.38230988 -.00000124 00000-0 10000-3 0 7020
2 03029 14.8680 354.7573 0009269 264.8722 138.9443 1.00272549109455
Starlette
1 07646U 75010A 97269.88942440 -.00000184 00000-0 -32207-4 0 880
2 07646 49.8263 107.0297 0206482 331.9248 27.0633 13.82193124143514
LAGEOS
1 08820U 76039A 97271.28182837 -.00000019 00000-0 00000+0 0 3217
2 08820 109.8172 186.3572 0044126 27.4636 332.8326 6.38664467243720
GOES 2
1 10061U 77048A 97271.56418068 .00000038 00000-0 10000-3 0 8868
2 10061 12.9412 31.8366 0010429 132.2553 229.1335 1.00266358 19144
IUE
1 10637U 78012A 97242.97126301 .00000033 00000-0 10000-3 0 4072
2 10637 36.1754 76.5853 1374263 69.3187 235.0170 1.00059570 24336
GOES 3
1 10953U 78062A 97268.35649247 -.00000095 00000-0 10000-3 0 8485
2 10953 11.9645 34.9403 0003753 192.1846 155.8578 1.00273026 23711
SeaSat 1
1 10967U 78064A 97271.90243837 .00000050 00000-0 60819-4 0 6079
2 10967 107.9986 64.6876 0002257 265.3685 94.7199 14.38192674 8836

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Nimbus 7
1 11080U 78098A 97271.62919662 -.00000051 00000-0 -88294-5 0 7003
2 11080 98.8900 115.6193 0009205 140.6197 219.5628 13.83679000955959
GOES 5
1 12472U 81049A 97269.34942090 -.00000240 00000-0 10000-3 0 196
2 12472 8.9226 45.5781 0005404 96.9761 263.1791 1.00329845 17779
Cosmos 1383
1 13301U 82066A 97271.54303536 .00000051 00000-0 42483-4 0 6151
2 13301 82.9330 150.3986 0028986 31.0700 329.2155 13.68086102761412
LandSat 4
1 13367U 82072A 97269.68170567 .00000054 00000-0 21727-4 0 1019
2 13367 98.0144 310.6714 0008013 117.9190 242.2821 14.57211999808476
DMSP B5D2-1
1 13736U 82118A 97271.57354800 .00000084 00000-0 53450-4 0 3175
2 13736 98.6226 98.3752 0009402 98.2981 261.9260 14.25857437767812
IRAS
1 13777U 83004A 97271.57691859 .00000237 00000-0 19330-3 0 7872
2 13777 98.9725 93.2864 0011707 240.3109 119.6890 13.99279134418874
Cosmos 1447
1 13916U 83021A 97270.90316856 .00000017 00000-0 22038-5 0 7106
2 13916 82.9451 205.0848 0036382 290.2579 69.4667 13.74359191727988
TDRS 1
1 13969U 83026B 97264.09167128 -.00000316 00000-0 10000-3 0 7925
2 13969 9.6176 39.3292 0004130 136.1502 168.2562 1.00259703 26008
GOES 6
1 14050U 83041A 97271.48217280 .00000052 00000-0 10000-3 0 7207
2 14050 7.7842 49.3680 0003259 127.8996 230.7052 1.00289564110883
AO-10
1 14129U 83058B 97268.62244806 -.00000050 00000-0 10000-3 0 5070
2 14129 26.2316 125.2061 6034251 154.4198 255.2304 2.05881396 79457
LandSat 5
1 14780U 84021A 97270.25528795 -.00000118 00000-0 -16033-4 0 6472
2 14780 98.2752 332.3798 0001693 311.5312 48.5736 14.57079113721972
UO-11
1 14781U 84021B 97271.45940497 .00000222 00000-0 45283-4 0 43
2 14781 97.8451 248.6193 0012923 36.4155 323.7923 14.69589230726428
Cosmos 1574
1 15055U 84062A 97268.91842460 .00000043 00000-0 29531-4 0 9083
2 15055 82.9525 262.4410 0028363 121.7607 238.6321 13.73653339664929
Cosmos 1602
1 15331U 84105A 97268.77665621 .00000449 00000-0 49735-4 0 5910
2 15331 82.5322 36.7659 0018772 205.6225 154.4062 14.84939126702064
ERBS
1 15354U 84108B 97270.52933648 -.00000201 00000-0 32848-5 0 3060
2 15354 56.9980 310.3832 0004378 59.6691 300.4782 14.95075817706739
NOAA 9
1 15427U 84123A 97271.84127704 -.00000001 00000-0 23089-4 0 3055
2 15427 98.8956 341.5807 0016034 66.3688 293.9162 14.13883530659856
Mir
1 16609U 86017A 97272.22629111 -.00024739 00000-0 -29175-3 0 6615
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2 16609 51.6525 283.0198 0003951 172.8443 187.2610 15.60254574663263
SPOT 1
1 16613U 86019A 97271.22870521 -.00000044 00000-0 00000+0 0 1196
2 16613 98.7877 342.9788 0001041 51.3453 308.7823 14.20002475286735
Cosmos 1766
1 16881U 86055A 97270.99216811 .00000292 00000-0 32274-4 0 5070
2 16881 82.5165 92.2488 0017521 232.0988 127.8643 14.83888363603219
EGP
1 16908U 86061A 97270.19513532 -.00000083 00000-0 10000-3 0 2112
2 16908 50.0149 1.2231 0011341 122.0631 238.1306 12.44417543174559
NOAA 10
1 16969U 86073A 97271.81070134 .00000026 00000-0 29285-4 0 2323
2 16969 98.5514 262.1715 0014294 66.7728 293.4956 14.25058204573346
MOS-1
1 17527U 87018A 97270.19268035 -.00000043 00000-0 00000+0 0 5897
2 17527 98.8796 326.4129 0020461 110.5087 249.8269 14.00468865540352
GOES 7
1 17561U 87022A 97271.57994828 -.00000155 00000-0 10000-3 0 3931
2 17561 3.9725 66.1169 0000849 145.9644 266.1646 1.00274625 22003
Kvant-1
1 17845U 87030A 97272.09809191 -.00039062 00000-0 -46516-3 0 1525
2 17845 51.6516 283.6642 0003697 169.0000 190.5356 15.60254399597355
DMSP B5D2-3
1 18123U 87053A 97271.68313129 .00000026 00000-0 35441-4 0 672
2 18123 98.7636 100.1194 0014758 0.7243 359.3949 14.15492419530777
RS-10/11
1 18129U 87054A 97271.18892728 .00000045 00000-0 32971-4 0 4042
2 18129 82.9282 162.6066 0010807 303.0643 56.9473 13.72382982514364
Meteor 2-16
1 18312U 87068A 97269.73709918 .00000031 00000-0 14892-4 0 5933
2 18312 82.5565 342.0230 0012942 358.2822 1.8291 13.84104110510718
Meteor 2-17
1 18820U 88005A 97270.89192304 .00000062 00000-0 41873-4 0 3721
2 18820 82.5400 35.0285 0018240 54.6270 305.6591 13.84781086488254
DMSP B5D2-4
1 18822U 88006A 97271.82854216 .00000037 00000-0 34470-4 0 6321
2 18822 98.3878 87.5900 0007307 75.3700 284.8292 14.23241499501239
Glonass 34
1 19163U 88043A 97271.37903903 .00000014 00000-0 10000-3 0 2186
2 19163 65.4499 70.0742 0003757 193.0209 166.9877 2.13102431 72218
Glonass 36
1 19165U 88043C 97268.15216991 -.00000030 00000-0 10000-3 0 6244
2 19165 65.4163 70.1288 0003049 317.3888 42.6242 2.13101840 72761
METEOSAT 3
1 19215U 88051A 97267.71805422 -.00000182 00000-0 00000+0 0 3401
2 19215 4.1629 65.4400 0007683 136.4207 223.7133 0.96948946 21681
OKEAN 1
1 19274U 88056A 97272.25642997 .00000554 00000-0 65580-4 0 2064
2 19274 82.5163 192.4738 0020907 24.8220 335.3994 14.82676201498879
Meteor 3-2
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1 19336U 88064A 97270.84286517 .00000051 00000-0 10000-3 0 6047
2 19336 82.5394 195.4905 0017375 141.7686 218.4672 13.16983050441032
Glonass 39
1 19503U 88085C 97268.18321090 -.00000014 00000-0 10000-3 0 5067
2 19503 65.3891 308.9942 0007094 148.4559 211.6505 2.13101796 70257
NOAA 11
1 19531U 88089A 97271.81716697 -.00000041 00000-0 28579-5 0 1245
2 19531 99.1430 307.1251 0012147 9.2076 350.9300 14.13144847464635
TDRS 3
1 19548U 88091B 97250.73669212 -.00000192 00000-0 10000-3 0 3005
2 19548 3.3734 69.4765 0003025 110.9662 156.4226 1.00264222 20019
Glonass 40
1 19749U 89001A 97271.50542454 .00000012 00000-0 10000-3 0 7213
2 19749 65.4107 69.5572 0007044 253.0350 106.8882 2.13100949 67838
Glonass 41
1 19750U 89001B 97267.80584329 .00000021 00000-0 10000-3 0 6297
2 19750 65.4311 69.7619 0005939 221.5796 138.3981 2.13101821 67779
GPS BII-01
1 19802U 89013A 97270.81112239 .00000024 00000-0 00000+0 0 4724
2 19802 55.5751 92.0085 0029881 109.0641 251.3332 2.00551691 63099
Akebono
1 19822U 89016A 97272.20867054 .00016620 00000-0 85528-3 0 9979
2 19822 75.0645 209.4827 3704001 109.4935 293.7063 8.00102985204019
Meteor 2-18
1 19851U 89018A 97271.89702252 .00000043 00000-0 25046-4 0 5917
2 19851 82.5178 267.3424 0015700 97.2319 263.0642 13.84439013433682
MOP-1
1 19876U 89020B 97258.63083916 -.00000113 00000-0 00000+0 0 2850
2 19876 2.9104 70.7658 0014411 287.4128 72.3263 0.97110233 11040
TDRS 4
1 19883U 89021B 97267.42084517 -.00000292 00000-0 10000-3 0 3601
2 19883 0.8239 85.9715 0002387 157.2233 230.6719 1.00269809203762
GPS BII-02
1 20061U 89044A 97269.15847785 .00000005 00000-0 10000-3 0 4592
2 20061 53.9132 267.1241 0183807 224.6601 133.8534 2.00562691 60807
Nadezhda 1
1 20103U 89050A 97269.67391955 .00000026 00000-0 11125-4 0 1552
2 20103 82.9597 124.6548 0036648 192.5706 167.4538 13.73882214412735
GPS BII-03
1 20185U 89064A 97270.85486584 .00000023 00000-0 00000+0 0 4917
2 20185 55.3756 92.3764 0031354 48.3847 311.9285 2.00567317 59419
GMS 4
1 20217U 89070A 97271.67299771 -.00000382 00000-0 10000-3 0 6388
2 20217 2.7193 72.8958 0000920 245.9197 51.1998 1.00267846 30115
INTERCOSMOS 24
1 20261U 89080A 97272.22539689 .00000125 00000-0 29629-4 0 6219
2 20261 82.5952 331.1253 1242231 55.0419 316.1089 12.47446893364381
GPS BII-04
1 20302U 89085A 97272.01613623 -.00000047 00000-0 10000-3 0 4908
2 20302 53.1748 206.6342 0102692 212.2789 147.9428 2.00557729 58231
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Meteor 3-3
1 20305U 89086A 97271.77679493 .00000044 00000-0 10000-3 0 9069
2 20305 82.5490 160.6099 0005666 247.3495 112.7038 13.04433959379291
COBE
1 20322U 89089A 97269.05522805 -.00000274 00000-0 -14710-3 0 3381
2 20322 98.9291 282.0191 0008400 174.2040 185.9222 14.03461646402271
Kvant-2
1 20335U 89093A 97272.09809191 -.00039062 00000-0 -46516-3 0 297
2 20335 51.6516 283.6642 0003697 169.0000 190.5356 15.60254399446367
GPS BII-05
1 20361U 89097A 97271.53499848 -.00000079 00000-0 00000+0 0 2675
2 20361 56.2538 34.8065 0097837 146.0810 214.5449 2.00567288 47708
COSMOS 2054 (Altair-1)
1 20391U 89101A 97268.21804581 -.00000199 00000-0 10000-3 0 5546
2 20391 4.7033 60.5996 0002981 127.6816 232.4637 1.00253101 28662
SPOT 2
1 20436U 90005A 97271.21114883 -.00000044 00000-0 00000+0 0 2792
2 20436 98.7190 344.4618 0001746 78.4025 281.7349 14.20034256398264
UO-14
1 20437U 90005B 97271.72650214 .00000031 00000-0 28936-4 0 3005
2 20437 98.5137 351.1280 0010128 265.3105 94.6914 14.29973192401011
AO-16
1 20439U 90005D 97268.72911827 .00000044 00000-0 33851-4 0 950
2 20439 98.5325 351.3524 0010616 277.0265 82.9704 14.30019394400602
DO-17
1 20440U 90005E 97269.26469623 .00000046 00000-0 34479-4 0 931
2 20440 98.5332 352.8074 0010227 267.2300 92.8079 14.30162759400718
WO-18
1 20441U 90005F 97272.20335698 .00000050 00000-0 35920-4 0 1011
2 20441 98.5341 355.5767 0011110 262.7769 97.2148 14.30130292401139
LO-19
1 20442U 90005G 97272.23220579 .00000024 00000-0 25809-4 0 998
2 20442 98.5382 356.3320 0011394 263.4502 96.5382 14.30246153401165
GPS BII-06
1 20452U 90008A 97270.93648087 -.00000005 00000-0 10000-3 0 3781
2 20452 54.0904 147.6971 0069693 95.9700 264.9125 2.00571124 56197
MOS-1B
1 20478U 90013A 97269.74963816 -.00000044 00000-0 00000+0 0 800
2 20478 99.0777 338.2396 0006314 57.3351 302.8417 13.93980917309551
DEBUT
1 20479U 90013B 97268.84410707 -.00000030 00000-0 -96179-6 0 914
2 20479 99.0585 211.8333 0541915 148.6816 214.7789 12.83353907357633
FO-20
1 20480U 90013C 97271.33809706 .00000027 00000-0 12587-3 0 9983
2 20480 99.0577 213.5801 0541474 143.8042 220.0997 12.83238966357934
MOS-1B R/B
1 20491U 90013D 97270.06671621 -.00000018 00000-0 36205-4 0 3830
2 20491 99.0265 291.4300 0469335 280.5116 74.3470 13.02997388362669
LACE
1 20496U 90015A 97269.81680976 .00002631 00000-0 78403-4 0 7934
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2 20496 43.1033 56.7670 0011411 222.5167 137.4807 15.37235299425604
Nadezhda 2
1 20508U 90017A 97270.51017421 .00000041 00000-0 27277-4 0 1556
2 20508 82.9510 258.4295 0045061 143.1187 217.3081 13.73526706380045
OKEAN 2
1 20510U 90018A 97269.22210285 .00000158 00000-0 18336-4 0 6144
2 20510 82.5243 152.7859 0017273 231.2293 128.7377 14.78719977408549
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2 20546 94.1098 260.6172 0047900 347.4087 12.6176 15.53924840417621
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2 20580 28.4660 110.5527 0014648 168.1190 191.9740 14.86496063208157
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2 20619 64.9729 307.9921 0027220 211.9610 147.9386 2.13102678 57214
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2 20620 64.9890 307.8960 0008526 27.7975 332.3206 2.13102736 57319
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2 20621 64.9869 308.0063 0014735 202.5147 157.4725 2.13102479 57277
Kristall
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2 20635 51.6516 283.6642 0003697 169.0000 190.5356 15.60254399417199
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1 20638U 90049A 97271.55263602 .00000243 00000-0 34519-4 0 6932
2 20638 52.9919 349.3942 0014111 111.5804 248.6688 15.07707550402968
Meteor 2-19
1 20670U 90057A 97271.47786779 .00000016 00000-0 82356-6 0 4067
2 20670 82.5469 335.9450 0016906 25.5940 334.6057 13.84132699366523
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2 20712 18.0651 59.3347 7186318 10.1063 358.7975 2.35949056 54120
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2 20724 55.1897 89.9262 0138529 192.9380 166.7425 2.00563293 50802
Feng Yun1-2
1 20788U 90081A 97271.53065066 .00000108 00000-0 10000-3 0 4730
2 20788 98.8266 267.1460 0015107 272.8191 87.1240 14.01418701361690
Meteor 2-20
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GPS BII-09
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1 21006U 90110A 97271.61165695 .00000010 00000-0 10000-3 0 9811
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Glonass 49
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2 21008 65.4031 68.9036 0007610 268.8854 91.0593 2.13098996 52965
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2 21089 82.9229 202.9559 0030284 15.9431 344.2674 13.74086025333179
MOP-2
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2 21140 1.4678 78.8150 0002492 117.7483 164.3312 1.00276070 26228
Nadezhda 3
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2 21152 82.9214 160.2176 0042740 123.1932 237.3326 13.73551332327797
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2 21218 64.7093 307.2445 0003188 310.0662 49.9693 2.13102677 50495
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2 21232 82.5370 43.1135 0014824 77.6453 282.6328 13.16477435308895
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2 21263 98.5366 282.9014 0013182 357.7616 2.3501 14.22751821331099
OKEAN 3
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2 21577 98.2890 323.1012 0006231 327.4155 32.6644 14.36560998324747
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2 21578 98.3337 335.7947 0004410 317.1029 42.9814 14.39435311325303
TDRS 5
1 21639U 91054B 97271.54897660 .00000065 00000-0 10000-3 0 2168
2 21639 0.0610 77.3346 0002037 339.3466 334.0287 1.00275935 22559
Meteor 3-5
1 21655U 91056A 97271.76888125 .00000051 00000-0 10000-3 0 93
2 21655 82.5562 349.5174 0014589 79.5887 280.6877 13.16855762294347
UARS
1 21701U 91063B 97271.59909994 -.00000016 00000-0 19605-4 0 8790
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DMSP B5D2-6
1 21798U 91082A 97271.81579882 .00000074 00000-0 62482-4 0 8953
2 21798 98.9147 294.6811 0012870 345.2280 14.8514 14.14075439301151
Glonass 53
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Glonass 54
1 21854U 92005B 97271.36658161 .00000010 00000-0 00000+0 0 5084
2 21854 65.3565 68.5119 0015110 20.3246 339.7696 2.13105647 44085
Glonass 55
1 21855U 92005C 97271.43978868 .00000010 00000-0 00000+0 0 4407
2 21855 65.3445 68.5062 0007708 193.9929 166.0023 2.13102130 44077
JERS-1
1 21867U 92007A 97268.77292650 .00002107 00000-0 18043-3 0 2736
2 21867 97.7443 345.6216 0001788 110.3729 249.7686 14.98654622307597
GPS BIIA-12
1 21890U 92009A 97271.85111188 -.00000047 00000-0 00000+0 0 553
2 21890 53.6742 207.3169 0047297 239.8905 119.5929 2.00572101 41045
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2 22012 81.6727 345.9376 0118625 85.1139 276.3581 14.92077506284868
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2 22014 54.8917 149.9265 0100523 340.8187 18.8673 2.00554113 31775
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TDRS 6
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2 22446 53.9102 267.9395 0114943 10.1026 350.1588 2.00552727 33919
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Glonass 60
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2 22513 65.3531 68.4157 0006550 186.3455 173.6656 2.13102727 35846
Glonass 61
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1 22521U 93011A 97270.25274651 .00001653 00000-0 10744-3 0 6152
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2 22657 55.0820 329.0123 0093777 229.9369 129.2914 2.00574438 28312
RADCAL
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2 22700 54.1040 209.3489 0063070 12.6007 347.5411 2.00570304 31071
NOAA 13
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2 22739 99.1065 237.9941 0010381 353.7970 6.3062 14.11002981213153
GPS BIIA-22
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Meteor 2-21
1 22782U 93055A 97270.90468585 .00000056 00000-0 37775-4 0 5926
2 22782 82.5493 336.4668 0023513 104.1430 256.2355 13.83081736205787
UFO F2
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SPOT 3
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STELLA
1 22824U 93061B 97271.24409504 .00000009 00000-0 21217-4 0 5814
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2 22825 98.5364 341.3330 0008062 310.5210 49.5648 14.27737101208516
IO-26
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2 22826 98.5349 344.3711 0008770 301.2393 58.7926 14.27847489208939
HEATHSAT
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1 22969U 94003A 97269.61760310 .00000051 00000-0 10000-3 0 3760
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2 22970 82.5597 292.2820 0016803 148.8022 211.4098 13.16830591176259
CORONAS I
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2 23019 82.4848 15.3917 0029490 3.4506 356.6938 15.22548098197583
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2 23125 7.5417 35.4779 7217981 99.6718 341.4144 2.35796024 27052
STRV-1B
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Nadezhda 4
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Glonass 65
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OKEAN 1-7
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RESURS 1-3
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LUCH (Altair-2)
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
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2529. RS-16 Condition

Newsgroup: rec.radio.amateur.space
Date: 1997-09-29 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue@amsat.org>
Message-ID: <19970929.190111.wb5rue@amsat.org>
Source record: 17897

I tried this earlier but I don't think it went thru....
What's the status on RS-16? Is it alive and well? I read
some time ago that it had been shut off.

Kevin, WB5RUE
wb5rue@amsat.org

2530. Re: Conflicting Sat Tracking Programs??

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <60q233egq1@ddi2.digital.net>
Source record: 17898

Daren <dd13582@cedarnet.org> wrote:
>I am using STSPLUS and SPYSAT programs with the same keps file and the
>programs are giving me two different positions for the MIR station for the
>same time period. Has anyone else run into this problem??

I'm reminded of the expression he who has one watch knows what time it
is. He who has two is never sure.

Couple of obvious things to check - are you using the same set of
keplerian elements in both programs? Are you using the same viewer
locatino, including time zone? Are you using the same Earth
gravitational field model? These can all cause various changes depending
on the satellite's orbit and amount of accuracy required.

One possible 'solution' would be to use a third separate source to
determine which program is correct (e.g. which program predicts a visible
pass more accurately or which program shows Mir over your horizon when
you hear its downlink, or check a third tracking program from another
source).

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not
accept any unsolicited E-mail or commercial advertisements.

2531. Observagon Observatories

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: shadow@lisco.com
Message-ID: <34310963.959665@news.lisco.com>
Source record: 17899

OBSERVAGON TM

* 7, 10, and 15 ft. Rotating Domes *
* Unique Design *
* Inert PVC or Metal Construction *
* Sturdy and Lightweight *
* Stand alone or On Building *
* Various Heights *
* Sensibly Priced *

10 Foot PVC Dome For ONLY $1800

(picture of dome is attached)

Contact: STELLAR STRUCTURES, INC.
12790 N. 39 th Ave. E. #240
Kellogg, IA 50135
Phone: (515) 236-9151
E-mail: shadow@se-iowa.net

2532. ARLK076 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk076.1997@arrl.org>
Source record: 17900
Cross-posted to: rec.radio.info,rec.radio.amateur.space

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SB KEP @ ARL $ARLK076
ARLK076 Keplerian data

ZCZC SK76
QST de W1AW
Keplerian Bulletin 76 ARLK076
From ARRL Headquarters
Newington, CT September 30, 1997
To all radio amateurs

SB KEP ARL ARLK076
ARLK076 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-86
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RS-10/11
1 18129U 87054A 97273.15741263 .00000078 00000-0 68773-4 0 04199
2 18129 82.9269 161.1498 0010675 297.1330 62.8736 13.72383382514634
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RS-12/13
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KO-23
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AO-27
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FO-29
1 24278U 96046B 97273.10238596 -.00000013 00000-0 26156-4 0 01148
2 24278 98.5301 299.9675 0350929 274.4089 81.7040 13.52633407055307
MO-30
1 24305U 96052B 97273.07979631 .00000203 00000-0 20364-3 0 01542
2 24305 82.9313 277.0682 0028674 275.7815 84.0064 13.73097265053458
Mir
1 16609U 86017A 97273.50724588 -.00015209 00000-0 -17644-3 0 6644
2 16609 51.6542 276.5765 0005514 174.3677 185.7381 15.60286167663465

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
October 4, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2533. RS satellites out of service?

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <3431E361.365D@mwt.net>
Source record: 17901

Haven't listened lately, but thought I read somewhere that one or more of the RS series sats were off the air. Any truth to that? Maybe I need to turn the rig on more often!
Scott (N0EDV)

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an RV-4!
No, the Super Chief is NOT for sale :)

2534. Re: building satellites - was Re: P3D Update

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bccdf8$8453d000$6f60b6cd@cbx-nt>
Source record: 17902

Make a heck of a shot at Black Rock!

I was thinking of a LARGE Hybrid. They have the ISP of a N2O all the way to
255!
--
Christopher Cox
KC8FRJ
TRA#4901 L2

2535. Looking for shuttle,Mir freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-09-30 00:00:00 UTC
From: Mrlyn@webtv.net
Message-ID: <60sfgk$4hj$1@newsd-111.bryant.webtv.net>
Source record: 17903

Here are the scanners I have:RS pro2042,AOR2500(picks up shortwave).Short wave and other freq's I can use,and any other that you know of that I can pick up with these scanners.Thanks in advance,

Sam
P.S.
E-mail if possible

2536. NORAD Two-Line Orbital Element Set: Space Shuttle (97272.58333333)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <60s58o$729$1@blackbird.afit.af.mil>
Source record: 17904

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

MIR
1 16609U 86017A 97272.48247875 .00030003 00000-0 36447-3 0 6626
2 16609 51.6531 281.7317 0004876 174.3781 185.7279 15.60306515663309
STS 86
1 24964U 9755A 97272.58333333 -.00000225 00000-0 35685-5 0 127
2 24964 51.6503 281.2253 0004611 170.1917 36.7899 15.60291785 532
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2537. Sunrise and sunset lines

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: Andre Brandao <l42303@alfa.ist.utl.pt>
Message-ID: <Pine.OSF.3.96.971001122502.4601A-100000@alfa.ist.utl.pt>
Source record: 17905

Hi

Does anyone know where can I find a routine to determine/draw the
lines where the sun rises and sets?

Thank you very much, Andre Brandao,

****
* *
* Andre Brandao *
* E-mail: l42303@alfa.ist.utl.pt *
* *
****

2538. SSTV aboard MIR?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: brunel@hugo.rz.fh-ulm.de
Message-ID: <brunel.288.000AC63B@hugo.rz.fh-ulm.de>
Source record: 17906

Hi,

does anyone know something about the planned SSTV- activity aboard the MIR?

vy 73, Roman (DL2SFE)

2539. FS: Icom IC-820H w/Warranty

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: Thomas E Johnson <n2rif@kwiknet.net>
Message-ID: <01bcce71$21f59460$e78d56cf@Kwiknet.ppp>
Source record: 17907

Hello All;
I am selling "like new mint" Icom IC-820H dual band allmode vhf-uhf satellite transciever. Still under warranty 3 months old. With all original boxes, docs, warranty card, receipt & etc. I'm asking $940 +shipping obo. Plus [if interested] optional "SM-8" amplified desk mic $85 + shipping obo.
Please Re me via: Email n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2540. Re: "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: notmbv@airmail.net
Message-ID: <60tkp0$e7b$1@tilde.csc.ti.com>
Source record: 17908

```
In article <memo.19970929235213.41143A@oddjob.compulink.co.uk>,
oddjob@cix.co.uk says...
>
>All of it. Self indulgent paranoid twaddle...
>
>You American like to make out you are soooo hard done by....
>
>I hope we can stay ON topic for a change.
>
>oddjob@cix.co.uk
>Steve Walters: G7VFY: 0956-544202
>
>
>In article <01bccc6c$de5cf6e0$7a60b6cd@cbx-nt>, cobox@netexp.net
>(Christopher Cox) wrote:
>
>> What part?
>> --
>> Christopher Cox
>> KC8FRJ
>> TRA#4901
>>
>> Stephen Walters <oddjob@cix.co.uk> wrote in article
>> <memo.19970927210046.30779A@oddjob.compulink.co.uk>...
>> > What a load of RUBISH.
>> >
>> >
>> > oddjob@cix.co.uk
>> > Steve Walters: G7VFY: 0956-544202
>> >~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
What's he trying to say? What topic is he talking
about? Maybe a translater would be helpful.
Ken K5MBV
>>
>
>
```

2541. FS: DSP-2232 w/Warranty

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: Thomas E Johnson <n2rif@kwiknet.net>
Message-ID: <01bcce71$40694b80$e78d56cf@Kwiknet.ppp>
Source record: 17909

Hello All;
I am selling "like new mint" AEA DSP-2232 Digital Signal Processor
"Mutli-Mode Data Controller" 2mos old still under Timewave warranty
With all original boxes, docs, warranty card, receipt & etc.
Please Re Me Via: email n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
I am asking $510 + shipping obo.
Thank you for reading my bulletin. Thomas J or just T.j. -73

PS.. I have been sent several replies informing me about the so
called drop in price at AES & HRO of new DSP-2232s for $499.
I have corresponded with "TimeWave" & there have been no
new DSP-2232s produced nor any price drop decided on. I do
have the written correspondance on this issue if intertested.
Tnx 73

2542. FS: Rf-Concept 110w 70cm Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: Thomas E Johnson <n2rif@kwiknet.net>
Message-ID: <01bcce71$7c37f6c0$e78d56cf@Kwiknet.ppp>
Source record: 17910

Hello All;
I'm selling a "like new" Rf-Concepts 4-110 Pre-amplified N/conn
10w-in 100-110w-out 70cm amplifier with all orignal boxes & docs.
Asking $290 + shipping obo. Please re: email= n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM. You can also try
calling butmy phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2543. Mir packet on 145.985

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: "Robert B. Zimmerman" <bobz@umich.edu>
Message-ID: <343261AF.62C6@umich.edu>
Source record: 17911

Saw much packet activity on 145.985MHz Tue. Sept. 29.
Glad to see Mir back on 2 meters.

--

Bob Zimmerman - KC8CLB Diversity: The longer you verk here,
E-Mail: bobz@umich.edu deverse it gets.

2544. Re: Sunrise and sunset lines

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <3432698b.1407152@news.mindspring.com>
Source record: 17912

Andre Brandao <l42303@alfa.ist.utl.pt> wrote:

>Hi
>
> Does anyone know where can I find a routine to determine/draw the
>lines where the sun rises and sets?
>
NOVA has it already built-in. I think LogSat Pro does too.

> Thank you very much, Andre Brandao,
>
> **
> * *
> * Andre Brandao *
> * E-mail: l42303@alfa.ist.utl.pt *
> * *
> **

2545. Re: Sunrise and sunset lines

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <343303E0.27B0@ix.netcom.com>
Source record: 17913

Andre Brandao wrote:
>
> Hi
>
> Does anyone know where can I find a routine to determine/draw the
> lines where the sun rises and sets?
>
> Thank you very much, Andre Brandao,
>
> **
> * *
> * Andre Brandao *
> * E-mail: l42303@alfa.ist.utl.pt *
> * *
> **

Hello Andre -- try GeoClock at URL:
http://www.alaska.net/~buchholz/soft.htm

Described as:
Newer Version - Geoclock for WINDOWS
GCKWIN75.zip [517K] shows daylight and darkness for
greyline dxing. Now with screen saver and wallpaper
ability. Nice!

Newer Version - Geoclock for DOS Geoclk75.zip
[351K] shows daylight and darkness for greyline dxing.
Newer Version - Extra maps for Geoclock Dos and
Windows versions, now includes Europe and South
Pacific. Geoxtr75.zip [194K].

Over 100 other software links at URL:
http://pw2.netcom.com/~ac6v/pageap.html

73
Rod in San Diego

--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

2546. QSL/QTH.Net Are UP!!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-10-01 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34331BCB.379A@primenet.com>
Source record: 17914

QSL/QTH.Net Are UP!!!!

The WWW and Listservers are back up and working!

Visit my web page and enormous shareware collection:
http://www.qsl.net/k7on

Or, join one of over 100 email mailing lists:
http://www.qsl.net/k7on/email/intro.htm

Download some shareware:
http://www.qsl.net/k7on/shareware

Sign up for a free email account or web page space:
http://www.qsl.net

73, Brian

2547. Re: FS: DSP-2232 w/Warranty

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: mulveyr@frontiernet.net
Message-ID: <slrn635su3.aid.mulveyr@ll.aa2ys.ampr.org>
Source record: 17915

Ok... so why wouldn't I buy it from Timewave for $499.00, when I
can *KNOW* that I am getting a good unit?

- Rich

On 1 Oct 1997 13:54:21 GMT, Thomas E Johnson <n2rif@kwiknet.net> wrote:
> Hello All;
> I am selling "like new mint" AEA DSP-2232 Digital Signal Processor
>"Mutli-Mode Data Controller" 2mos old still under Timewave warranty
>With all original boxes, docs, warranty card, receipt & etc.
> Please Re Me Via: email n2rif@amsat.org Or
> Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
> You can also try calling but my phone is usally busy.
> My ph# is 609-386-9382..
> I am asking $510 + shipping obo.
> Thank you for reading my bulletin. Thomas J or just T.j. -73
>
>PS.. I have been sent several replies informing me about the so
>called drop in price at AES & HRO of new DSP-2232s for $499.
>I have corresponded with "TimeWave" & there have been no
>new DSP-2232s produced nor any price drop decided on. I do
>have the written correspondance on this issue if intertested.
>Tnx 73
>

--
--
Rich Mulvey
mulveyr@frontiernet.net Rochester, NY USA
http://www.frontiernet.net/~mulveyr
Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

2548. NORAD Two-Line Orbital Element Set: Space Shuttle (97273.91666667)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <60uq27sji1@blackbird.afit.af.mil>
Source record: 17916

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

MIR
1 16609U 86017A 97272.48247875 .00030003 00000-0 36447-3 0 6626
2 16609 51.6531 281.7317 0004876 174.3781 185.7279 15.60306515663309
STS 86
1 24964U 9755A 97273.91666667 -.00000235 00000-0 34481-5 0 151
2 24964 51.6540 274.5200 0005079 175.1677 326.1804 15.60286154 746
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2549. Re: Looking for shuttle,Mir freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: Tom@astro.net
Message-ID: <60vsi2$ts8$1@news.mhv.net>
Source record: 17917

In article <60sfgk$4hj$1@newsd-111.bryant.webtv.net>, Mrlyn@webtv.net (Samuel Watkins) wrote:
>Here are the scanners I have:RS pro2042,AOR2500(picks up
>shortwave).Short wave and other freq's I can use,and any other
>that you know of that I can pick up with these scanners.Thanks in
>advance,
>
> Sam
>P.S.
>E-mail if possible

Read below:

Space Shuttle/Mir Radio Coms - Updated 7/11/97

Shuttle amateur Radio experiment (Sarex) Downlink: 145.550 FM
This is for both voice AND packet modes. So if you hear short
bursts of noise they are in packet mode.

Some amateur radio 2 meter FM repeaters carry live air to
ground coms. Scan the 2 meter band between 144.000 and 148.000
or ask a local ham if they know of any freqs in your area.

On HF, WA3NAN - the Goddard amateur radio club
transmits the missions on: 3.860 (all freqs. in single side band)
7.185
14.285
14.295
21.390
21.395
28.650

These are dependant on propagation! In N.Y. I pick them up on
the 80 and 40 meter frequencies (the first 2) the best.
They I.D. in morse code and voice. Park on a freq. and listen awhile,
coms are not non-stop! There are sometimes long breaks in the action.
When the astronauts are asleep they are off the air. If the weather is
bad at the station or no control operator is available they won't be
on the air either. This is a volunteer service. Thanks to WA3NAN for
providing this service!

Mir 2 meter FM amateur radio downlinks are on 145.800 (Europe) and 145.985
in the U.S. These are for both voice AND packet radio. So if you hear short
bursts of noise they are in packet mode.

There is a ground control freq. of 143.625 FM that is sometimes
used as well, but NOT for amateur radio. I hope you speak Russian!

Mir is also now on 70 cm with voice downlinks on: 437.950
437.925
Packet downlink: 437.975

Happy listening!

Tom
trandall@mhv.net

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2550. CD-R's at good prices

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: 4389uerwjaf@0890weflsd.com
Message-ID: <343303db.0@news.inreach.com>
Source record: 17918

We have the following CD-R Media and Copiers for Sale:

Copiers:

Panasonic
4X8 CD Recorder
Price: $449
Includes 2 Pieces of CD-R Media
1 Year Factory Warrenty
With purchase of Drive Toast & Easy Cd Pro Together for additional $39

Media:

CD-R Media
Generic
Memorex OEM
Guaranteed Replacement
Gold on Green
Price: $2.19
Minimum Order: 10
Or: 21.90 Per 10 pack

The Copy Cat Shop has all of your Duplication, Replication, Media
Supplies.

The Copy Cat Shop
760-510-9888

2551. VHF Communications Magazine

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: Michael J Wooding <g6iqm@g6iqm.demon.co.uk>
Message-ID: <xJAJsDATT$M0Ewer@g6iqm.demon.co.uk>
Source record: 17919
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

VHF Communications 3/1997 has now been shipped to all current subscribers.

For more information on the contents of this issue, or for subscription information take a look at:

http://www.vhfcomm.co.uk

Regards ... Mike

--
Michael J Wooding G6IQM email: michael.j@vhfcomm.co.uk
World Wide Web site http://www.vhfcomm.co.uk
KM Publications, 5 Ware Orchard, Barby, Nr.Rugby, CV23 8UF, UK
Tel: (0)1788 890365 Fax: (0)1788 891883
VHF Communications Magazine - Especially covering VHF, UHF and Microwaves

2552. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-10-02 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <611824$3qv$1@blackbird.afit.af.mil>
Source record: 17920

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2553. Re: "Judy Kimbrel" <ostrich@thegrid.net>: good thought to ponder on..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-03 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bccff3$e7f61d00$8160b6cd@cbx-nt>
Source record: 17921

I agree it is not on subject and should not be in this newsgroup, sorry.
It does reflect USA history and attitude. We citizens of the USA tend to be
a little apathetic, but if you tick us off, we can rally to the storm.
Uhhh.... like kicking allot of Red Coats out of the country. :-)

I guess this poster is a little perturbed with the current state of things.
He should vent elsewhere.

--
Christopher Cox
KC8FRJ
TRA#4901 L2

2554. ARLS031 Functional Sputnik model set for Mir launch

Newsgroup: rec.radio.amateur.space
Date: 1997-10-03 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls031.1997@arrl.org>
Source record: 17922
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS031
ARLS031 Functional Sputnik model set for Mir launch

ZCZC AS31
QST de W1AW
Space Bulletin 031 ARLS031
From ARRL Headquarters
Newington, CT October 3, 1997
To all radio amateurs

SB SPACE ARL ARLS031
ARLS031 Functional Sputnik model set for Mir launch

Plans remain in place to launch a functioning mini-Sputnik from Mir October 4--the 40th anniversary of the launching of Sputik 1 by the USSR. Sputnik 1 was the first manmade satellite put into orbit around Earth.

Earlier this year, an agreement was signed between Russia and France to commemorate the 40th anniversary of the launch of Sputnik 1, and two groups of high school students cooperated in building the one-third scale model of the original Sputnik 1. Students in Russia built the satellite itself, while students in France built the 2-meter transmitter that will ''beep'' from space following its launch from Mir. The mini-satellite flew as cargo to Mir last month aboard a Progress rocket. According to Miles Mann, WF1F, of MIREX, the Mir crew will place the satellite in an airlock on Mir and push it out the door on October 4.

Following launch, the scale model of Sputnik will remain close to the Russian space station. It's estimated that its batteries will hold up for up to two months.

The transmitter will put between 100 and 200 mW into a circularly polarized antenna. The transmitter frequency is expected to be between 145.81 and 145.85 MHz (FM). The audio tone will be at 1.3 kHz but vary with temperature. For more information, see http://www.oceanes.fr/~fr5fc/angspoutnik.html.
NNNN
/EX

2555. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: pwinter@best.com
Message-ID: <616prj$4r2$1@shell5.ba.best.com>
Source record: 17830

In article <3437e30a.1386855@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:
>
>>The Sputnik model was supposed to be hand-launched from Mir today (40th
>>anniversary of the original Sputnik.)
>>
>If they can launch a satellite from MIR why can't AMSAT launch from
>MIR ???

Note the phrase "hand-launched." If I read the Sputnik II Web site correctly, the satellite is about 7.5 inches in diameter. Phase 3D is about six feet across (not including solar panels) and weighs, I believe, a few hundred pounds. Not exactly a good "pick it up and toss it out the airlock" candidate. Oh, and then there's the orbit...

Patty

2556. Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: KD1YV <jimkd1y@eat_spam.and_die.snet.net>
Message-ID: <34366E8C.2D7B@eat_spam.and_die.snet.net>
Source record: 17831

The Sputnik model was supposed to be hand-launched from Mir today (40th anniversary of the original Sputnik.)

Did it happen? Has anybody heard the beacon? On what frequency?

I think for the first short while, it will have essentially the same trajectory, and therefore the same Keps, as Mir. When will it get its own set of Keps?

--
To reply to this e-mail, remove the eat_spam.and_die part of the address.
--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
With all of the Y2K problems, we had better start now working on Y10K.

2557. Addresses in HK for buying good cheap equipment ?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: olivierfr@iname.com
Message-ID: <3436A32E.DE0D8DFC@iname.com>
Source record: 17832
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.antenna

Hello everybody,

I might have the opportunity to go to Hong Kong by the end of the Year.
I currently have no equipment related to ham radio. I think it might be
a good place to buy electronics there. Does anybody have an idea or an
address where I could buy some transmitters at good prices ?
I am looking for a 144 Mhz transmitter and performant antennas.
What would be interesting for me is to hear Shuttle and Mir
communications.

Siou

siou_in_france@geocities.com

2558. Need HELP wioth KLM 432 antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: "T. Calvete (KA2OMQ)" <calvete@rpa.net>
Message-ID: <34369F3B.3835@rpa.net>
Source record: 17833

I recently installed a klm 40CX antenna for satellite use. I have a
U-100 rotor for elevation. The antemnna is off balance so much that it
will not lift the feedpoint up. If I push it with a broom it works fine.

Any ideas??

2559. OBSERVAGON Observatories

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: shadow@lisco.com
Message-ID: <3435b9ee.308345122@news.lisco.com>
Source record: 17923

OBSERVAGON Observatories

* 7, 10, and 15 ft. Rotating Domes
* Unique Design
* Inert PVC or Metal Construction
* Sturdy and Lightweight
* Stand alone or On Building
* Various Heights
* Sensibly Priced

10 Foot PVC Dome For ONLY $1800

Contact: STELLAR STRUCTURES
12790 N. 39 th Ave. E. #240
Kellogg, IA 50135
Phone: (515) 236-9151
E-mail: shadow@se-iowa.net

2560. HELP:Wiring Paccomm NB-96+PSK1 And The IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: Geko <geko@redestb.es>
Message-ID: <615kqi$d3r$4@talia.mad.ibernet.es>
Source record: 17924

Dears Friends
I ham interested in the conection wiring of the combo Tnc
Paccomm NB-96+Psk-1 and the Icom all mode
Transceiver IC-970/H For Work Amateur Satellites
I ham also Interested in the 9600 bd modification
for this Transceiver

Thank`s

Ramon EA3CFC

E.mail: ea3cfc@redestb.es

2561. HELP: Wiring Paccomm NB-96&PSK1 And The IC-970/H

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: Geko <geko@redestb.es>
Message-ID: <615kts$d3r$5@talia.mad.ibernet.es>
Source record: 17925

Dears Friends
I ham interested in the conection wiring of the combo Tnc
Paccomm NB-96+Psk-1 and the Icom all mode
Transceiver IC-970/H For Work Amateur Satellites
I ham also Interested in the 9600 bd modification
for this Transceiver

Thank`s in Advanced

Ramon EA3CFC

E.mail: ea3cfc@redestb.es

2562. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: pwinter@best.com
Message-ID: <61615n$7c7$1@shell5.ba.best.com>
Source record: 17926

In article <34366E8C.2D7B@eat_spam.and_die.snet.net>,
KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:
>The Sputnik model was supposed to be hand-launched from Mir today (40th
>anniversary of the original Sputnik.)

I've seen conflicting information on this, the most recent of which
saying that it isn't being delivered (on a Progress resupply ship) for
another couple of days and won't be tossed till Oct. 12th or 13th.

Patty

========= patty@wintertime.com ===== N6BIS ===== Sunnyvale, Calif. ========
"The thrust of a rocket, a weapons bay bigger than a B-29, and the
handling of a two-seater Cessna--and they think this is possible?!"
========= CBC's Arrow Web page: http://www.tv.cbc.ca/spots/arrow/ =========

2563. * SpaceNews 06-Oct-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1006.1997@ampr.org>
Source record: 17927
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1006
* SpaceNews 06-Oct-97 *

BID: $SPC1006

=========
SpaceNews
=========

MONDAY OCTOBER 6, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIKE FOALE'S FINAL MESSAGE FROM MIR *
=======================================
The following message is from Mike Foale prior to his departure from the Mir
space station. It was received by Miles Mann, WF1F via the Mir packet radio
BBS:

Stat : PR
Posted : 09/28/97 14:50
To : ALL
From : R0MIR
@ BBS :
BID :
Subject: Mir Status

Well STS-86 made its docking smoothly yesterday, and I must honestly say
I am looking forward to seeing my wife Rhonda, daughter Jenna, and 3 yr
old son Ian, who my shuttle crew say has grown twice his size since I
last saw him. I will be sad leave my good Russian friends Anatoli and
Pavel here on Mir, but it is now time for me to say goodbye to them, and
to all the Hams in the world who have spent the time to talk to us.

Thank you.

I will be showing David Wolf, my replacement, how to operate the PMS
here, and I hope you will enjoy many contacts with him. For now, the
70cm experiment is over, and MIREX will later post its findings.

Best wishes
Michael Foale KB5UAC, NASA 5.

* DOVE-OSCAR-17 RETURNS TO 2-METERS *
======================================
Jim White, WD0E, has reported through the AMSAT News Service that the

DOVE-OSCAR-17 satellite has returned to 2 meters (145.825 MHz AFSK-FM). Operational software has again been successfully loaded into the spacecraft by the DOVE command team. WD0E started the software upload on 17-Sep-97 at 19:40 UTC and reports the software seems to be running well. Reports on the condition of the batteries would be appreciated, and should be directed to: wd0e@amsat.org. Jim reports it remains to be seen how long the intermittent watchdog timer in the satellite will allow this software to run. The S-band transmitter is on to facilitate testing of S-band equipment on the ground, particularly for those working toward P3D Mode-S capability. Power level on the 2 meter transmitter is about 1-watt day and night. Telemetry is currently being sent every 60 seconds, but this could change due to power management needs.

* SSTV FOR SPUTNIK ANNIVERSARY *
==========

Well known SSTV experimenter Ted G6HMS will be transmitting Sputnik 1 pictures to celebrate the 40th anniversary of the launch of Sputnik 1 using slow-scan television via the FO-20 and FO-29 satellites. Operations start on Saturday October 4th on FO-20 and FO-29 and will continue until November 3rd. Format for the transmissions is Martin 1 on 435.880 MHz to 435.870 MHz (USB). The uplink will be fixed in frequency, so groundstations receiving the images will need to tune their receivers in response to Doppler shift.

[Info via John Heath, G7HIA]

* STUDENTS HELP CELEBRATE SPUTNIK'S BIRTHDAY *
==========

On 04-Oct-57, Sputnik 1, the first man-made satellite was successfully launched in low-earth orbit, thus ushering in the dawn of the space age. Sputnik 1 was joined less than a month later by Sputnik 2 on 03-Nov-57. Sputnik 1 decayed in the earth's atmosphere in early January 1958, while Sputnik 2 survived until 14-Apr-58.

To help celebrate the 40th anniversary of Sputnik 1's historic space voyage, the L'Aeroclub of France, along with the Russian Aeronautical Federation joined forces to coordinate the construction of a miniature satellite similar in construction to Sputnik 1. Students from the Jules Reydellet College in St. Denis Reunion Island and the Polytechnic Laboratory of Nalchik Kabaradine Balkar Republique were called upon to develop a working model of the original Sputnik satellite that would be hand deployed from the Mir space station during an EVA on Sputnik 1's 40th birthday (04-Oct-97).

The satellite carries a low-power (100 mW to 200 mW) 2-meter VHF-FM beacon transmitter operating on 145.800 MHz that emits a pulsating tone similar to the original Sputnik. The audio frequency of the tone is a function of the internal temperature of the spacecraft in keeping with the design and operation of the original Sputnik. Its lifetime in orbit is expected to be between one and two months.

* HIGH-SPEED DIGITAL SATS ON THE WAY *
==========

With TMSAT-1 and other high-speed digital communication satellites being
prepared for launch, development on inexpensive and effective reception
solutions will soon be needed. Chris Jackson, G7UPN/ZL2TPO has prepared
a Web page describing what equipment is necessary to effectively communicate
with the next generation of high-speed "Pacsats". The page may be found at:

http://www.ee.surrey.ac.uk/CSER/UOSAT/amateur/38k4_receiver_paper.html

This page will be frequently updated with some additional information and
higher quality images over the next week or so, so stay tuned.

[Info via Chris G7UPN / ZL2TPO]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2564. UK Web Page Directory

Newsgroup: rec.radio.amateur.space
Date: 1997-10-04 00:00:00 UTC
From: kama@zetnet.co.uk
Message-ID: <3436be1a.331417@news>
Source record: 17928

Looking for a UK based amateur radio web page?

Then visit the G7KPF UK Amateur Radio Quick Links page at

http://www.users.zetnet.co.uk/kama/hamlinks.htm

With over 600 UK links, including clubs, societies, individual ham's pages and
various commercial sites, you are sure to find what you're looking for.

You can also vote for your favourite UK AR site in the G7KPF Top Ten survey.

Looking forward to your visit....

73

Andy G7KPF

2565. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <3437e30a.1386855@news.mindspring.com>
Source record: 17834

KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:

>The Sputnik model was supposed to be hand-launched from Mir today (40th
>anniversary of the original Sputnik.)
>
>Did it happen? Has anybody heard the beacon? On what frequency?
>
>I think for the first short while, it will have essentially the same
>trajectory, and therefore the same Keps, as Mir. When will it get its
>own set of Keps?
>
>
If they can launch a satellite from MIR why can't AMSAT launch from
MIR ???

2566. Re: Need HELP wioth KLM 432 antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34373efc.78272994@news.atl.bellsouth.net>
Source record: 17835

On Sat, 04 Oct 1997 15:55:39 -0400, "T. Calvete (KA2OMQ)" <calvete@rpa.net>
wrote:
>I recently installed a klm 40CX antenna for satellite use. I have a
>U-100 rotor for elevation. The antemnna is off balance so much that it
>will not lift the feedpoint up. If I push it with a broom it works fine.
>
>Any ideas??

First of all, this is more antenna than the little U-100 was designed to handle. But you can make it work (for a while) by balancing the antenna. Tape lead weights out at the front end of the boom until the antenna is balanced. I did this before I bought a real rotator. It took a full bullet casting ingot to bring the antenna into balance. Use good tape, you don't want this coming loose and falling on your head. The U-100 lasted about a month of daily satellite use before it burned up.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2567. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <344e5eb8.1049653011@news.sci.fi>
Source record: 17836

sco@sco-inc.com (SCO) wrote:

>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:
>
>>The Sputnik model was supposed to be hand-launched from Mir today (40th
>>anniversary of the original Sputnik.)
>>
>>Did it happen? Has anybody heard the beacon? On what frequency?
>>
>>I think for the first short while, it will have essentially the same
>>trajectory, and therefore the same Keps, as Mir. When will it get its
>>own set of Keps?
>>
>>
>If they can launch a satellite from MIR why can't AMSAT launch from
>MIR ???

And the point being ?

Mir is in Low Earth Orbit (LEO) and so would the satellite thrown out
of Mir, unless it has internal propulsion. The Mir orbit is quite low
and it drops constantly due to the atmospheric drag. To stay in orbit,
Mir is reboosted a few times a year to maintain orbit. A satellite
released from Mir without internal propulsion would deorbit within a
few months.

Paul OH3LWR

2568. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <3439a8f5.2017469@news.mindspring.com>
Source record: 17837

pwinter@best.com (Patty Winter) wrote:

>In article <3437e30a.1386855@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
>>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:
>>
>>>The Sputnik model was supposed to be hand-launched from Mir today (40th
>>>anniversary of the original Sputnik.)
>>>
>>If they can launch a satellite from MIR why can't AMSAT launch from
>>MIR ???
>
>
>Note the phrase "hand-launched." If I read the Sputnik II Web site
>correctly, the satellite is about 7.5 inches in diameter. Phase 3D
>is about six feet across (not including solar panels) and weighs,
>I believe, a few hundred pounds. Not exactly a good "pick it up and
>toss it out the airlock" candidate. Oh, and then there's the orbit...
>
>
>Patty

Oh I know that. I mean why can't we (AMSAT) design a small satellite
that we COULD launch from MIR ?

W4SCO

2569. The DXCC worksheet

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: Gabriel Sampol Durán <g_sampol@redestb.es>
Message-ID: <01bcd186$435380a0$0100007f@srvbiel>
Source record: 17838
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.space,tnn.radio.amateur,tw.bbs.rec.radio.amateur
Body handling: HTML body converted to readable text

Este es un mensaje con m�ltiples partes en formato MIME.

------=_NextPart_000_01BCD186.435380A0

Are you fed up of counting up and down manually you listing of the DXCC
countries in order to know your current status?
Are you tired of copying your listings of worked and confirmed countries
from one sheet to another every time there is an addition of deletion of a
country?
Don't you want to say "I have worked 150 countries, more or less" any more?
Have you ever spent an evening searching that paper or notebook where you
used to trace your DXCC status?

Here you have the definitive solution. The DXCC Worksheet.

HTTP://www.redestb.es/personal/g_sampol

What is the DXCC worksheet?
It is an Excel worksheet that helps you trace your status of DXCC
countries. You only have to fill the cells with your worked and confirmed
countries and the totals will be automatically updated. You don't have to
make any calculation !

What do I need for using the DXCC worksheet?
You need a computer running Microsoft's Excel Version 5.0 or 7.0(97)
Availability for former versions of Excel can be studied on demand.

Which are the facilities of the DXCC worksheet?
It provides an updated listing of the DXCC countries (including the deleted
ones). This listing includes:
Common prefix/prefixes
Name
Continent
ITU zone
CQ zone
Provides information on the date of insertion or deletion of the country.
Allows to enter data for any band from 160 m. to 23 cms. plus a
customizable band (3 cms, etc.).
Allows to enter separate data for SSB and CW plus a customizable mode
(RTTY, SSTV, etc.).
Automatically calculates:
Number of worked countries per band in SSB
Number of worked countries per band in CW
Number of worked countries per band in the customizable mode

Number of worked countries per band in mixed mode
Number of confirmed countries per band in SSB
Number of confirmed countries per band in CW
Number of confirmed countries per band in the customizable mode
Number of confirmed countries per band in mixed mode
Total number of countries worked in SSB in the WARC bands
Total number of worked countries in CW in the WARC bands
Total number of worked countries in mixed mode in the WARC bands
Total number of confirmed countries in SSB in the WARC bands
Total number of confirmed countries in CW in the WARC bands
Total number of confirmed countries in mixed mode in the WARC bands

How can I get the DXCC worksheet?
You can download it from my web site at:
HTTP://www.redestb.es/personal/g_sampol

------=_NextPart_000_01BCD186.435380A0

Are you fed up of counting up =
and down manually you listing of the DXCC countries in order to know =
your current status?
Are you tired of copying your listings of =
worked and confirmed countries from one sheet to another every time =
there is an addition of deletion of a country?
Don't you want =
to say "I have worked 150 countries, more or less" any =
more?
Have you ever spent an evening searching that paper or =
notebook where you used to trace your DXCC status?

Here you have the =
definitive solution. The DXCC Worksheet.

HTTP://www.redestb.es/personal/g_sampol

What is the DXCC worksheet?
It is an Excel worksheet that helps you trace your =
status of DXCC countries. You only have to fill the cells with your =
worked and confirmed countries and the totals will be automatically =
updated. You don't have to make any calculation !

What do I need for using the DXCC =
worksheet?
You need a computer =
running Microsoft's Excel Version 5.0 or 7.0(97)
Availability for =
former versions of Excel can be studied on demand.

Which are the facilities of the DXCC =
worksheet?
It provides an =
updated listing of the DXCC countries (including the deleted ones). This =
listing includes:

* Common prefix/prefixes
* Name
* Continent
* ITU zone
* CQ =
zone

Provides information on the date of insertion or deletion of the =
country.
Allows to enter data for any band from 160 m. to 23 cms. =
plus a customizable band (3 cms, etc.).
Allows to enter separate data =
for SSB and CW plus a customizable mode (RTTY, SSTV, =
etc.).
Automatically calculates:

* Number of worked countries per band in SSB
* Number of =
worked countries per band in CW
* Number of worked countries per band =
in the customizable mode
* Number of worked countries per band in mixed =
mode
* Number of confirmed countries per band in SSB
* Number of =
confirmed countries per band in CW
* Number of confirmed countries per =
band in the customizable mode
* Number of confirmed countries per band =
in mixed mode
* Total number of countries worked in SSB in the WARC =
bands
* Total number of worked countries in CW in the WARC =
bands
* Total number of worked countries in mixed mode in the WARC =
bands
* Total number of confirmed countries in SSB in the WARC =
bands
* Total number of confirmed countries in CW in the WARC =
bands
* Total number of confirmed countries in mixed mode in the WARC =
bands

How can I get the DXCC =
worksheet?
You can download it =
from my web site at: HTTP://www.redestb.es/personal/g_sampol

------=_NextPart_000_01BCD186.435380A0--

2570. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-05 00:00:00 UTC
From: Glenn <GHansen@juno.com>
Message-ID: <3437CB7C.DE47D29D@juno.com>
Source record: 17839

SCO wrote:

> Oh I know that. I mean why can't we (AMSAT) design a small satellite
> that we COULD launch from MIR ?

So why not save all our sky-rockets from the 4th of July one year, make
a satellite and have them launch it from the cargo bay of the Shuttle.
Oh, wait! I bet they couldn't get a match to light out there could
they??
Is there such a thing as a zero oxygen punk? :-)

2571. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: Jim <jim.parnell@nzart.org.nz>
Message-ID: <34377C69.910E8B53@nzart.org.nz>
Source record: 17840

KD1YV wrote:

> The Sputnik model was supposed to be hand-launched from Mir today (40th
> anniversary of the original Sputnik.)
>
> Did it happen? Has anybody heard the beacon? On what frequency?
>
> I think for the first short while, it will have essentially the same
> trajectory, and therefore the same Keps, as Mir. When will it get its
> own set of Keps?

Keep an eye on the following web page regarding this project:

http://www.oceanes.fr/~fr5fc/spoutnik.html

I just looked at it, but the launch date is not yet given. Coming up is a special anniversary event on the 10/11/12 October. See the URL for details.

Jim, ZL2APE
jim.parnell@nzart.org.nz

2572. ARLK077 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk077.1997@arrl.org>
Source record: 17841
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK077
ARLK077 Keplerian data

ZCZC SK77
QST de W1AW
Keplerian Bulletin 77 ARLK077
From ARRL Headquarters
Newington, CT October 4, 1997
To all radio amateurs

SB KEP ARL ARLK077
ARLK077 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-86
1 24964U 97055A 97276.93459247 -.00000054 00000-0 49343-5 0 220
2 24964 51.6532 259.3380 0017997 0.8501 183.5337 15.67011615 1213
AO-10
1 14129U 83058B 97268.62244806 -.00000050 00000-0 10000-3 0 5070
2 14129 26.2316 125.2061 6034251 154.4198 255.2304 2.05881396 79457
RS-10/11
1 18129U 87054A 97276.21950398 .00000005 00000-0 -10509-4 0 04151
2 18129 82.9278 158.8886 0010397 287.1964 72.8046 13.72382646515055
UO-11
1 14781U 84021B 97275.95316282 .00000217 00000-0 44329-4 0 00067
2 14781 97.8454 252.9386 0012785 23.3461 336.8323 14.69591161727082
RS-12/13
1 21089U 91007A 97276.20584488 .00000023 00000-0 86173-5 0 00296
2 21089 82.9235 198.5296 0030010 359.5976 0.5158 13.74086154333994
UO-14
1 20437U 90005B 97276.20467307 .00000030 00000-0 28173-4 0 03037
2 20437 98.5132 355.5056 0010049 251.3607 108.6502 14.29973769401658
RS-15
1 23439U 94085A 97276.19085969 -.00000039 00000-0 10000-3 0 02524
2 23439 64.8201 338.2005 0146738 111.7846 249.8762 11.27528238114117
AO-16
1 20439U 90005D 97276.14584608 -.00000012 00000-0 12303-4 0 01189
2 20439 98.5323 358.6216 0010509 253.6895 106.3134 14.30019741401669
```

```
RS-16
1 24744U 97010A 97276.41467071 .00006147 00000-0 20059-3 0 852
2 24744 97.2640 179.4117 0009554 64.7887 295.4448 15.32095044 32659
DO-17
1 20440U 90005E 97276.19093830 .00000007 00000-0 19329-4 0 01030
2 20440 98.5339 359.6000 0010515 248.8556 111.1511 14.30163441401702
WO-18
1 20441U 90005F 97276.26125508 -.00000022 00000-0 83238-5 0 1025
2 20441 98.5337 359.5551 0011140 251.5070 108.4901 14.30129954401712
LO-19
1 20442U 90005G 97276.28977289 -.00000011 00000-0 12418-4 0 1006
2 20442 98.5379 0.3127 0011485 250.8178 109.1762 14.30246262401740
FO-20
1 20480U 90013C 97275.86030730 -.00000009 00000-0 44019-4 0 9996
2 20480 99.0582 217.2565 0541423 133.5827 231.1550 12.83238845358518
AO-21
1 21087U 91006A 97276.22104635 .00000094 00000-0 82657-4 0 08723
2 21087 82.9418 331.6198 0035919 330.1926 29.7183 13.74586669334997
UO-22
1 21575U 91050B 97276.23555971 .00000006 00000-0 16228-4 0 08126
2 21575 98.2889 332.9015 0006886 293.7506 66.2926 14.37086737326007
KO-23
1 22077U 92052B 97276.12807246 -.00000037 00000-0 10000-3 0 07192
2 22077 66.0805 279.2367 0004363 182.2388 177.8611 12.86303708241634
KO-25
1 22828U 93061F 97276.23744739 .00000009 00000-0 20765-4 0 5653
2 22828 98.5337 348.3753 0009444 272.6669 87.3430 14.28192714177639
IO-26
1 22826U 93061D 97276.57952233 .00000034 00000-0 31261-4 0 5862
2 22826 98.5355 348.6171 0008726 288.5406 71.4853 14.27848244209556
AO-27
1 22825U 93061C 97276.19894320 .00000011 00000-0 22088-4 0 06123
2 22825 98.5367 347.9747 0007935 290.7012 69.3316 14.27737611209485
FO-29
1 24278U 96046B 97276.57893614 .00000009 00000-0 48098-4 0 1110
2 24278 98.5298 302.9668 0350751 265.3677 90.7328 13.52633780 55778
Mir
1 16609U 86017A 97276.77374295 -.00015852 00000-0 -18442-3 0 6733
2 16609 51.6542 260.1440 0006408 173.7682 186.3398 15.60244228663979

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
October 7, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2573. Re: Mir and Mirex and disapearing acts..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: dogpark@interlog.com
Message-ID: <19971006082904322638 3@dogpark.interlog.com>
Source record: 17842

David Hendrick <dhendrick@turbont.net> wrote:

> It is pretty evident that N6CO
> can sell QSL cards, and WF!F can promote video phones by being the most
> powerful stations, on the west and east coasts, and can monopolize the
> PMS, driving other hams out completely, we however do not have to
> support them.. thanks for reading this, and I would like your opinions..

Since you asked: here is my opinion: I think you are way out of line.

I was able to able to use the recent UHF experimental frequencies
(which were widely published) on a daily basis and was even able to
upload a news report to Mike Foale - which he thanked me for.

I don't have a PacSat station, and I was running < 25 watts, using
a plain old AX25 Kantronics KPC-3 TNC.

Was the Doppler too much for you ?

Far from dominating the experiment - as you have alleged, Miles
and Dr. Larsen were helpfull and considerate.

We usually had 3-4 stations work the PMS per pass, and it was a
pleasure to work Mir without N1PPP hogging the frequency for the
whole pass.

73...Don VE3VRW

2574. Re: Mir and Mirex and disapearing acts..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: PTammaro <Ptamm@worldnet.att.net>
Message-ID: <61aq54$5m5@bgtnsc02.worldnet.att.net>
Source record: 17843

Don Agro wrote:
>
> David Hendrick <dhendrick@turbont.net> wrote:
>
> > It is pretty evident that N6CO
> > can sell QSL cards, and WF!F can promote video phones by being the most
> > powerful stations, on the west and east coasts, and can monopolize the
> > PMS, driving other hams out completely, we however do not have to
> > support them.. thanks for reading this, and I would like your opinions..
>
> Since you asked: here is my opinion: I think you are way out of line.
>
> I was able to able to use the recent UHF experimental frequencies
> (which were widely published) on a daily basis and was even able to
> upload a news report to Mike Foale - which he thanked me for.
>
> I don't have a PacSat station, and I was running < 25 watts, using
> a plain old AX25 Kantronics KPC-3 TNC.
>
> Was the Doppler too much for you ?
>
> Far from dominating the experiment - as you have alleged, Miles
> and Dr. Larsen were helpfull and considerate.
>
> We usually had 3-4 stations work the PMS per pass, and it was a
> pleasure to work Mir without N1PPP hogging the frequency for the
> whole pass.
>
> 73...Don VE3VRW

I'll second ur comeents Don...pete n2oij here...was able to work MIR
last night..and post a msg...sure there were other stations there...but
we waited our turn and all had a decent crack at the PMS...
PETE..N2OIJ...STATEN ISLAND,NYC

2575. WTB: 15 to 20 foot satellite dish.

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: Warren kidd <kidd@datasync.com>
Message-ID: <01bcd28b$6bc08f00$874a84d0@warren>
Source record: 17844

Located mississippi guld coast, Looking for a large used satellite dish.
no lna or lnb or positioner arms or motor needed.
warren kidd Email kidd@datasync.com
thanks,
wk

2576. Drake TR270 for sat work?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: Bob Smith <bsmith@spam.msn.com>
Message-ID: <01bcd2a0$920913c0$bb4637a6@ibm-customer>
Source record: 17845
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space

Anyone think about using the Drake TR270 for sat work? Looks pretty good
with cool features like auto Doppler shift, etc. Plus, they have it at
about $999 right now on their WWW site.
--
--
Bob Smith
Atlanta, GA 30024
bsmith @ msn . com
Please remove "spam." from e-mail address (this thwarts spammers)
--

2577. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <34398536.B959B072@acm.org>
Source record: 17846

SCO wrote:
>
> pwinter@best.com (Patty Winter) wrote:
>
> >In article <3437e30a.1386855@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
> >>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:
> >>
> >>>The Sputnik model was supposed to be hand-launched from Mir today (40th
> >>>anniversary of the original Sputnik.)
> >>>
> >>If they can launch a satellite from MIR why can't AMSAT launch from
> >>MIR ???
> >>
> >>
> >Note the phrase "hand-launched." If I read the Sputnik II Web site
> >correctly, the satellite is about 7.5 inches in diameter. Phase 3D
> >is about six feet across (not including solar panels) and weighs,
> >I believe, a few hundred pounds. Not exactly a good "pick it up and
> >toss it out the airlock" candidate. Oh, and then there's the orbit...
> >
> >
> >Patty
>
> Oh I know that. I mean why can't we (AMSAT) design a small satellite
> that we COULD launch from MIR ?
>
> W4SCO

Actually, the Dragsat student project at UC San Diego is preparing to
do just that! While the first demonstration satellite may be
hand-launched, later multi-satellite missions are expected to have more
elaborate catapult and/or tether deployers. Check out their preliminary
Web site at http://calspace.ucsd.edu/dragsat/

And for those in the local San Diego area, there is a one hour
presentation at noon this Wednesday (8 Oct) that will provide an
overview of the project. The location is on the UCSD campus, in Urey
Hall, room 2102. Just show up, no prior reservation is needed. Be
sure to stop by a Visitor's Information booth (at either the Gillman
Drive or Torrey Pines & Genesee entrances) to get a campus map and pay
the $6 campus parking fee. Of course, there is free parking on the
south edge of the campus on La Jolla Village Drive, but it is generally
packed, and is about a 10 minute walk from Urey Hall.

-BobC

2578. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <343987F5.A4C938F8@acm.org>
Source record: 17847

In my earlier post, I neglected to include a URL to the UCSD Space and Physics seminar schedules: http://casswww.ucsd.edu/seminars/

-BobC

2579. Re: Addresses in HK for buying good cheap equipment ?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3438F27D.6C8E@taxes.net>
Source record: 17848
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.amateur.antenna

Before you buy equipment in a foreign country, be sure that
you can legally import the equipment to your home country.

Also check on import duties _in your country_. The gentlemen
in Hong Kong will gladly tell you that there are no import
or export duties, if it helps them make a sale.

2580. Re: Mir and Mirex and disapearing acts..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-06 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <34398562.25E@antispam.trader.com>
Source record: 17849

Don Agro wrote:
> I was able to able to use the recent UHF experimental frequencies

What frequencies were used?
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2581. Re: Drake TR270 for sat work?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-07 00:00:00 UTC
From: ham@cybercomm.net
Message-ID: <343a8939.33682475@news.cybercomm.net>
Source record: 17850
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space

Its down $500 already??
...keep going...

On Mon, 06 Oct 1997 14:41:15 -0700, "Bob Smith" <bsmith@spam.msn.com>
wrote:

>Anyone think about using the Drake TR270 for sat work? Looks pretty good
>with cool features like auto Doppler shift, etc. Plus, they have it at
>about $999 right now on their WWW site.
>--
>--
>Bob Smith
>Atlanta, GA 30024
>bsmith @ msn . com
>Please remove "spam." from e-mail address (this thwarts spammers)
>--
>

2582. ARLK078 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-07 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk078.1997@arrl.org>
Source record: 17851
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK078
ARLK078 Keplerian data

ZCZC SK78
QST de W1AW
Keplerian Bulletin 78 ARLK078
From ARRL Headquarters
Newington, CT October 7, 1997
To all radio amateurs

SB KEP ARL ARLK078
ARLK078 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97277.84210603 .00000065 00000-0 10000-3 0 5088
2 14129 26.2661 123.5522 6039277 157.0705 248.6734 2.05879961 79648
RS-10/11
1 18129U 87054A 97280.15647663 .00000010 00000-0 -57191-5 0 04152
2 18129 82.9286 155.9816 0010184 274.3010 85.6983 13.72382798515598
UO-11
1 14781U 84021B 97279.97030197 .00000224 00000-0 45599-4 0 69
2 14781 97.8460 256.8013 0012510 10.9825 349.1652 14.69593391727675
RS-12/13
1 21089U 91007A 97280.13792803 .00000033 00000-0 18930-4 0 00325
2 21089 82.9264 195.6172 0029723 348.8534 11.1961 13.74086599334531
UO-14
1 20437U 90005B 97280.19304289 .00000027 00000-0 27118-4 0 3022
2 20437 98.5127 359.4047 0010221 236.1314 123.8910 14.29974176402222
RS-15
1 23439U 94085A 97280.18207049 -.00000039 00000-0 10000-3 0 2512
2 23439 64.8176 331.7436 0146622 111.1299 250.5367 11.27528205114565
AO-16
1 20439U 90005D 97280.20405422 .00000033 00000-0 29597-4 0 01249
2 20439 98.5322 2.5999 0010624 238.2164 121.7991 14.30020510402240
RS-16
1 24744U 97010A 97280.20272062 .00005870 00000-0 19140-3 0 871
2 24744 97.2643 183.1286 0009349 54.6150 305.5964 15.32142939 33231
```

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DO-17
1 20440U 90005E 97280.17877770 .00000022 00000-0 25413-4 0 01157
2 20440 98.5348 3.5124 0010573 237.1944 122.8223 14.30163970402279
WO-18
1 20441U 90005F 97280.17922365 .00000007 00000-0 19418-4 0 01330
2 20441 98.5346 3.3985 0011105 239.7048 120.3037 14.30130532402270
LO-19
1 20442U 90005G 97279.78767383 .00000032 00000-0 28979-4 0 01311
2 20442 98.5378 3.7444 0011547 238.9331 121.0719 14.30247132402243
FO-20
1 20480U 90013C 97280.30451509 -.00000046 00000-0 -39792-4 0 09
2 20480 99.0588 220.8691 0541475 123.5461 241.8572 12.83238540359081
AO-21
1 21087U 91006A 97280.15170424 .00000093 00000-0 82657-4 0 08863
2 21087 82.9424 328.7131 0034912 318.9777 40.8753 13.74586749335535
UO-22
1 21575U 91050B 97280.20421348 .00000037 00000-0 26720-4 0 08120
2 21575 98.2865 336.7188 0007141 283.6261 76.4105 14.37087959326576
KO-23
1 22077U 92052B 97280.09332028 -.00000037 00000-0 10000-3 0 07295
2 22077 66.0803 270.9342 0003998 180.4043 179.6972 12.86303790242142
KO-25
1 22828U 93061F 97280.16072472 .00000045 00000-0 35496-4 0 06049
2 22828 98.5329 352.2076 0009321 260.5160 99.4971 14.28193629178190
IO-26
1 22826U 93061D 97280.15336889 -.00000007 00000-0 14598-4 0 06039
2 22826 98.5352 352.1075 0008627 277.1372 82.8833 14.27848274210067
AO-27
1 22825U 93061C 97280.19354968 .00000012 00000-0 22322-4 0 06129
2 22825 98.5352 351.8760 0007879 277.6397 82.3889 14.27738240210059
FO-29
1 24278U 96046B 97280.12947594 .00000004 00000-0 42750-4 0 01498
2 24278 98.5292 306.0289 0350777 256.1705 100.0177 13.52634070056258
MO-30
1 24305U 96052B 97280.07523516 .00000203 00000-0 20364-3 0 01514
2 24305 82.9283 271.8892 0028417 255.3695 104.4226 13.73098432054415
Mir
1 16609U 86017A 97280.42452647 .00000376 00000-0 10800-4 0 6844
2 16609 51.6543 241.7810 0006357 187.1799 172.9111 15.60274619664542

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
October 11, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2583. Are you ready to retire yet??????

Newsgroup: rec.radio.amateur.space
Date: 1997-10-07 00:00:00 UTC
From: mike1@sprynet.com
Message-ID: <343a723f.70207532@news.sprynet.com>
Source record: 17852

Are you ready to retire yet??????

I thought, what the heck, I'll try it. It's only six dollars. I
didn't
do it right at first, I only sent out to about 30 newsgroups. But, I
got back my six dollars and actually made $159.37 in a week (someone
put
some change in the envelope). Anyway, now I'm going to do this the
right way; send out to 250 newsgroups! The rest of this letter is
just
a cut and paste from the original. All I can say is that it works. I
would never have believed it if it didn't happen to me. Just remember
that we must all follow the rules. Be HONEST and FAIR and you will
make
money! Sure is a lot of mail though!

Thanks for reading! - Darrin
^^^

But if you think this is just another scam, I suggest that you don't try
it.

PLEASE NOTE - THIS IS A 6-PERSON LIST, NOT THE USUAL 5. PLEASE DO NOT TRY TO CHEAT THIS PROGRAM. JUST ADD ONE NAME AND REPOST THE ARTICLE. IF
YOU DO NOT IT WILL NOT WORK, AND YOU WILL BE REMOVED. FROM THE LIST! FOLLOW THESE DIRECTIONS AND JOIN US IN A GREAT OPPORTUNITY!

The program has been revised and you will notice six names instead of five. The reason for this is the flood of five name programs and the sixth name will add $50000 to $100000. This is proven mathematically and in my bank account. I never really thought that this program would work, but IT DOES and it will for you too. Just be patient and follow the directions exactly. Print this article now, so you have all the information for your version. Remember to keep the names right. Let's go!

STEP 1

Invest your $6 by writing your name and address on six separate pieces of paper along with the words:
"PLEASE ADD ME TO YOUR MAILING LIST". (In this way, you are not just sending a dollar to someone; you are paying for a legitimate service.)

People have asked me if this is really legal. It is! You are using the
Internet to advertise your business. What is that business? You are assembling a mailing list of people who are interested in home based computer and on-line businesses and methods of generating income at home. Remember - people send you a small fee to be added to your list.
It is legal. What will you do with your list of thousands of names? That's up to you, but this is how it becomes legal. To be legal you must
actually sell a product or service if you expect to receive a dollar. Anyone sending a dollar back to you must receive something in return. You have already received this letter due to the participation of each of the 6 persons listed below. This letter and the plan given within this letter are a "product" that you have received. Thus, you will be sending
$1.00 to each of the 6 persons given below in exchange for receiving this letter and for asking them to provide the "service" of adding you to their mailing list.

THIS IS A SERVICE AND IS A 100% LEGAL BUSINESS OPPORTUNITY, WHICH I COVERED IN TITLE 18, SECTION 1302 AND 1342 OF THE POSTAL AND LOTTERY LAWS.

Now, please follow the given steps exactly to receive your desired amount of money:

STEP 1

Immediately send $1 US cash (a one-dollar bill, no checks, and no money
orders) to each of the 6 people on the list below. Wrap this dollar in a
note with the words: "Please add me to your mailing list." (In this way,
you're not just sending a dollar to someone, you're paying for a
legitimate service.) Also, to discourage those who prey on cash in the
mail, be sure the bill is completely hidden by the note. A woven
envelope is recommended.

Include your address. You do not need to include your name. This is the
key to the program! Also, let each person know what number they are in
your letter so he/she knows which cycle he is receiving the $1.00 from.

Make sure that you retain EVERY name and address sent to you, either on
computer or hard copy, but do not discard the names and notes that
people send to you. This is PROOF that you are truly providing a
service, and should the IRS or some other government agency question
you, you can provide them with this proof.

Therefore, you will start a list of all the people who send you a dollar
requesting to be added to a mailing list. Actually, you will want to
safeguard this list because it can generate even better responses and
much more money later! Fold a $1 bill inside each paper, and mail them
by standard mail to the following six addresses:

1) Rudolfs Osins
Aspazijas 37-4
Jelgava, LV 3001
Latvia

2) F. Rome
1030 Hilltop Dr.
Grapevine, TX 76051
USA

3) Chris Leclair
39 Gurly Rd
Edison, NJ 08817
USA

4) R.M.
66 Navsink Dr
Monmouth Beach, NJ 07750
USA

5) CEP
174 Hillcrest Dr
Barrington IL 60010
USA

6) DA
3 Sumter Ave.
Albany NY 12203
USA

STEP 2

Now remove the top name from the list, and move the other names up. This way #6 becomes #5 and so on. Put your name in as the #6 on the list
(Remember to take #1 off and change the numbers so #2 becomes #1, #3 becomes #2, #4 becomes #3, #5 becomes #4 and #6 becomes #5 and you become #6.)

STEP 3

LET ME TELL YOU HOW MUCH MONEY YOU CAN MAKE.

How do the numbers work for potential income earnings? Assume for the sake of example that you get a 7.5% return rate. This is very conservative; my first attempt was about 9.5%, and my second was over 11%.

1. You send out 200 letters, and 15 people (7.5% x 200) will send you $1
each. $15.00

2. Those 15 send out 200 letters each, and 225 people send you $1 each.
$225.00

3. Those 225 send out 200 letters each, and 3,375 people send you $1 each $3,375.00.

4. Those 3,375 send out 200 letters each, and 50,625.00 people send you
$1 each. $50,625.00

5. Those 50,625 send out 200 letters each, and 759,375 people send you $1 each. $759,375.00

6. Those 759,375 send out 200 letters each, and 11,390,625 people send you $1 each. $11,390,625

TOTAL $12,204,240.00!! That's 12 million dollars. If those figures sound incredibly high, figure that even with half the return rate, or even a quarter, the total is still spectacular. It works every time, but how well will depend on how many letters you send.

In the above example you mailed out 200 letters. This sounds like "pie in the sky," but the numbers add up, and with over 40 million people

on
the NET, it works! TIP: For an even greater return, post to MORE
than
250 newsgroups initially; try for 300-350.

When your name drops off a list, simply access another message from a
newsgroup and start the process over again. Post the new article to
at
least 250 newsgroups. Remember, the more you post, the more people
see,
and the more you get.

There are at least 25,000 newsgroups at any one time. This is a $7.92
investment. It takes about a week or so to start seeing a return- so
be
patient. The money should flow for about 3months. At that point,
simply
add your name to the list and start over.

I've done this three times and now I can quit my job and start
investing
in real estate full time. I assure you this can work. If you mailed
out
500 letters, you could have received even more! Check the math
yourself, but I guarantee it's correct. With this kind of return, you
have got to give it a try!

Try it once, and you'll do it again. Just make sure you send a dollar
to
each of the addresses on the list above with a note asking to be added
to their mailing list. Together we will all prosper and we will be
able
to share our wealth with those less fortunate than ourselves.

GOOD LUCK!!

2584. Radio Meteor Obs. Bull. Sept 1997

Newsgroup: rec.radio.amateur.space
Date: 1997-10-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.139.343A9DCE@vvs.innet.be>
Source record: 17853

Radio Meteor Observation Bulletin No. 50 October 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Enric Fraile Algeciras
Location: Barcelona, Spain (01 59' E, 41 21' N)
Frequency: 48.250 MHz
Transmitter location: most likely Czech television C2 C. Budejovica,
100 kW, horizontal polarisation.
Antenna: 6-element Yagi 617-6B, 14 dBd gain.
Antenna: astronomical azimuth 215 deg (=NE), elevation 0 deg.
Receiver: home made converter 20 dB gain, 1 dB noise and Kenwood TS-830S.
Sensitivity: 0.25 uV for 10 dB S/N
Observing method: the audio signal of the video carrier is received using
a narrow CW filter (100 Hz) and fed into the PC in real time.
Data sampling system: using a super 14 bits A/D card to PC/XT and
"Data Capture" software with 9 second/18 sampling interval to store
all the > 1.0 s signal increases.

| Sep 1997
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+--
0 | 18 32 50 49 63 78 69 62 52 61 65 53 77 70 78
1 | 20 49 27 42 50 70 76 51 70 64 47 59 64 64 95
2 | 44 49 37 29 83 62 69 70 80 53 47 58 52 50 55
3 | 38 76 51 61 53 72 119 71 107 88 70 60 52 74 71
4 | 44 67 78 83 78 82 116 120 88 80 80 85 65 73 100
5 | 40 50 81 121 75 80 99 100 82 94 96 82 77 93 109
6 | 43 69 76 83 91 152?106 81 72 117 113 83 111 97 92
7 | 47 82 74 91 91 80 122 94 94 70 101 88 76 126 99
8 | 50 54 80 73 97 98 96 88 94 82 111 67 120 144 115
9 | 46 74 73 77 88 93 92 75 87 51 63 93 113 106 122
10 | 47 47 82 81 94 76 80 64 53 76 89 81 94 115 120
11 | 36 48 57 51 83 57 86 66 56 61 59 76 68 105 87
12 | 53 75 72 51 32 82 50 61 60 55 50 63 75 74 97
13 | 27 25 35 35 34 36 69 53 53 53 65 62 56 76 80
14 | 29 47 27 52 71 56 75 63 67 66 40 64 84 59 68
15 | 22 37 30 31 90 31 63 75 68 48 69 65 118 88 84
16 | 16 22 19 56 54 33 60 45 50 46 64 58 255? 85 69
17 | 19 21 14 40 19 24 31 38 42 40 46 54 149 66 73
18 | 7 14 23 24 16 54 36 30 38 31 51 51 99 53 51
19 | 8 50 23 26 29 35 54 35 48 34 49 24 86 51 52
20 | 24 10 25 30 31 50 61 37 36 24 45 50 51 67 40
21 | 290?131 70 39 29 50 58 49 56 67 63 42 53 69 39
22 | 355?101 40 36 64 79 59 76 61 70 58 77 62 52 60

```
23 | 116? 33 49 64 62 94 42 62 59 94 70 84 56 95 67
---+------------------------------------------------------------
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Sep 1997

| Sep 1997
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28
---+-----------------------------------------------------
0 | 87 85 73 66 98
1 | 62 51 66 57 99
2 | 55 73 78 98 96
3 | 53 84 115 118 115
4 | 71 55 131 158 157
5 | 80 81 118 120 134
6 | 98 95 110 153 122
7 | 116 116 129 132 128
8 | 106 106 119 131 137
9 | 112 115 142 225 122
10 | 102 115 103 130 101
11 | 115 124 98 87 99
12 | 93 114 108 68 81
13 | 74 96 113 94 102
14 | 60 58 88 87 98
15 | 62 63 79 72 100
16 | 56 34 55 53 68
17 | 55 56 32 42
18 | 54 65 42 59
19 | 43 61 42 61
20 | 42 75 48 113
21 | 45 67 88 94
22 | 36 71 79 107
23 | 76 83 74 86
---+-----------------------------------------------------
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28
| Sep 1997

. ? probably affected by sporadic-E, direct reception

Enric Fraile Algeciras

------------------------------------------------------------------------
Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
```

Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elevation 27 deg.
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

September 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Sep	UT										
1997	20h	21	22	23	00	01	02	03	04	05	06
1- 2	35	49	69	79	89	102	118	118	119	113	106
2- 3	90	44	24	67	97	96	100	111	162	184	87
3- 4	35	90	44	82	77	85	125	127	143	129	134
4- 5	32	53	68	83	112	99	114	145	120	117	140
5- 6	41	57	85	73	75	97	112	112	108	122	120
6- 7											
7- 8	34	53	58	76	74	107	81	101	105	88	-
8- 9	35	63	65	80	78	89	97	113	90	91	86
9-10	24	22	21	34	65	92	102	88	93	77	87
10-11	33	37	48	56	62	60	70	89	67	67	70
11-12	22	54	44	50	59	58	52	91	75	72	67
12-13	28	47	59	66	51	104	81	72	105	90	67
13-14	32	27	45	64	86	75	103	81	107	73	
14-15	27	59	47	51	60	94	115	113	102	123	88
15-16	45	39	64	74	62	76	85	108	122	100	83
16-17	32	37	62	68	57	70	103	90	89	134	133
17-18	26	60	73	80	84	86	83	91	107	134	88
18-19	29	26	20	23	34	22	25	30	26	42	22
19-20	24	56	63	83	77	57	84	91	86	115	86
20-21											
21-22	15	29	62	72	65	67	58	74	91	102	72
22-23	26	49	52	61	75	64	69	110	86	135	63
23-24	25	42	56	56	73	90	79	82	95	89	72
24-25	38	40	47	48	88	70	86	99	78	67	57
25-26	28	36	47	54	59	64	74	90	80	80	88
26-27	-	24	53	61	65	80	126?	106	82	?	?
27-28	?	56	60	54	70	90	81	94	91	104	88
28-29											
29-30	40	57	43	70	68	92	92	78	77	97	90

```
30- 1 | 29 42 69 75 109 86 97 91 99 122? 154?
------+-----------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06
Sep | UT
```

Notes:
. ? probably affected by sporadic-E, direct reception
. local time = UT + 2 hours.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 20 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

```
-----------------------------------------------------------
| Sep 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---------------------------------------------------------
0 | 86 46 39 48 48 57 99 55 51 39 47 49 37 48 36
1 | 42 50 61 48 55 61 66 66 61 49 53 39 54 51 58
2 | 130 64 52 63 81 59 71 71 54 65 54 41 59 45 49
3 | 91 110 94 98 121 101 92 131 74 92 94 85 53 67 62
4 | 84 95 72 105 59 61 102 81 66 79 48 57 68 79 46
5 | 125 57 36 80 76 81 159 68 72 68 69 67 108 71 105
6 | 82 68 44 51 131 90 123 76 63 69 66 82 72 63 55
7 | 74 61 58 23 58 80 104 36 21 59 72 29 78 51 42
8 | 46 36 29 25 36 70 27 21 39 47 50 93 90 19
9 | 30 31 27 27 26 69 83 24 27 32 38 82 81 69 34
10 | 52 42 37 56 45 107 54 50 18 27 19 61 87 74 46
11 | 13 29 19 26 22 41 51 21 17 14 7 35 50 48 28
12 | 27 23 14 62 14 46 39 11 25 16 4 34 51 22 12
```

```
13 | 49 14 9 17 26 25 41 11 14 19 8 12 42 15
14 | 17 10 9 7 20 52 51 7 28 7 3 10 20 28 21
15 | 10 12 11 11 22 25 25 11 25 23 8 14 13 43 9
16 | 22 12 23 12 21 36 25 10 16 8 12 14 19 17 13
17 | 12 12 8 9 13 25 24 24 11 15 32 19 43 16 31
18 | 14 13 16 19 33 14 28 14 15 12 18 24 17 11
19 | 19 21 28 23 24 28 24 19 33 22 26 21 28 19
20 | 33 48 28 32 30 36 43 44 25 31 42 41 41 33 40
21 | 29 72 30 27 39 44 36 34 32 34 34 27 40 35 31
22 | 52 27 29 32 42 63 44 28 31 58 33 34 30 33 35
23 | 34 26 27 38 38 40 31 27 28 29 35 36 36 38 49
---+------------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

------------------------------------------------------------
| Sep 1997 | 10x % reflec. time | horiz: day | vert: time |
------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+------------------------------------------------------------
0 | 44 55 50 38 47 33 33 40 42 47 31 40 28 29 49
1 | 56 57 41 48 47 54 44 44 44 50 32 48 30 32 56
2 | 56 53 42 50 57 37 45 39 54 50 53 73 37 29 48
3 | 81 56 57 81 72 51 54 58 62 68 45 67 46 37 41
4 | 54 67 63 58 38 45 56 51 66 68 46 52 52 46 44
5 | 59 46 62 35 59 83 42 63 55 52 60 69 76 33 54
6 | 72 65 51 36 67 58 44 86 46 61 74 43 55 59 50
7 | 22 40 62 36 49 43 35 51 45 45 30 36 36 32 30
8 | 41 44 24 11 49 60 19 53 31 60 16 49 79 14 31
9 | 30 26 14 12 55 40 20 36 19 41 23 35 39 12 26
10 | 26 15 10 14 61 42 25 34 23 37 27 40 39 19 30
11 | 20 12 12 18 41 31 30 35 14 30 31 34 44 11 20
12 | 10 15 14 8 34 39 11 24 13 22 10 8 27 6 15
13 | 6 7 8 10 27 21 8 17 10 6 6 12 26 4 6
14 | 5 17 5 9 18 14 7 10 4 6 8 8 19 5 3
15 | 11 9 8 8 12 14 14 13 5 9 9 21 11 7 5
16 | 17 10 14 16 16 24 13 24 12 13 19 22 18 17 16
17 | 10 18 13 17 13 14 13 25 9 13 11 37 13 18 9
18 | 12 18 18 22 18 15 18 13 13 11 20 46 29 20 15
19 | 25 22 11 39 34 61 16 20 19 22 23 9 12 19 24
20 | 34 35 29 49 31 26 35 23 32 30 37 47 22 21 27
21 | 42 28 30 41 35 29 26 43 30 36 33 21 18 36 33
22 | 49 25 36 36 40 50 30 44 34 38 27 34 46 31 34
23 | 48 38 26 50 36 42 37 30 30 26 30 37 31 27 29
---+------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

Notes:
. alpha Aurigids early September
. local time = UT + 2 hours.

Pierre De Groote / comments by C. Steyaert

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south, elevation 65 deg
Receiver: AR-8000 at 53.7600 MHz, SSB mode.
Transmitters: 1) 30 kW TV video carrier from Bari, Italy, distance 700 km, direction south 2) a 30 kW TV video carrier from Sicilia, Italy, distance 900 km, south. Both transmitters are on the same frequency (+/- 10 Hz) and are processed within the same 40 Hz receiver channel. Several high mountains in transmitter direction prevent direct and tropospheric reception.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record the audio signal. 20 channels of 2 Hz width are used for meteor identification, pictures with interference, sporadic-E, E-layer and FAI propagation are manually rejected.

All meteor counts below are corrected for a full hour observing time. If the recording duration is 20-40 minutes, a dot is shown after the value. Data for less than 20 minutes observing time are not shown here.

Counts of reflections longer than 6.5 seconds: assumed to be overdense.

The Nothingnids

| Sep 1997
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---
0| 9 6 5 3 4 3 2 0 2 0 2 0
1| 7 9 0 4 11 6 3 0 6 5 1 7
2| 11 8 6 10 14 7 4 5 2 5 5 3
3| 6 5 5 5 7 6 7 4 7 4 5 4
4| 6 5 10 4 12 2 7 3 12 7 8 14
5| 9 15 4 10 4 4 5 4 10 6 7 7
6| 14 3 5 8 6 9 14 1 6 12 5 5
7| 6 13 8 5 5 4 12 7 4 11 15. 5
8| 7 8 7 3 8 9 2 15 4 4 12 11
9| 11 5 8 4 7 8 10 7 3 8 11. 2
10| 7 1 5 4 5 2 5 3 2 6 3. 3
11| 12 3 3 3 0 3 2 9. 5 6 6
12| 6 4 0 0 7 1 5 2 2 2 6 5
13| 5 2 1 2 1 0 1 2 4 1 4. 6
14| 4 1 1 1 0 1 0 3 3 8. 5
15| 1 0 4 0 1 1 4 4.
16| 2. 0. 0. 0 2
17| 1 3 1
18| 0 7. 0. 0 1
19| 2. 0. 0 6 3. 2 3 0 0
20| 0 3 1 3 1 0 1 0 2
21| 6 3 6 7. 1 0 3 1 3 2
22| 5 1 7 0 2 7 0 2 2 0 2 0
23| 12 4 1 2 3 1 2 3 2 1 0 1
---+---

```
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Sep 1997

| Sep 1997
UT| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+-------------------------------------------------------------
0| 0 2 1 0 3 3 1 2 1 3 1 0 3
1| 4 3 4 1 1 4 3 1 0 3 2 4 2
2| 4 7 3 2 0 1 3 1 2 5 6 5 8
3| 5 3 11 0 4 6 6 5 3 3 3 3 3
4| 5 7 5 5 2 3 7 2 6 4 4 5 3
5| 5 6 3 4 12 2 1 8 8 6 7 3 8
6| 7 7 5 5 6 6 5 4 8 5 5 6 4
7| 7 8 3 6 7 6. 6 2 5 5 9 9 10
8| 10 13 2 7 8 2 5 4 6 5 2 9 5
9| 6 7 3 5 2. 0. 6 6 14 6 6 10 7
10| 6 6 1 17 1 8 5 2 7 5 10
11| 3 2 5 6 7 0 3 2 3 3 3
12| 3 3 2 1 4 1 1 1 3
13| 0. 4 1 2 1 1 0 0 1 1 1
14| 1 2 2 4 0 2 2 1 0 0 0
15| 0 1 1 0 2 0 1 1 0.
16| 8. 1 2. 0 0 0 0.
17| 0 0. 0 0 0 2 0.
18| 1 6. 1 0. 0 0
19| 0. 0. 0. 0 0 1 2
20| 0 0. 0 0 1 1 0 2. 0 2 1 2
21| 1 1 0 0 3 1 0 1 1 4 1 2
22| 3 2 0 3 1 1 0 0 1 1 2 1
23| 1 3 2 2 0 0 2 0 1 2 0 0
---+-------------------------------------------------------------
UT| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
| Sep 1997

Notes:
. blank value means either few or no data available, interference,
sporadic-E, E-layer or FAI propagation, or offline.
. nothing special to report during September 1997, also no event in
the counts of other duration length (0.5 - 120 seconds).
. no sporadic-E propagation in September 1997 detected.
. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)

Werfried Kuneth

--------------------------------------------------------------------------------
Observer: Sadao Okamoto
Location: Damine Meteor Observatory, Japan (137.53 E, 35.07 N)
Transmitter: HAM beacon for RMO (50 W CW, 53.7500 MHz) by
JA9BOH Kimio Maegawa. No modulation except for identification.
Antenna: 2 element Cross Yagi 4 dBi aiming to Zenith. Omnidirectional
above 15deg el.
```

Location: Fukui-NCT at Sabae city (136.2 E, 35.9 N)
At present time about 10 observer are listing for
Kimio Maegawa's 53.75 MHz beacon.
Receiver: IC575
Antenna: 2 element Yagi, pointed to the zenith
Observing method: FFTDSP software, manual count.

Notes:
-: lost counts because of high noise level or machine failure.
@: Hourly rate estimated by effective observation time less than 60 min.
n: Contamination due to radio noise
e: Contamination due to sporadic E opening
f: No data available due to TX or RX failure
JST = UT + 9 h

Hourly echoes over 10 dB SNR
1997
Sep|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Sep|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+---
01 |47 46 44 45 52 53 72 42 32 30 19 n n 16 21 16 9 15 10 9 15 26 38@49
02 |44 65 56 45 46 52 51 46 30 32 23 30 23 20 25 14 16 10 @6 19 30 51 40@49
03 |41 32 47 36 39 61 37 47 32 26 22 15 18 11 12 18 19 11 16 13 15 33 36@36
04 |31 43 38 56 58 62 52 n n n n n n n n n 18 17 20 34 32 43@39
05 |40 55 56 49 48 65 50 40 36 34 27 25 18 26 32 28 19 19 18 12 24 44 39@37
06 |42 51 52 52 48 52 46 44 38 34 30 32 15 27 n 10 21@19 21 26 23 35 25@40
07 |28 33 41 46 45 37 40 44 40 41 29 28 28 28 20 17 27 19 24 19 24 38 32@25
08 |45 38 36 41 59 35 46 36 31 39 37 33 22 23 25 24 26 14 16 16 15 40 43@36
09 |28 29 40 32 47 46 41 36 45 37 23 15 30 33 31 30 22 22 16 22 19 38 30@36
10 |40 32 52 55 43 55 47 61 46 55 n 32 29 32 23 n n 19 18 17 31 47 35@55
11 |39 41 54 45 37 49 62 53 49 47 31 42 31 40 17 29 25 17 20 9 24 53 39@37
12 |31 51 45 65 45 41 51 39 50 37 27 26 24 n 27 27 25 26 13 26 24 35 31@50
13 |46 46 45 51 50 42 52 49 41 30 31 31@40 30 37 8 11 18 9 34 35 31 47 --
14 |47 41 46 63 34 36 59 39 40 35 24@30 26 28 24 16 28 16 7 14 13 42 36@35
15 |22 22 56 43 38 48 51 31 39 29 27 30 35 27 30 9 29 15 14 12 28 45 47@33
16 |26 35 49 49 41 53 56 47 38 38 37 36 31@33 n 25 15 21 13 14 31 28 38@39
17 |36 44 48 48 49 41 44 41 45 28 23 22 19 25 21 18 30 9 25 17 33 30 37@35
18 |42 43 49 51 48 60 36 45 37 40 21 28 n 23 33 24 25 18 13 16 26 32 37@35
19 |45 48 46 51 53 49 59 50 25 35 n 39 24 32 16 22 23 14 17 26 20 27 46@55
20 |36 38 52 59 50 54 58 52 42 45 23 34 26 30 17 n 17 19 f 20 31 35 33@36
21 |37 49 52 56 50 59 70 51 35 45 21 36 27 32 27 n n n 13 14 32 51 29@35
22 |36 38 47 54 50 46 50 57 31 33 n 35@27 31@10 26 20 20 31 20 22 40 39@48
23 |33 37 46 52 35 43 55 42 34 31 29 28 33@20 26 15 15 25 18 10 30 42 45 --
24 |40 46 47 43 56 38 33 38 28 23 n n 24 20 19 16 22 9 15 13 23 23 28@26
25 |37 38 53 50 51 42 37 50 44 21 27 23 22 16 13 23 21 14 18 13 24 35 49@31
26 |32 37 41 41 29 45 35 37 24 32 24 24 22 15 19 23 15 19 13 21 22 30 40@38
27 |31 39 48 45 51 41 39 39 32 36 36 34 n n n 21 16 20 19 20 26 32 39@42
28 |31 29 42 57 44 53 42 46 33 24 23 18 22 18 14 17 16 13 6 15 21 24 33@34
29 |46 41 46 50 49 45 54 43 30 19 21@14 26 23 31 19 21 9 14 15 36 37 44 --
30 |21 41 44 49 49 66 50 52 47 34 29 19 29 n@14@13 e e 15 13 23 33 28@30
---+---

```
Sep|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
Sep|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
1997

Echoes with duration > 5 s
1997
Sep|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Sep|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+------------------------------------------------------------------------
01 | 4 4 8 5 2 2 1 1 2 1
02 | 1 1 3 4 3 4 6 1 1
03 | 2 2 3 2 3 1 1 1 2
04 | 1 2 4 5 6 2 3
05 | 4 1 4 2 10 4 3 4 1 2 3 2 1 1
06 | 1 3 2 2 3 3 2 6 6 3 3 8 1 1
07 | 1 2 2 5 2 2 2 1 1 1 1 1 1 2 1 1
08 | 1 4 2 4 5 3 2 2 1 2 3 1 3 1 1 1 2 1
09 | 2 1 3 3 5 6 3 3 9 2 2 2 1 1 2 2 1 1 1
10 | 1 3 1 5 4 2 2 1 1 1 1 1
11 | 1 6 2 2 2 6 4 3 2 2 1 2
12 | 2 2 2 2 2 3 2 3 2 1 2
13 | 1 2 3 1 2 1 1 4 2 2 1 1 1 1 2
14 | 4 2 1 2 5 1 1 1
15 | 1 1 2 1 3 1 2 2 1 1
16 | 1 2 1 3 1 4 5 1 2 1 2 1
17 | 2 3 1 2 1 1 1
18 | 1 1 9 1 1 1 2 1 1 1
19 | 1 1 1 2 2 2 1 2 3 2 1 1 1
20 | 2 3 1 1 2 4 2 2 2 1 1 1 1 1
21 | 1 1 1 4 2 2 3 3 2 1 1 1 1 1 2
22 | 1 1 2 2 2 4 1 1 1 1
23 | 1 2 2 3 4 1 3 3 1 1 2 1 1 3
24 | 1 2 1 2 1 4 1 1 1 1 2 1
25 | 1 1 1 5 5 1 2 2 3 2 2 1 1
26 | 1 2 2 2 5 3 1 1 1 1 2 1 1 1 1 2
27 | 2 1 2 1 1 1 2 2 1 1 1 1 2
28 | 1 2 1 3 3 1 2 1 2 1 2 2 3
29 | 3 1 1 3 3 2 1 1 1 1 1 1 1
30 | 2 2 3 2 3 4 2 3 1 1 1 2 1
---+------------------------------------------------------------------------
Sep|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
Sep|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
1997

Daily rate of long echoes (T > 20 s)

Sep 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---------------------------------------------------------------
9 0 1 3 4 7 3 7 4 6 3 3 2 0 2
```

Sep 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---
1 1 2 2 3 4 2 2 2 3 1 1 2 3 3

Sadao Okamoto / via Kimio Maegawa

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. CONTRIBUTORS / USEFUL ADDRESSES

Enric Fraile Algeciras (EA3BTZ)
Frederic Corominas 58, Torrelles de llobregat, E-08629 Barcelona
E-mail: EA3BTZ@mx3.redestb.es

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK

E-mail: kuneth@net4you.co.at

Kimio Maegawa
Fukui National College of Technology, Electro-Information Course
67-9 Shimo Asojima Ohno Fukui 912 JAPAN
E-mail: kmaegawa@fukui-nct.ac.jp

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Sadao Okamoto
E-mail: okamoto@jim.sugiyama-u.ac.jp

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
homepage: http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

W.T. Zanstra
Spijkerlaan 13, 9903 BB Appingedam, Netherlands
tel: +31 (0)596 625617
Email: via tonsch@nfra.nl

--
Christian Steyaert (RMOB9709) 7 October 1997
--

2585. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-08 00:00:00 UTC
From: dj0my@aol.com
Message-ID: <19971008200300.QAA03779@ladder01.news.aol.com>
Source record: 17854

Hi everybody,

today the PROGRESS cargo ship docked with MIR. There has been
one day of delay, because of some technical problems with the removal
of the old PROGRESS which was still docked on the docking port.
(the miniature Sputnik and other things arrived with this cargo ship)

Now let's hope that they throw it "out of the hatch" very soon..... ;-)

Best 73,

Oscar DJ0MY

2586. Icom PCR1000

Newsgroup: rec.radio.amateur.space
Date: 1997-10-08 00:00:00 UTC
From: Michael Blake <k9jri@worldnet.att.net>
Message-ID: <01bcd445$e086e4e0$3a20420c@mb2.d51.lilly.com>
Source record: 17855

I have an IC-PCR1000 computer controlled receiver on order. I have a few questions. Facts or opinions are welcome.

1. Any opinion on using it as the receiver for space use. The receiver is all mode and covers from 100kHz to 1.3 gHz.
I would expect to use a mast mounted preamp on 432 and 1.2.

2. How about slaving it to a low cost Icom HF xcvr, like a 707, with the CIV16 unit for use as a 28mHz source for the
transmitting convertor?

3. Has anyone actually seen one? What was your impression.

Mike Blake
K9JRI

2587. Satellite industry links

Newsgroup: rec.radio.amateur.space
Date: 1997-10-09 00:00:00 UTC
From: M Armstrong-Smith <mcom@globalnet.co.uk>
Message-ID: <01bcd4ae$3d57e620$81577ec2@default>
Source record: 17856

This free major resource on the web is intended for use by satellite and space industry professionals.

Containing links to hundreds and hundreds of industry web sites this is believed to be the largest and most extensive listing of its kind. It is derived from the list of links used internally within Microcom Systems Ltd for research on the web.

Categories in the listing include:

Space Agencies
Launch Vehicles and Services
Satellite Manufacturers
Satellite Operators
Satellite Service Providers
Professional Equipment Suppliers
Consumer Equipment Suppliers
Regulatory Agencies
Broadcasters
Standards Agencies
Professioanl Services
Universities and Research Centres
Trade Associations
Space Resources

Satellite Links can be viewed by visiting
http://www.users.globalnet.co.uk/~mcom/

If you would like to see your company web site listed in Satellite Links, contact Mike Armstrong-Smith at mcom@globalnet.co.uk

Company entries are included at no charge. Expanded entries including company address, phone and fax numbers, email address, as well as product details are available for a charge of £95 plus VAT (currently 17.5%).

Microcom Systems Ltd is a consultancy specialising in satellite communications.

2588. FS: Used tubes, Microwave Components, Test Equipment

Newsgroup: rec.radio.amateur.space
Date: 1997-10-09 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <61imha$me7$25@ha1.rdc1.occa.home.com>
Source record: 17857

```
Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
-------------------------------------------
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each

Test Equipment, working, but not recently calibrated, may need minor
repairs & calibration.
-------------------------------------------
Hewlett Packard 8640B/323 ( AN/USM 323 ) Signal Generator, $395.00

Microwave Components, used, untested, sold "as is".
-------------------------------------------
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Sale prices valid until 10-20-97 or while supply lasts.
```

2589. Bran New Cheerleader Pictures

Newsgroup: rec.radio.amateur.space
Date: 1997-10-09 00:00:00 UTC
From: chrisj@webtv.net
Message-ID: <61jlnp$90r$18@PaperBoy.livenet.net>
Source record: 17858

Hey,
Here's a site with archives of: -Nude CHEERLEADERS
-Latina Women!
-Naughty Secretaries
-Sluts in High Heels

http://www.mephoto.com

2590. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-09 00:00:00 UTC
From: wb6w@netcom.com
Message-ID: <wb6wEHt5oI.771@netcom.com>
Source record: 17859

My newsreader claims that SCO (sco@sco-inc.com) wrote:
: pwinter@best.com (Patty Winter) wrote:

: >In article <0a.1386855@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
: >>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:

(snip)
: >>If they can launch a satellite from MIR why can't AMSAT launch from
: >>MIR ???
: >
: >
: >Note the phrase "hand-launched." If I read the Sputnik II Web site
: >correctly, the satellite is about 7.5 inches in diameter. Phase 3D
: >is about six feet across (not including solar panels) and weighs,
: >I believe, a few hundred pounds. Not exactly a good "pick it up and
: >toss it out the airlock" candidate. Oh, and then there's the orbit...
: >
: >
: >Patty

: Oh I know that. I mean why can't we (AMSAT) design a small satellite
: that we COULD launch from MIR ?

: W4SCO

well.... AMSAT did build up a bunch of "microSats" a few years back.
As I recall they were rather Borg-like cubes that were 9 inches or so
on a side. Throwing such a bird out the window on MIR would be quite
simple. Getting it TO the window - that's a bit more difficult!

seventy trees - Glenn
--
****
* "Two wrongs don't make a right, but three lefts do." *
* *
* wb6w@netcom.com - Glenn Thomas *
****

2591. Cheerleaders have very long legs!

Newsgroup: rec.radio.amateur.space
Date: 1997-10-10 00:00:00 UTC
From: jimdec@outernetix.com
Message-ID: <61ktrp$q6j$53@PaperBoy.livenet.net>
Source record: 17860

-(10,000 pictures of beautiful hot sexy Celebrities CD-ROM - ME#3)-
Questions? CALL US IN USA 1-757-484-7538
(http://www.mephoto.com)

Check this out:

600+ pictures of Cindy Crawford
400+ pics of Pamela Anderson
250+ pics of Elle Macpherson
200+ pics of Christina Applegate
200+ pics of Alicia Silverstone -==< 10,000 CELEBRITIES!! >==-
200+ pics of Mariah Carey
200+ pics of Sandra Bullock
150+ pics of Liv Tyler, young star
130+ pics of Niki Taylor
130+ pics of Kate Moss!!! For a list of ALL files on the CD
100+ pics of Madchen Amick goto www.mephoto.com
100+ pics of Racquel Darrian - *WOW*
80+ pics of hot model Jenny McCarthy! (Nudity!)
80+ pics of Paulina Poriskova, sexy supermodel!
70+ pics of Bridget Hall, supermodel!
50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
50+ pics of Daisy Fuentes, hot spanish VJ
50+ pics of Salma Hayek, sexy latina actress! ORDER NOW!
50+ pics of Teri Hatcher 1-757-484-7538
* 4000+ pics of other NUDE stars
* 4000+ pics of PG-13 rated celebrity poses
* 10,000+ pictures total, thats TEN thousand!
* Graphics viewing software for Windows3.1/DOS/Win95
* CD is BBS ready, with descriptions of files! And its Mac readable!
* Many more features and pictures of stars!
* NO AMATURE MODELS! - ONLY Celebs!
* If you have ME#1 and ME#2 - This CD is all the stars/celebrities from them

(For MORE information content at http://www.mephoto.com)
or call 757-484-7538 in USA to order via phone!

Other information:
* Packed in white shipper: No signs of nudity (Wife protection plan!)
* There are over 10,000, that's TEN THOUSAND FILES, on ME#3 alone!
* All pictures are high quality at least 640x480!
* Directories are arranged in NUDE/NON NUDE format for easy use!
* Graphics viewing software for Windows/DOS/Win95
* CD Is ISO-9660 Macintosh compatible if you have a Mac JPG viewer
* It's truly BBS-ready with detailed descriptions of all files!

* ME#3 will save you -ALOT- of download/searching TIME & MONEY!
* Sysops! Has a files.bbs conversion program for different formats!
* Many more features.. Guaranteed or your money back!

This CD represents high quality work. Here is the pricing:
$$$ $36 each (plus $2 shipping, $5 shipping outside USA) $$$

(*) For FAST results, visit http://www.mephoto.com
And fill out a order there. We take all methods of payment.

(*) AOL USERS: You must use AOL 3.0 Web Browser or HIGHER to order at our
automated web site, otherwise request an order form via email.

(*) Or call 757-686-1271 to order via credit card over the phone!

(*) If you can not access the World Wide Web and would like an ORDER FORM
sent to you by email, reply to this message at cds@mid-night.com
If you have any further questions feel free to email us!

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ Midnight Escape ~'..

2592. FT-767 info/opinions?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-10 00:00:00 UTC
From: sbabb@lpub.NoQRM.com
Message-ID: <61l7rc$qbl@news-central.tiac.net>
Source record: 17861
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space

I'm looking for a "new" HF radio.

My Icom 730 has served well, but I'm looking for something that will cover 160 meters and give me more sensitivity and better filtering (particularly on SSB.) I like dxing, ragchewing, rtty/amtor/packet, and contesting. I live down the road from KC1XX, so I don't even see myself as a "little pistol" in contests (maybe more of a "rusty slingshot") but I enjoy seeing what I can do with my R5, doublet, and 100 watts.

I saw a Yaesu FT-767 GX II at the Rochester, NH hamfest last weekend. I didn't get much of a chance to look at it because someone bought it (for $1400 or so, I think) within minutes of me starting to look at it. It had modules for 6M, 2M, and 70cm. This interested me because I'd like to take a shot at the satellites, and it would also let me operate 6M dx and maybe a few of the local repeaters.

Since then, I've poked around dejanews and the web looking for info on this radio. As often happens, I found more questions than answers. So I've brought my questions to you:

1. What is the difference between a FT-767, a FT-767 GX, and a FT-767 GX II?

2. How are the filters in this rig? As 20 meters gets uglier, better filters seem to be what I need the most (followed by more receiver sensitivity.)

3. You can contest with any radio, but some are better than others. Do any contesters have comments on this rig?

4. Anyone want to comment on their experiences with the VHF/UHF modules and satellite work?

5. Are there other rigs that are as versatile as this one appears to be?

Thanks and 73,
Scott WA1VHT

(Please remove the "NoQRM." from my return address to reply.)

Remove the "NoQRM." in my address to reply. Don't you hate unsolicited e-mail advertisements? Me too. I apologize for the inconvenience.

Scott Babb - WA1VHT - Littlefield Publishing

2593. FS: Used tubes, Test Equipment and Microwave Components

Newsgroup: rec.radio.amateur.space
Date: 1997-10-10 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <61n2srgkb25@ha1.rdc1.occa.home.com>
Source record: 17862

```
Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
-------------------------------------------
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each

Test Equipment, working, but not recently calibrated, may need minor
repairs & calibration.
-------------------------------------------
Hewlett Packard 8640B/323 ( AN/USM 323 ) Signal Generator, $395.00

Microwave Components, used, untested, sold "as is".
-------------------------------------------
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
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HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
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HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Sale prices valid until 10-20-97 or while supply lasts.
```

2594. ARLS032 Sputnik model launch delayed

Newsgroup: rec.radio.amateur.space
Date: 1997-10-10 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arls032.1997@arrl.org>
Source record: 17863
Cross-posted to: rec.radio.info,rec.radio.amateur.space

SB SPACE @ ARL $ARLS032
ARLS032 Sputnik model launch delayed

ZCZC AS32
QST de W1AW
Space Bulletin 032 ARLS032
From ARRL Headquarters
Newington, CT October 10, 1997
To all radio amateurs

SB SPACE ARL ARLS032
ARLS032 Sputnik model launch delayed

It now appears that the launch of a working model Sputnik 1 from the Russian Mir space station won't happen until October 18-20, and perhaps later. According to AMSAT News Service, the model Sputnik, assembled by students in Russia and equipped with a 2-meter transmitter by students in France, was to be aboard the Progress rocket that docked aboard Mir this week. Earlier information from several sources--including the sponsors--had indicated the model satellite would be launched from Mir October 4, the 40th anniversary of the original Sputnik 1 satellite.

The Sputnik-40, as it's called, reportedly will be hand-released by the Mir crew during a space walk. Latest information indicates the mini-satellite will transmit a ''beep-beep'' signal on 145.800 MHz (FM) from its 200-mW onboard transmitter. The batteries are expected to last a month or two.

For additional details and photos see
http://www.oceanes.fr/~fr5fc/spoutnik.html.
NNNN
/EX

2595. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-10 00:00:00 UTC
From: markv@pixar.com
Message-ID: <61lmjr$n2c$1@atlantis.pixar.com>
Source record: 17864

In article <3439a8f5.2017469@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
>pwinter@best.com (Patty Winter) wrote:

>Oh I know that. I mean why can't we (AMSAT) design a small satellite
>that we COULD launch from MIR ?

You know, that's a darned fine question! :)

By trying to make a satellite which is all things to all people, we have created an expensive payload, which is very expensive (by amateur standards anyway) and creates a single-point-failure situation for amateurs. (If the Arian destructs itself, I know there will be many unhappy campers, it will take a long time to recover).

As for hand launching from Mir, the satellite's orbit will decay rather rapidly. This limits the longevity of any satellite in low earth orbit.

I know that AMSAT has been intersted in the micro-sat concept for along time. Can anyone who is closer to this subject update us on what we are likely to see in this regard in the future?

>W4SCO
--
Mark T. VandeWettering (KF6KYI) Telescope Information (and more)
Email: <markv@pixar.com> http://www.idle.com/~markv/
<kf6kyi@qsl.net> http://www.qsl.net/kf6kyi

2596. HOW TO ATTRACT GIRLS INSTANTLY....Secrets to instant sex appeal

Newsgroup: rec.radio.amateur.space
Date: 1997-10-11 00:00:00 UTC
From: INSTANT SEX APPEAL <larry@sprynet.com>
Message-ID: <61nbnc$p8u$16989@ddi2.digital.net>
Source record: 17865

HOW TO ATTRACT GIRLS INSTANTLY....Secrets to instant sex appeal

PURE INSTINCT PHEROMONE ATTRACTANT FOR MEN
WILL GIVE YOU AN UNFAIR ADVANTAGE WITH WOMEN
GUARANTEED

(or your money back)!

Everyone knows that some men (a tiny minority) are able to instantly attract women. It used to be known as "animal magnetism". Scientists now say this natural attraction is due to pheromones - body smells that are not consciously detected, but that effect the behavior of others towards the person giving off these chemical signals. It's natures way of attracting the opposite sex. Scientists have now isolated and synthesized two natural Attractants- androstenol and androstenone pheromone. Carefully controlled experiments show they work and have been widely reported on television and in both the British and international press. Androstenone pheromone has been successfully tested on BBC TV's "TOMORROWS WORLD" and by Desmond Morris (Author of "The Naked Ape" and "Manwatching" and renowned human behaviorist) on BBC TV's "Friday Night... Saturday Morning."

New improved formula PURE INSTINCT from ICT Research Technology contains both ANDROSTENOL and ANDROSTENONE pheromone and produces and undetectable scent that subconsciously attracts women to the wearer. PURE INSTINCT is the world's number one selling and the most concentrated (5 - 7 x normal active strength) pheromone spray for men - don't be misled by cheaper (or more expensive) imitations.

WHAT THE PRESS SAY:

* Lowell Ponte, a former consultant on exotic weapons and a Readers Digest science writer, said in an interview that "use of the recently discovered chemical Androstenone should be banned. Congress should pass a law making it a crime to use this chemical to influence voters by making politicians appear more lovable.
- The San Francisco Chronicle -

* "The stuff attracts women like you wouldn't believe"
- Colorado Telegraph

* "And now this pheromone has been marketed, we've tested it - and good grief it works"
- Koave

* "pheromones influence human behavior in a subtle way. Women are attracted to the smell"
- The Daily Telegraph

* "Pure Instinct is likely to produce a state of sexual excitement or arousal"
- Men Only (Vol. #44 No. 4)

Much of our sales of PURE INSTINCT are reorders from existing users, reports confirm success. "PURE INSTINCT really does seem to work! The most dramatic instances have occurred when wearing it at discos. Girls just drift towards me and start flirting."
-DT Cardiff

"I Knew PURE INSTINCT wasn't a gimmick when one of the girls at work, quite out of character, started to seduce me when we were alone in the office."
-SD Nottingham

PURE INSTINCT comes in a discreet 15ml pocket roll on container with full instructions, Ideal for any man who wants to join that lucky few who have more than their fair share of sex appeal.

30 DAY MONEY BACK GUARANTEE

If you are not 100% delighted with the results from using PURE INSTINCT simply return remainder within 30 days for a full refund- No questions asked!

C O N F I D E N T I A L I T Y Note:

We do not sell our database to any other company,
all of our order processing is done by our company alone, and orders are sent in plain, nondescript packaging. The confidentiality of our customers is maintained above all.

To order the " Pure Instinct Pheromone Sex Attractant" please fill out the following form and mail it to the address below.
(Feel free to write out the order form by hand, All funds must equal US dollars.

OVERSEAS ORDERS WELCOME BUT MUST PAY WITH US CASH
INTERNATIONAL MONEY ORDER OR TRAVELLERS CHECK

_____

Yes! I want to attract more women please send me _____ bottles of
PURE INSTINCT Price $29.95(U.S.) + $4.00 S/H U.S. OVERSEAS $8.00 S/H.
Please allow 1-2 WEEKS FOR DELIVERY.

I understand that if I'm not 100% delighted, simply return remainder within 30 days for a full refund.

I have enclosed check, cash or money-order for _____ (U.S.)

Name (Please use block letters)

_____

Address: _____

City, St.: _____

Zip: _____

E-Mail : _____
Please Mail to:

SMG Enterprises
1970 E. Osceola Pkwy
Suite 242
Kissimmee Fl.34743

2597. (No Subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-11 00:00:00 UTC
From: Pete deVolpi <amsoft@epix.net>
Message-ID: <Forum.876581414.23913.amsoft@m>
Source record: 17866
Cross-posted to:
rec.radio.cb,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew

```
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http://hamster.ivey.uwo.ca/~amsoft/

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------------------------------------------------------
Send E-mail to: amsoft@epix.net ,(Pete deVolpi, KC3TL)
Publisher of "The World of Ham Radio", Callsign CD-ROM
AmSoft,PO Box 666, New Cumberland, PA, 17070-0666, USA
This document was sent 10/11/97 AD, 10:49:39 EST,
FTP SITE: ftp://hamster.ivey.uwo.ca/pub/amsoft/
WWW SITE: http://hamster.ivey.uwo.ca/~amsoft/
------------------------------------------------------
```

2598. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-11 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34402AF0.5FAB@trader.com>
Source record: 17867

> You know, that's a darned fine question! :)

Agreed.

> This limits the longevity of any satellite in low earth orbit.

But it's dirt cheap! At $5000, if it only lasts a year....
----
n9vem

2599. ARLK079 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk079.1997@arrl.org>
Source record: 17868
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK079
ARLK079 Keplerian data

ZCZC SK79
QST de W1AW
Keplerian Bulletin 79 ARLK079
From ARRL Headquarters
Newington, CT October 11, 1997
To all radio amateurs

SB KEP ARL ARLK079
ARLK079 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97277.84210603 .00000065 00000-0 10000-3 0 5088
2 14129 26.2661 123.5522 6039277 157.0705 248.6734 2.05879961 79648
RS-10/11
1 18129U 87054A 97283.58310100 .00000010 00000-0 -57191-5 0 4076
2 18129 82.9290 153.4497 0010191 263.5639 96.4358 13.72382980516068
UO-11
1 14781U 84021B 97281.94482519 .00000256 00000-0 51012-4 0 00239
2 14781 97.8461 258.6992 0012218 5.1407 354.9922 14.69594761727967
RS-12/13
1 21089U 91007A 97282.83213319 .00000036 00000-0 22128-4 0 130
2 21089 82.9238 193.6195 0029874 341.2475 18.7574 13.74086743334908
UO-14
1 20437U 90005B 97282.15224029 .00000074 00000-0 45334-4 0 03205
2 20437 98.5121 1.3186 0010284 229.1316 130.8977 14.29975102402508
RS-15
1 23439U 94085A 97282.13333024 -.00000039 00000-0 10000-3 0 02602
2 23439 64.8170 328.5882 0146631 110.7142 250.9537 11.27528100114781
AO-16
1 20439U 90005D 97282.16318858 .00000049 00000-0 35724-4 0 01013
2 20439 98.5321 4.5203 0010693 232.2010 127.8209 14.30021008402522
RS-16
1 24744U 97010A 97282.09671473 .00005218 00000-0 17032-3 0 00930
2 24744 97.2647 184.9872 0009247 50.3850 309.8204 15.32159615033527
```

```
DO-17
1 20440U 90005E 97282.20767838 .00000026 00000-0 26743-4 0 965
2 20440 98.5343 5.5011 0010619 231.2354 128.7884 14.30164297402565
WO-18
1 20441U 90005F 97282.13820720 .00000038 00000-0 31258-4 0 01093
2 20441 98.5338 5.3179 0011150 233.8844 126.1301 14.30131104402552
LO-19
1 20442U 90005G 97282.16624628 .00000046 00000-0 34648-4 0 01125
2 20442 98.5381 6.0788 0011509 231.3543 128.6612 14.30247681402585
FO-20
1 20480U 90013C 97281.86387615 .00000003 00000-0 70987-4 0 00087
2 20480 99.0588 222.1366 0541466 120.0297 245.5662 12.83239018359288
AO-21
1 21087U 91006A 97282.11703348 .00000093 00000-0 82657-4 0 08677
2 21087 82.9424 327.2591 0034785 313.6181 46.2089 13.74586900335809
UO-22
1 21575U 91050B 97283.19810920 .00000064 00000-0 35629-4 0 8060
2 21575 98.2866 339.6023 0007085 274.2942 85.7434 14.37088752327005
KO-23
1 22077U 92052B 97282.03706894 -.00000037 00000-0 10000-3 0 06993
2 22077 66.0802 266.8646 0003915 180.9152 179.1855 12.86303780242398
KO-25
1 22828U 93061F 97282.12236325 .00000035 00000-0 31402-4 0 05744
2 22828 98.5327 354.1240 0009368 254.5735 105.4417 14.28193869178474
IO-26
1 22826U 93061D 97282.11547970 .00000031 00000-0 30010-4 0 05944
2 22826 98.5342 354.0222 0008449 270.5289 89.4927 14.27848943210348
AO-27
1 22825U 93061C 97282.71645939 .00000016 00000-0 23912-4 0 5916
2 22825 98.5333 354.3391 0007816 269.3037 90.7250 14.27738501210411
FO-29
1 24278U 96046B 97282.12666415 -.00000024 00000-0 14279-4 0 01184
2 24278 98.5293 307.7521 0350767 250.9846 105.2989 13.52633910056523
Mir
1 16609U 86017A 97283.69094171 .00005851 00000-0 76268-4 0 6933
2 16609 51.6590 225.3520 0006624 196.7154 163.3491 15.60324481665053

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
October 14, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2600. * SpaceNews 13-Oct-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-10-12 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1013.1997@ampr.org>
Source record: 17869
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1013
* SpaceNews 13-Oct-97 *

BID: $SPC1013

=========
SpaceNews
=========

MONDAY OCTOBER 13, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
During the month of October, there may be a few times when the Amateur Radio
equipment on board the Mir space stations is temporarily shutdown. People
should not panic if they should find the 2-meter station turned off for a
few days. The new crew is very busy storing the tons of supplies delivered
by the STS-86 Shuttle last week. Also, the Progress mission to Mir delivered
even more supplies during the first week of October including a scale model
of the original Sputnik satellite. The exact date this spacecraft will be
deployed from Mir is not yet known.

Some reasons for temporary shutdowns of the 2-meter Amateur Radio station
include:

1. The crew is Busy. Making Amateur Radio contacts is not their primary
mission in space.

2. Docking/undocking. When there is a planned docking or undocking of any
module, all un-used radio equipment is turned off for the duration of
the docking/undocking cycle.

3. Power rationing. Some experiments require large amounts of power.
Low priority experiments such as the Amateur Radio station will
sometimes be turned off for several hours during these periods.

4. While using the PMS. It is easier to edit the mail in the PMS mailbox
when the 2-meter transceiver is turned off, allowing the crew member
to concentrate on replying to mail sent over the PMS.

Help out the crew my limiting your packet access to Mir.

For the month of October, let's try to voluntarily limit the use of the
Mir PMS using the suggestions below. It is not a good idea to overwork

the crew by sending hundreds of messages to them and asking for replies. The crew members do not have very much free time to spend at the keyboard answering packet mail. It has been suggested that we break in the new crew members gently by following these simple guidelines:

1. Keep all messages short (there is only 13k of mail storage).

2. Send your message as a one way messages, such as greetings, introductions, etc. and do not try to ask questions requiring a reply.

3. Don't complain if you do not get any response from the crew.

More than one astronaut / cosmonaut has remarked that they do not like to make voice contacts because groundstations are too impatient to wait their turn. The Mir crew members are NOT CONTESTERS! When the crew is on voice, please follow these guidelines:

1. Listen for CQ

2. Listen for CQ

3. The crew members like to chat for 3-8 minutes per contact. If you are listening, you must wait for the CQ from the crew member before you transmit.

4. Do not transmit until the crew member has completely signed with the ground station. For example, "Thank you very much, this is KC5VPF clear with NA1UZN. CQ/QRZ?"

5. Do not bother the crews about QSL cards. N6CO is the QSL manager for all Russian and America crew members "living" on Mir. Note, N6CO does not do QSL for Shuttle missions or for other guests on Mir.

Remember, Mir is our stepping stone to the stars. Let's tread lightly.

[Info via Miles, WF1F]

* W3XO HONORED *
==========
AMSAT-NA President Bill Tynan, W3XO, has been elected a Fellow of the Radio Club of America. Bill is scheduled to receive his award at the Club's annual dinner, to be held 21-Nov-97 in New York.

The Radio Club of America, founded on 02-Jan-09, is the world's oldest radio communications society. The Club provides grants in aid to educational institutions and other worthy causes related to radio communications, as well as sponsoring technical meetings and publishing a journal, Proceedings. Its membership includes many leaders in amateur, commercial and government communications. Bill has been a member of the Club since 1992.

[Info via Ray Soifer, W2RS]

* FODTRACK 2.4 RELEASED *
==========
Manfred, XQ2FOD, reports releasing version 2.4 of his FodTrack program just

two days after releasing version 2.3. Version 2.4 adds an additional feature allowing it to perform Doppler tracking on the Yaesu FT-736 transceiver even for satellites that have uplink and downlink in the same band (like MIR).

FodTrack 2.4 was uploaded to KO-23 two weeks ago, and is available via the Internet from the AMSAT FTP server and Web site (ftp.amsat.org, www.amsat.org).

* SPOUTNIK-40 NEWS *
====================
Spoutnik-40, the official name for the Sputnik model to be deployed from the Mir space station is tentatively scheduled to begin operations between 18-Oct-97 and 20-Oct-97. Some reports indicate it may be deployed on 12-Oct-97.

Spoutnik-40's purpose is to help celebrate the 40th anniversary of the launch of the original Sputnik spacecraft (Sputnik-1) in October 1957. Spoutnik-40 carries a 2-meter FM CW/telemetry beacon on 145.800 MHz, and should be fairly easy to copy with a minimal satellite groundstation. A handheld receiver and a whip antenna may be suitable in many cases.

* RS-12 NEWS *
==============
Reports from users of the RS-12 satellite indicate thath the satellite remains in Mode A and is relaying distorted signals within its downlink passband. Some desense from the VHF commercial navigation transmitter flying along with the RS-12 transponder may also be the cause of some problems.

Not all satellite users appear to be happy with RS-12's switch from Mode KT to Mode A. Then again, not too many satellite users are pleased with the loss of RS-10. It is not clear whether RS-12's switch to Mode A was an error in commanding the satellite or was an intentional operational change. Users should keep tabs on the satellite, monitor telemetry transmissions, and listen to downlinks on 10 and 2 meters to help determine which mode the satellite is operating in.

* FEEDBACK/INPUT WELCOMED *
============================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948

Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2601. Re: Did Sputnik II launch ok?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-12 00:00:00 UTC
From: jjm@shore.net
Message-ID: <3440e227.3692482@news.shore.net>
Source record: 17870

In answer to the Subject..... No. Maybe in a couple of weeks.
==========
73 de WK1V, Jim Martin, jjm@shore.net
Ex: KB1LW <<>> N1CLS <<>> KA5MWD <<>> HL9ZF
http://www1.shore.net/~jjmartin/jjm.htm
==========
Spam Filter <.procmail> engaged at Shore.Net
==========

2602. ANS-285 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-10-12 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <61qo5r$j6p$1@news3.mr.net>
Source record: 17871

Please notify listserv@amsat.org if you would like to subscribe,
un-subscribe or change your Internet address for any of the AMSAT
lists. You may request to be added or deleted from the following
lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.
SB SAT @ AMSAT $ANS-285.01
AMATEUR RADIO ON ISS
HR AMSAT NEWS SERVICE BULLETIN 285.01 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.01
This past week, the following ground breaking announcement was made to the
international delegates that comprise the current Amateur Radio on the
International Space Station (ARISS) team:
"Dear Delegates:
Our joint collaboration at the ARISS International Conference last
November was extremely successful. The signed Memorandums of
Understanding representing our combined commitment to develop a
single, coordinated amateur radio station on ISS were presented to
the top ISS officials.
NASA HAS GIVEN US A COMMITMENT. AMATEUR RADIO IS NOW AN OFFICIAL
PAYLOAD OF THE INTERNATIONAL SPACE STATION".
For the past few years, the SAREX Working Group and last November the
ARISS-International team, have met with members of the International Space
Station (ISS) Program Office to gain acceptance of amateur radio on the
space station. These efforts, as well as discussions held this past month
with ARISS team member Matt Bordelon, KC5BTL, and the ISS Payloads Office
at the Johnson Space Center in Houston, have led to the following plan for
amateur radio on ISS.
The plan is divided into three distinct capabilities.
1. First, the delivery of a transportable amateur radio station.
With the first crew scheduled to arrive in January 1999 for a 5 month
stay. It must provide the basic capabilities that will allow the crew
to establish voice and packet contacts with friends, family, school
groups and other amateur radio operators.
It must be capable of operating from within the Russian Service
Module, a module with good Earth visibility and the primary crew
residence during the early part of the assembly sequence.
2. External pallets will provide the second capability and location for
amateur radio equipment. The EXPRESS pallets, located on the S3
(starboard) truss segment, are a perfect location for potential repeater
and microsat-type payloads. These pallets, which are due to arrive on
ISS-UF4 in January 2002, have power, thermal, and telemetry connections.
They also have good Earth visibility. Each pallet will be installed

robotically.
3. The permanent station will provide the third distinct capability. This permanent station is expected to house the most complete amateur radio station with the greatest functionality. The U.S. Habitation Module, currently scheduled for delivery sometime in 2002, will have good Earth visibility and plenty of feedthroughs for external antennas. During the international partners meeting in Houston, the team agreed that this station should include slow scan TV, fast-scan TV, packet, voice, and experimental modes. Moreover, the plan is for the station to include several frequency bands and modes (SSB & FM) and have the ability to interface with the ISS audio and video subsystems.
AMSAT-NA Vice President for Manned Space Programs, Frank Bauer, KA3HDO, announced: "This is truly a monumental decision which will solidify the future of amateur radio on manned space vehicles". He continued, "As our space explorers occupy the international space station and eventually venture to worlds beyond, amateur radio will continue to provide the adventures of space flight directly to radio amateurs, students and the general public on Earth".
When he learned of the decision to make amateur radio an official payload on ISS, Joerg Hahn, DL3LUM, from the German SAFEX team stated: "Thank you for your very POSITIVE mail...these are very stimulating news...it is a good sign to know that the ham activities will be an official part of ISS".
Like the current SAFEX, MAREX, MIREX and SAREX programs, the ARISS international partners are striving to develop an amateur radio station that will enable experimentation, promote interest in amateur radio, and spark student's interest in the science and technology fields. The ARISS team includes members from Great Britain, Germany, Italy, France, Japan, Russia, Canada and the United States.
Stay tuned to future ANS bulletins as the hardware concepts from the international partners solidify into a preliminary design.
For more information on the International Space Station and the planned assembly sequence, see: http://station.nasa.gov/station/assembly
[ANS thanks Frank H. Bauer, KA3HDO, of the SAREX Working Group for this report.]
/EX
SB SAT @ AMSAT $ANS-285.02
W3XO HONORED
HR AMSAT NEWS SERVICE BULLETIN 285.02 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.02
AMSAT NA President Bill Tynan, W3XO, has been elected a Fellow of the Radio Club of America. Bill is scheduled to receive his award at the Club's annual dinner, to be held November 21 in New York.
The Radio Club of America, founded January 2, 1909, is the world's oldest radio communications society. The Club provides grants in aid to educational institutions and other worthy causes related to radio communications, as well as sponsoring technical meetings and publishing a journal, Proceedings. Its membership includes many leaders in amateur, commercial and government communications. Bill has been a member of

the Club since 1992.
[ANS thanks Ray Soifer, W2RS, for this report.]
/EX
SB SAT @ AMSAT $ANS-285.03
STS-87 KEPS
HR AMSAT NEWS SERVICE BULLETIN 285.03 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.03
Below is the nominal State Vector and Keplerian Elements for
STS-87. The vector data comes from NASA; the Keplerian Elements
were computed from the vector.
This file may be read by VEC2TLE version 9648 to update your
Keplerian Elements text file.
Vector format = 10117
Satellite Name: STS-87
Catalog Number: 99987
Epoch MET: 0.03001030093
0/00:43:12.890 MET
EFG E: 9732372.589 ft
F: 17189716.790 ft
G: -9361179.872 ft
Edot: -21474.160303457 ft/s
Fdot: 9266.878065107 ft/s
Gdot: -5300.822941406 ft/s
ndot/2 (drag): 0.00040121794 rev/day^2
nddt/6: 6.72842E-09 rev/day^3
Bstar: 8.95827E-05 1/Earth Radii
Elset #: 1
Rev @ Epoch: 1.67780888922
Launch scheduled: 19-NOV-97 / 19:47 UTC
Note that "99987" is a temporary Catalog Number for STS-87. Once
STS-87 is launched, a permanent Catalog Number and International
Designator will be assigned.
The following Keplerian elements were computed by VEC2TLE from this
vector, and the scheduled launch time using a 1.0 drag multiplier:
STS-87
1 99987U 97323.85431586 .00040122 67284-8 89583-4 0 11
2 99987 28.4670 185.9357 0002865 329.1052 274.9205 15.96550274 16
Satellite: STS-87
Catalog number: 99987
Epoch time: 97323.85431586
Element set: 1
Inclination: 28.4670 deg
RA of node: 185.9357 deg
Eccentricity: 0.0002865
Arg of perigee: 329.1052 deg
Mean anomaly: 274.9205 deg
Mean motion: 15.96550274 rev/day
Decay rate: 4.01218e-04 rev/day^2

Epoch rev: 1
Checksum: 328
VEC2TLE may be downloaded from:
http://www.amsat.org/amsat/sarex/orbit.html
[ANS thanks Ken Ernandes, N2WWD, for this information.]
/EX
SB SAT @ AMSAT $ANS-285.04
2-METER ACTIVITY ON MIR
HR AMSAT NEWS SERVICE BULLETIN 285.04 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.04

During the Month of October 97, there may be a few times when the Amateur Radio equipment on board the MIR space stations is temporarily shutdown.. The new crew is very busy storing the tons of supplies delivered by the STS-86 Shuttle last week. Also, a new cargo Progress rocket is schedules to fly the first week of October, with even more supplies, including a scale model of the Sputnik Satellite.
Reasons for Temporary shutdowns of the Amateur Radio 2-meter Station
1. Crew is Busy: Amateur Radio is not their Primary Mission
2. Docking/undocking: When there is a planned Docking or Undocking of any module, all un-used radio equipment is turned of for the duration of the docking/undocking cycle.
3. Power rationing: Some experiments require a large amount of power. Low priority experiments such as the Amateur Radio station will sometimes get turned off for a few hours.
4. Using the PMS: It is easier to edit the mail in the PMS mail box, when the radio is off, and the crew member can concentrate on replying to mail sent over the PMS.

Help out the crew my limiting your Packet access:
For the month of October, lets try to voluntarily limit the our use of the PMS mail to the suggestions below. We do not want to over load the crews by sending hundreds of messages and asking for e-mail replies. The crews do not have very much free time to spend at the keyboard answering mail.

1. Keep your messages short (there is only 13k of mail storage)
2. Send your message as a one way messages, such as , Greetings, Introductions, etc. and do not try to ask questions requiring a reply.
3. Don't complain if you do not get any mail from the crew.
Voice operations:
More than one astronaut / cosmonaut has told me the do not like to work voice, because the crowds to not wait for their turn. The Crew members are NOT CONTESTERS! When the crew is on voice, do the following:
1. Listen for CQ
2. Listen for CQ
3. The crew members like to chat for 3-8 minutes per person. If you are listening, you must wait for the CQ from the crew member before you transmit.
4. Do not transmit until the crew member has completely signed with the

ground station, example, ?Thank you very much, this is KC5VPF clear with
NA1UZN, CQ/QRZ?
5. Do not bother the crews about QSL cards. N6CO is the QSL manager for
all Russian and America crew members living on MIR. Note, N6CO does not
do QSL for Shuttle, nor for other guests on MIR.
[ANS thanks Miles Mann, WF1F, for this update.]
/EX
SB SAT @ AMSAT $ANS-285.05
RS-17 INFO
HR AMSAT NEWS SERVICE BULLETIN 285.05 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.05
The Sputnik 1/3 scale, PS-2, will be RS-17 when released,
according to sponsor's web page. Listen on 145.82 FM
(145.80-145.85 for doppler?). Date of release has again been
pushed back to November 3rd, during the next EVA (spacewalk) from MIR.
[ANS thanks Philippe Mondon, FR5DN, for this information.]
/EX

SB SAT @ AMSAT $ANS-285.06
WEEKLY SATELLITE REPORT PT 1
HR AMSAT NEWS SERVICE BULLETIN 285.06 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.06
MIR
Simplex 145.985 MHz, FM
Dave Wolf has been active over Europe on phone.
He just called CQ but wasn't able to pick-up any callsign back.
Then he quickly announced that he had to turn off amateur radio since the
beginning of communications with the control center.
[ANS thanks Alain De Carolis, IW6PBC, for this report.]
SAFEX, MIR 70 cm Repeater
(Uplink 435.750 MHz FM, Downlink 437.950 MHz FM,
Subaudible tone 141.3 Hz)
Not operational at this time.
RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
RS-10 Still silent.
RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz .)
Operational, now in mode A. Some distortion has been report on the downlink
this week.
RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)
RS-16

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 , 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W
Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9
MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK.)
KO-23 operating normally with downlink efficiencies returned to >90%.
[ANS thanks Jim Weisenberger, AA7KC, for this report.]
KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM,
9600 Baud FSK.)
KO-25 operating normally
[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25.]
AO-27
(Uplink 145.85 MHz FM, Downlink:
436.792 MHz FM .)
Operational. It may be turned back to digital mode sometime Sunday 05-Oct.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]
FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX
SB SAT @ AMSAT $ANS-285.07
WEEKLY SATELLITE REPORT PT 2
HR AMSAT NEWS SERVICE BULLETIN 285.07 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 12,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-285.07
AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational,. AO-10 still has strong signals but occasional deep
fading during a perigee pass over the southern US on 9/30/97 at about
3500 miles using only a 3 element linear polarized 2m yagi without

preamp. For now AO-10 looks like its workable from some less elaborate
stations.
[ANS thanks Jim Dawdy for this report.]
OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz..)
Operating normally.
OSCAR-11 users are welcome to visit Clive's web site. It contains some
software for capturing data, and decoding ASCII telemetry and WOD.
There is an archive of raw data (mainly WOD) for analysis, which is
continually being expanded, as new data is captured. The URL is -
http://www.users.zetnet.co.uk/clivew/
[ANS thanks Clive Wallis, G3CWV, for this information.]
AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
Uptime is 1119/06:34:11. Time is Sat Oct 11 12:00:51 1997
Bat 1 Temp 2.419 D Bat 2 Temp 3.024 D
Baseplt Temp 4.234 D RC PSK BP Temp 1.814 D
RC PSK HPA Tmp 1.814 D +Y Array Temp -2.422 D
PSK TX HPA Tmp 1.209 D +Z Array Temp 16.336 D
RC PSK TX Out 0.428 W
Total Array C= 0.305 Bat Ch Cur=-0.004 Ifb= 0.041 I+10V= 0.272
TX:010B BCR:85 PWRC:59E BT:3C WC:25 EDAC:13
Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]
DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK.
Beacon 2401.220 MHz.)
DOVE has returned to 2 meters.
For those operating JOTA the weekend of October 25 you may want to take
your packet gear and attempt to copy DOVE (DO-17) on 145.825 MHz. DOVE
will be transmitting a greeting to JOTA operators from about Oct. 15th
through about Oct. 23rd. Transmissions will be 1200 baud packet and
standard packet equipment can demodulate this signal. The signal will
not be strong, the satellite will be transmitting about .8 watts day and
night. The Dove command team would suggest a small beam if you want to
assure success. The message will be transmitted about every 60 seconds
along with telemetry, and will be in ASCII text.
[ANS thanks Jim White, WD0E, for this update.]
WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25.)
No report available.
LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks:
145.84, 145.86, 145.88, 145.9 MHz FM, Downlink 437.125 MHz SSB,
1200 bps RC-BPSK.)
Operating normally.

Uptime is 843/21:54:00. Time is Sat Oct 11 11:59:10 1997
Bat 1 Temp 1.252 D Bat 2 Temp 1.252 D
Baseplt Temp 0.692 D RC PSK BP Temp 4.057 D
RC PSK HPA Tmp 5.740 D +Y Array Temp -3.796 D
PSK TX HPA Tmp 2.935 D +Z Array Temp -2.113 D
RC PSK TX Out 0.986 W
Total Array C= 0.159 Bat Ch Cur=-0.041 Ifb= 0.075 I+10V= 0.158
TX:01A BCR:80 PWRC:36E BT:3C WC: 0
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]
UO-22:
(Uplink: 145.9 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK.)
UO-22 is operating normally.
Chris Jackson, G7UPN / ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.
In the old task, once an upload was complete, the spacecraft had to
perform the checksum on the complete file. Depending on the file
length, this could take quite a long time. With the new task, the
checksum is computed on the fly - while the data is actually being
uploaded. Thus there is no need to recompute it at the end of the
transfer and this checksum delay is then removed.
However, all files that were started before Chris Jackson, G7UPN /
ZL2TPO, loaded the task around 1000 UTC on the 19th will receive a corrupt
body checksum error when the upload is completed. If the file is uploaded
again, it should be accepted. If trying to upload a large file that was
started before the above time, then start again.
If anyone gets persistent body checksum errors while uploading files to
UO-22 would they please let Chris Jackson know as soon as possible
[ANS thanks Chris Jackson, G7UPN / ZL2TPO,
Groundstation and Operations Manager, for this report.]
IO-26 (ITAMSAT)
Uplink 145.875, 145.9, 145.925, 145.95 MHz FM, Downlink 435.822 MHz SSB,
1200 Baud PSK.)
The actual beacon is:
26th September 1997 Happy birthday ITAMSAT!
Today IO-26 is 4 years old and all sub-systems are OK
Best wishes from the IT-AMSAT team
[ANS thanks Daniele, IK2XRO, and Piercarlo, IW2EGC,
ITMSAT Command Station for this report.]

[Please send your Satellite or News reports to ANS Editor B.J. Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]
/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL

Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2603. Re: Mir and Mirex and disapearing acts..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-12 00:00:00 UTC
From: dogpark@interlog.com
Message-ID: <19971012135253131799@209-20-0-87.dialin.interlog.com>
Source record: 17872

Dave Hendrick <dhendrick@turbont.net> wrote:

> And you are not seeing Miles on now because
> he has defined frequencies other that the published ones which he has
> them switch to when he has "official" business like saying hello. So
> remember when you don't see Mir on the right frequency Miles and
> Larson are on somewhere else.. enjoy... and use your head.... DAVE

So...what's your point ?

Are you just ticked because they didn't invite you ?

During the UHF experiment they were on the published frequency
more than 90% of the time - I know, I monitored most of the passes.

What have you got against MIREX ?

Use YOUR head: The $10.00 he charges barely covers production and
postage. If you don't want one - don't order one.

I maitain, your original post was offensive, un-gentlemanly and
very much out of keeping with the spirit of amateur radio.

I see by the responses however, that you speak only for yourself.

73 Don VE3VRW.

2604. ANS-286 SPECIAL BULLETIN

Newsgroup: rec.radio.amateur.space
Date: 1997-10-12 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <61rksn$s0j$1@news3.mr.net>
Source record: 17873

SB SAT @ AMSAT $ANS-286.01
P3D SPECIAL REPORT

HR AMSAT NEWS SERVICE BULLETIN 286.01 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 13,1997
TO ALL RADIO AMATEURS BT
BID: $ANS-286.01

During the last couple of weeks there has been quite some media-coverage of ARIANE 502, some of it with very little relationship to the facts. With this release we would like to put an end to some speculations and present the situation as it really exists today. Until the beginning of this year ESA analyze the flight-records of the ill- fated flight ARIANE 501 and as a consequence, the vibration specifications for AMSAT P3-D were more than doubled on the AR-502 flight.

AMSAT then immediately asked a specialist to analyze the impact of this change. This resulted in a list of modifications required for P3-D, and work was started without delay to implement them.
All flight-ready modules had to be removed from the satellite. The mechanical structure had to be partially disassembled and reinforcements and other components had to be added to harden P3-D for the AR-502 flight environment.

Our schedule of course was delayed by this without our fault and we got out of step with ESA-planning by 4 - 6 weeks.
AMSAT was obliged to inform ESA about this turn of events, and initially ESA accepted this situation since there was also considerable schedule uncertainty concerning the launcher. It was agreed to take a decision in early September.

But in August ESA terminated our contract unilaterally; ESA then maintained that the launch would occur with near-certainty by the end of September.

Our contract now stipulated that AMSAT would have to provide a dummy-mass to simulate the mass of P3-D within the SBS adapter. Contrary to the contractual requirement, ESA then decided that AMSAT would not have to provide the dummy-mass. The reason probably was that the flight-mass for AR-502 hat been reduced by about the same amount as the mass of P3-D. This was fortunate, because AMSAT thus saved the expenditure for the dummy-mass. But the SBS built by AMSAT remains part of the AR-502 payload. The SBS had been purchased by ESA from AMSAT; this was always planned in this way as part of our contract. Immediately after the AR-502 launch (now stated as "October 28 at the

earliest"), AMSAT and ESA will have enough facts to search for an amicable solution which will guarantee an early launch of P3-D taking into consideration the actual ARIANE flight-planning.

This developments of events of course is very regrettable, but our contract leaves us little choice but to accept initially the above situation. For ESA the successful launch of AR-502 of course has highest priority and precludes any scheduling risks on our behalf. Unfortunately this means right now a launch delay for us. But we should not forget that 16 amateur-spacecraft were launched on ARIANE which constitutes a record in it's own right of support of our cause. Thus it would not be helpful to jeopardize the present negotiations by speculations and expressions of bad tempers. Both sides work very hard to find an acceptable solution towards a new flight-opportunity for AMSAT P3-D. We are certain that P3-D will be launched next year on an ARIANE."

[ANS thanks Peter Guelzow DB2OS for this bulletin.]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2605. test

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: Rudy Pycke <in000824@innet.be>
Message-ID: <01bcd81d$148457c0$9e0d07c2@interpac.interpac.be>
Source record: 17781

```
test ... test
```

2606. An update from your friends at FBOM Magazine Online.

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: n9vjg@n-lemma.com
Message-ID: <344183f4.9853263@news.imaxx.net>
Source record: 17874

Dear Fellow Hobby-Radio Enthusiast,

This is a brief reminder that FBOM Magazine Online has undergone a major website update with new stuff.

Although FBOM Magazine Online tries to maintain a monthly major update schedule (and we're pretty late this time), many additions and changes are made on a more frequent basis. We recommend that you check our website regularly so you won't miss a thing. And as always, FBOM Magazine and FBOM Magazine Online welcome your comments.

And by the way, the next Hardcopy Issue of FBOM Magazine will hit the Snail-Mail in November packed with goodies. Check the website for information on Subscribing Today. A true "multi-RF-cultural" hobby radio publication --FBOM Magazine and FBOM Magazine Online.

73 and have fun with your radio hobby!

http://n-lemma.com/FBOM

2607. Message not deliverable

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: Administrator@sil.ORG
Message-ID: <199710131613.JAA17787@mailbox1.ucsd.edu>
Source record: 17875

Ham-Space Digest Fri, 10 Oct 97 Volume 97 : Issue 335

Today's Topics:
99c Tripple Cheeseburger!!
Addresses in HK for buying good cheap equipment ?
Cheerleaders have very long legs!
Daisyduke shorts
Did Sputnik II launch ok? (3 msgs)
FS: Used tubes, Microwave Components, Test Equipment
Icom PCR1000
Satellite industry links

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 9 Oct 1997 11:10:51 GMT
From: donwaun@webtv.net
Subject: 99c Tripple Cheeseburger!!

Hey,
Here's a site with archives of: -Nude CHEERLEADERS
-Latina Women!
-Naughty Secretaries
-Sluts in High Heels

http://www.mephoto.com

Date: 9 Oct 1997 19:02:21 -0400
From: jchapman@freenet.columbus.oh.us (John Chapman)
Subject: Addresses in HK for buying good cheap equipment ?

olivierfr@iname.com wrote:
: Hello everybody,

: I might have the opportunity to go to Hong Kong by the end of the Year.
: I currently have no equipment related to ham radio. I think it might be
: a good place to buy electronics there. Does anybody have an idea or an

: address where I could buy some transmitters at good prices ?
: I am looking for a 144 Mhz transmitter and performant antennas.
: What would be interesting for me is to hear Shuttle and Mir
: communications.

: Siou

: siou_in_france@geocities.com

I have found very few bargains anymore in asia, including Hong Kong. KNOW WHAT YOU ARE LOOKING FOR, AND WHAT PRICE YOU CAN GET IT FOR LOCALLY. If you are in the US, get an AES or HRO catalog. Be sure to add duty fees.

Most manufacturers have different radios for different markets, as the bands are different, and tones are different. Also, beware that there is probably no warranty, you will not be able to get it repaired locally. This is what is called a "grey market" radio.

Are there bargains? Yes! But know exactly what you are looking for first, and let the buyer beware. I've had better luck in Hong Kong with camera equipment......

73,

--
--*-*-*-*-*-*-*-*-*-*-*-*-*-
John Chapman WB8INY
Ohio Section ARES, District Emergency Coordinator, District 7
http://www.geocities.com/CapeCanaveral/Lab/9551/ (check it out)

Date: 10 Oct 1997 09:51:53 GMT
From: jimdec@outernetix.com
Subject: Cheerleaders have very long legs!

-(10,000 pictures of beautiful hot sexy Celebrities CD-ROM - ME#3)-
Questions? CALL US IN USA 1-757-484-7538
(http://www.mephoto.com)

Check this out:

600+ pictures of Cindy Crawford
400+ pics of Pamela Anderson
250+ pics of Elle Macpherson
200+ pics of Christina Applegate
200+ pics of Alicia Silverstone -==< 10,000 CELEBRITIES!! >==-
200+ pics of Mariah Carey
200+ pics of Sandra Bullock
150+ pics of Liv Tyler, young star
130+ pics of Niki Taylor
130+ pics of Kate Moss!!! For a list of ALL files on the CD
100+ pics of Madchen Amick goto www.mephoto.com
100+ pics of Racquel Darrian - *WOW*

80+ pics of hot model Jenny McCarthy! (Nudity!)
80+ pics of Paulina Poriskova, sexy supermodel!
70+ pics of Bridget Hall, supermodel!
50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
50+ pics of Daisy Fuentes, hot spanish VJ
50+ pics of Salma Hayek, sexy latina actress! ORDER NOW!
50+ pics of Teri Hatcher 1-757-484-7538
* 4000+ pics of other NUDE stars
* 4000+ pics of PG-13 rated celebrity poses
* 10,000+ pictures total, thats TEN thousand!
* Graphics viewing software for Windows3.1/DOS/Win95
* CD is BBS ready, with descriptions of files! And its Mac readable!
* Many more features and pictures of stars!
* NO AMATURE MODELS! - ONLY Celebs!
* If you have ME#1 and ME#2 - This CD is all the stars/celebrities from them

(For MORE information content at http://www.mephoto.com)
or call 757-484-7538 in USA to order via phone!

Other information:
* Packed in white shipper: No signs of nudity (Wife protection plan!)
* There are over 10,000, that's TEN THOUSAND FILES, on ME#3 alone!
* All pictures are high quality at least 640x480!
* Directories are arranged in NUDE/NON NUDE format for easy use!
* Graphics viewing software for Windows/DOS/Win95
* CD Is ISO-9660 Macintosh compatible if you have a Mac JPG viewer
* It's truly BBS-ready with detailed descriptions of all files!
* ME#3 will save you -ALOT- of download/searching TIME & MONEY!
* Sysops! Has a files.bbs conversion program for different formats!
* Many more features.. Guaranteed or your money back!

This CD represents high quality work. Here is the pricing:
$$$ $36 each (plus $2 shipping, $5 shipping outside USA) $$$

(*) For FAST results, visit http://www.mephoto.com
And fill out a order there. We take all methods of payment.

(*) AOL USERS: You must use AOL 3.0 Web Browser or HIGHER to order at our
automated web site, otherwise request an order form via email.

(*) Or call 757-686-1271 to order via credit card over the phone!

(*) If you can not access the World Wide Web and would like an ORDER FORM
sent to you by email, reply to this message at cds@mid-night.com
If you have any further questions feel free to email us!

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ Midnight Escape ~'..

Date: 10 Oct 1997 04:31:29 GMT
From: johnf@webtv.net

Subject: Daisyduke shorts

-(10,000 pictures of beautiful hot sexy Celebrities CD-ROM - ME#3)-
Questions? CALL US IN USA 1-757-484-7538
(http://www.mephoto.com)

Check this out:

600+ pictures of Cindy Crawford
400+ pics of Pamela Anderson
250+ pics of Elle Macpherson
200+ pics of Christina Applegate
200+ pics of Alicia Silverstone -==< 10,000 CELEBRITIES!! >==-
200+ pics of Mariah Carey
200+ pics of Sandra Bullock
150+ pics of Liv Tyler, young star
130+ pics of Niki Taylor
130+ pics of Kate Moss!!! For a list of ALL files on the CD
100+ pics of Madchen Amick goto www.mephoto.com
100+ pics of Racquel Darrian - *WOW*
80+ pics of hot model Jenny McCarthy! (Nudity!)
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70+ pics of Bridget Hall, supermodel!
50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
50+ pics of Daisy Fuentes, hot spanish VJ
50+ pics of Salma Hayek, sexy latina actress! ORDER NOW!
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* 4000+ pics of other NUDE stars
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* 10,000+ pictures total, thats TEN thousand!
* Graphics viewing software for Windows3.1/DOS/Win95
* CD is BBS ready, with descriptions of files! And its Mac readable!
* Many more features and pictures of stars!
* NO AMATURE MODELS! - ONLY Celebs!
* If you have ME#1 and ME#2 - This CD is all the stars/celebrities from them

(For MORE information content at http://www.mephoto.com)
or call 757-484-7538 in USA to order via phone!

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* Directories are arranged in NUDE/NON NUDE format for easy use!
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* CD Is ISO-9660 Macintosh compatible if you have a Mac JPG viewer
* It's truly BBS-ready with detailed descriptions of all files!
* ME#3 will save you -ALOT- of download/searching TIME & MONEY!
* Sysops! Has a files.bbs conversion program for different formats!
* Many more features.. Guaranteed or your money back!

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automated web site, otherwise request an order form via email.

(*) Or call 757-686-1271 to order via credit card over the phone!

(*) If you can not access the World Wide Web and would like an ORDER FORM
sent to you by email, reply to this message at cds@mid-night.com
If you have any further questions feel free to email us!

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ Midnight Escape ~'..

Date: Wed, 08 Oct 1997 23:01:37 -0300
From: KD1YV <jimkd1y@ix.netcom.com>
Subject: Did Sputnik II launch ok?

Dj0my wrote:
>
> Hi everybody,
>
> today the PROGRESS cargo ship docked with MIR. There has been
> one day of delay, because of some technical problems with the removal
> of the old PROGRESS which was still docked on the docking port.
> (the miniature Sputnik and other things arrived with this cargo ship)
>
> Now let's hope that they throw it "out of the hatch" very soon..... ;-)
>
> Best 73,
>
> Oscar DJ0MY

Oscar,

Thanks for the update. Whoever on the NG hears it first, be sure to post the
actual
frequency that it beacons. I'll start monitoring with the next passes.

My XYL suggested a graphic thought on the "launch" of Sputnik II. Picture this
-
two
Russian and one American rednecks, driving their broken down high-tech tractor
trailer
down an orbital backroad. Suddenly, one rolls down the window and pitches his
litter
out along the skyside. And thus, the orbit of Sputnik II is born :-)

--
To reply to this e-mail, remove the eat_spam.and_die part of the address.
--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html
With all of the Y2K problems, we had better start now working on Y10K.

Date: 8 Oct 1997 20:03:25 GMT
From: dj0my@aol.com (Dj0my)
Subject: Did Sputnik II launch ok?

Hi everybody,

today the PROGRESS cargo ship docked with MIR. There has been
one day of delay, because of some technical problems with the removal
of the old PROGRESS which was still docked on the docking port.
(the miniature Sputnik and other things arrived with this cargo ship)

Now let's hope that they throw it "out of the hatch" very soon..... ;-)

Best 73,

Oscar DJ0MY

Date: Thu, 9 Oct 1997 23:38:42 GMT
From: wb6w@netcom.com (Glenn Thomas)
Subject: Did Sputnik II launch ok?

My newsreader claims that SCO (sco@sco-inc.com) wrote:
: pwinter@best.com (Patty Winter) wrote:

: >In article <0a.1386855@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
: >>KD1YV <jimkd1y@eat_spam.and_die.snet.net> wrote:

(snip)
: >>If they can launch a satellite from MIR why can't AMSAT launch from
: >>MIR ???
: >
: >
: >Note the phrase "hand-launched." If I read the Sputnik II Web site
: >correctly, the satellite is about 7.5 inches in diameter. Phase 3D
: >is about six feet across (not including solar panels) and weighs,
: >I believe, a few hundred pounds. Not exactly a good "pick it up and
: >toss it out the airlock" candidate. Oh, and then there's the orbit...
: >
: >
: >Patty

: Oh I know that. I mean why can't we (AMSAT) design a small satellite
: that we COULD launch from MIR ?

: W4SCO

well.... AMSAT did build up a bunch of "microSats" a few years back.
As I recall they were rather Borg-like cubes that were 9 inches or so
on a side. Throwing such a bird out the window on MIR would be quite
simple. Getting it TO the window - that's a bit more difficult!

seventy trees - Glenn
--
****
* "Two wrongs don't make a right, but three lefts do." *
* *
* wb6w@netcom.com - Glenn Thomas *
****

Date: Thu, 9 Oct 1997 06:31:48
From: kevin@emodus.com
Subject: FS: Used tubes, Microwave Components, Test Equipment

Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"

6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each

Test Equipment, working, but not recently calibrated, may need minor
repairs & calibration.

Hewlett Packard 8640B/323 (AN/USM 323) Signal Generator, $395.00

Microwave Components, used, untested, sold "as is".

HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each

HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount (conversion rate .73). No minimum order.
Sale prices valid until 10-20-97 or while supply lasts.

Date: 8 Oct 1997 23:57:10 GMT
From: "Michael Blake" <k9jri@worldnet.att.net>
Subject: Icom PCR1000

I have an IC-PCR1000 computer controlled receiver on order. I have a few
questions. Facts or opinions are welcome.

1. Any opinion on using it as the receiver for space use. The receiver is
all mode and covers from 100kHz to 1.3 gHz.
I would expect to use a mast mounted preamp on 432 and 1.2.

2. How about slaving it to a low cost Icom HF xcvr, like a 707, with the
CIV16 unit for use as a 28mHz source for the
transmitting convertor?

3. Has anyone actually seen one? What was your impression.

Mike Blake
K9JRI

Date: 9 Oct 1997 12:26:57 GMT
From: "M Armstrong-Smith" <mcom@globalnet.co.uk>
Subject: Satellite industry links

This free major resource on the web is intended for use by satellite and
space industry professionals.

Containing links to hundreds and hundreds of industry web sites this is
believed to be the largest and most extensive listing of its kind. It is
derived from the list of links used internally within Microcom Systems Ltd
for research on the web.

Categories in the listing include:

Space Agencies
Launch Vehicles and Services
Satellite Manufacturers
Satellite Operators
Satellite Service Providers
Professional Equipment Suppliers

Consumer Equipment Suppliers
Regulatory Agencies
Broadcasters
Standards Agencies
Professioanl Services
Universities and Research Centres
Trade Associations
Space Resources

Satellite Links can be viewed by visiting
http://www.users.globalnet.co.uk/~mcom/

If you would like to see your company web site listed in Satellite Links,
contact Mike Armstrong-Smith at mcom@globalnet.co.uk

Company entries are included at no charge. Expanded entries including
company address, phone and fax numbers, email address, as well as product
details are available for a charge of £95 plus VAT (currently 17.5%).

Microcom Systems Ltd is a consultancy specialising in satellite
communications.

End of Ham-Space Digest V97 #335
****

Forward item:
---------------------------------- Returned -----------------------------------
From: Ham-Space@ucsd.edu at internet
Date: 10/10/97 6:31AM -0700
To: Norm Beasley at PNG
*To: Ham-Space@ucsd.edu at internet
Subject: Ham-Space Digest V97 #335

2608. Message not deliverable

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: Administrator@sil.ORG
Message-ID: <199710131641.JAA18344@mailbox2.ucsd.edu>
Source record: 17876

Ham-Space Digest Sat, 11 Oct 97 Volume 97 : Issue 336

Today's Topics:
FS: Used tubes, Test Equipment and Microwave Components

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 10 Oct 1997 22:27:21
From: kevin@emodus.com
Subject: FS: Used tubes, Test Equipment and Microwave Components

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Pulled from Surplus Equipment, sold "as is"

6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each

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HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

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$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount (conversion rate .73). No minimum order.
Sale prices valid until 10-20-97 or while supply lasts.

End of Ham-Space Digest V97 #336
****

Forward item:
---------- Returned ----------
From: Ham-Space@ucsd.edu at internet
Date: 10/11/97 6:31AM -0700
To: Norm Beasley at PNG
*To: Ham-Space@ucsd.edu at internet
Subject: Ham-Space Digest V97 #336

2609. FodTrack

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: Rudy Pycke <in000824@innet.be>
Message-ID: <01bcd81c$e3de1e80$9e0d07c2@interpac.interpac.be>
Source record: 17877

I have some stability problems in using the Fodtrack rotator interface when running it under WIN95.
Who has the solution?

Rudy, ON6PY

2610. FS: Low prices on NOS Tubes

Newsgroup: rec.radio.amateur.space
Date: 1997-10-13 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <61utrglq25@ha1.rdc1.occa.home.com>
Source record: 17878

NOS Tubes, large quantities of each available.

5U4G Russian, $7.50 each
6AZ8 Philips, $3.00 each
JAN 12AT7 GE, $4.50 each
811A Chinese, $11.00 each
JAN 5751 GE, $4.00 each
5886 Raytheon, $25.00 each
6186W (6AG5WA) philips, $.25 each
JAN 6922 Philips, $3.00 each
7062/E188CC Amperex,$4.00
JAN 8106 GE, $5.00 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount (conversion rate .73). No minimum order.
Prices valid until 10-24-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"
Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

2611. Re: Mir and Mirex and disapearing acts..

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: jjm@shore.net
Message-ID: <34435e81.83690181@news.shore.net>
Source record: 17782

Dave Hendrick <dhendrick@turbont.net> wrote:

> And you are not seeing Miles on now because
> he has defined frequencies other that the published ones which he has
> them switch to when he has "official" business like saying hello. So
> remember when you don't see Mir on the right frequency Miles and
> Larson are on somewhere else.. enjoy... and use your head.... DAVE

I talk to Miles almost everyday on the local two meter repeater. That's where he is and why you can't hear him. His "defined" frequency is the 147.12 repeater in Billerica, MA.

You sure are envious of him aren't you?

==========
73 de WK1V, Jim Martin, jjm@shore.net
Ex: KB1LW <<>> N1CLS <<>> KA5MWD <<>> HL9ZF
http://www1.shore.net/~jjmartin/jjm.htm
==========
Spam Filter <.procmail> engaged at Shore.Net
==========

2612. Re: (No Subject)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: Trevor Mole <trevor@moledad.demon.co.uk>
Message-ID: <yg3ZsDAjt8Q0EwNn@moledad.demon.co.uk>
Source record: 17783
Cross-posted to:
rec.radio.cb,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <Forum.876581414.23913.amsoft@m>, Pete deVolpi
<amsoft@epix.net> writes
> http://hamster.ivey.uwo.ca/~amsoft/

--
Trevor Mole - Trevor@moledad.demon.co.uk

2613. cool web page

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: Tigran <tk5234@csun.edu>
Message-ID: <6202co$klg@bgtnsc02.worldnet.att.net>
Source record: 17784

check it out. http://members.aol.com/jplsep509

2614. ARLK080 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk080.1997@arrl.org>
Source record: 17785
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK080
ARLK080 Keplerian data

ZCZC SK80
QST de W1AW
Keplerian Bulletin 80 ARLK080
From ARRL Headquarters
Newington, CT October 14, 1997
To all radio amateurs

SB KEP ARL ARLK080
ARLK080 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97277.84210603 .00000065 00000-0 10000-3 0 5088
2 14129 26.2661 123.5522 6039277 157.0705 248.6734 2.05879961 79648
RS-10/11
1 18129U 87054A 97287.15553985 .00000010 00000-0 -57191-5 0 04455
2 18129 82.9293 150.8107 0010151 252.1686 107.8362 13.72383116516550
UO-11
1 14781U 84021B 97287.05134448 .00000291 00000-0 56902-4 0 00368
2 14781 97.8470 263.6102 0012031 349.2598 10.8328 14.69597972728711
RS-12/13
1 21089U 91007A 97287.12829912 .00000019 00000-0 45641-5 0 00226
2 21089 82.9196 190.4353 0029432 329.2906 30.6527 13.74086695335499
UO-14
1 20437U 90005B 97287.19017760 .00000076 00000-0 46148-4 0 03303
2 20437 98.5076 6.2407 0010357 214.7012 145.3494 14.29976214403221
RS-15
1 23439U 94085A 97287.18886648 -.00000039 00000-0 10000-3 0 02663
2 23439 64.8180 320.4153 0146617 109.7233 251.9565 11.27528203115357
AO-16
1 20439U 90005D 97287.20096099 .00000107 00000-0 58243-4 0 01086
2 20439 98.5312 9.4553 0010990 215.6348 144.4103 14.30022545403248
RS-16
1 24744U 97010A 97287.19072856 .00008070 00000-0 26138-3 0 00943
2 24744 97.2617 189.9840 0009045 34.4202 325.7628 15.32240601034304
```

```
DO-17
1 20440U 90005E 97287.17498568 .00000046 00000-0 34508-4 0 01003
2 20440 98.5346 10.3722 0010698 215.7618 144.2859 14.30165214403272
WO-18
1 20441U 90005F 97287.17559570 -.00000017 00000-0 10001-4 0 01185
2 20441 98.5339 10.2576 0011233 219.7859 140.2506 14.30131175403272
LO-19
1 20442U 90005G 97287.20322108 .00000067 00000-0 42485-4 0 01146
2 20442 98.5379 11.0206 0011534 216.2557 143.7842 14.30248932403302
FO-20
1 20480U 90013C 97286.85380091 .00000016 00000-0 10012-3 0 00213
2 20480 99.0584 226.1927 0541474 108.7363 257.3277 12.83239546359927
AO-21
1 21087U 91006A 97287.13954300 .00000093 00000-0 82657-4 0 08883
2 21087 82.9424 323.5423 0034545 299.5390 60.2323 13.74587277336491
UO-22
1 21575U 91050B 97287.16676106 .00000042 00000-0 28253-4 0 08305
2 21575 98.2871 343.4270 0006928 260.1404 99.8992 14.37089102327577
KO-23
1 22077U 92052B 97287.01306718 -.00000037 00000-0 10000-3 0 07055
2 22077 66.0792 256.4454 0003245 184.0738 176.0252 12.86303639243031
KO-25
1 22828U 93061F 97287.16657515 .00000056 00000-0 39638-4 0 05833
2 22828 98.5324 359.0524 0009316 237.8905 122.1384 14.28194852179198
IO-26
1 22826U 93061D 97287.16090687 .00000036 00000-0 31897-4 0 05974
2 22826 98.5345 358.9524 0008467 255.9597 104.0643 14.27849823211065
AO-27
1 22825U 93061C 97287.20162970 .00000048 00000-0 36830-4 0 5923
2 22825 98.5321 358.7167 0007702 254.7252 105.3075 14.27739619211058
FO-29
1 24278U 96046B 97287.08267871 -.00000153 00000-0 -11855-3 0 01301
2 24278 98.5284 312.0248 0351009 237.9627 118.6930 13.52632589057199
MO-30
1 24305U 96052B 97286.92494093 .00000204 00000-0 20364-3 0 01545
2 24305 82.9240 266.8188 0028076 238.7513 121.0858 13.73099657055355
Mir
1 16609U 86017A 97287.14937062 .00009193 00000-0 11588-3 0 07041
2 16609 51.6540 207.9548 0006523 212.9324 147.1263 15.60396254665595

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
October 18, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2615. FREE MOTOROLA PAGERS! GET YOURS TODAY!

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: info@pgrds.com
Message-ID: <3442cf63.0@Crypt.NetGoth.COM>
Source record: 17786

****

FREE MOTOROLA PAGERS OR SEIKO MESSAGE WATCH!!!

CALL 1-800-784-6452 CERTIFICATE #4248000

NO CREDIT CHECKS

NO CONTRACTS

NO HASSLE

MANY TO CHOOSE FROM!

$80-$150 VALUE!
Sign activation required after month is up you cancel and KEEP THE PAGER!!

**********CALL 1-800-784-6452 CERTIFICATE #4248000**********

*****Motorola Pronto Flex*****
Motorola Express Extra Flex
-16 number mem, clock, vibration, time stamps, and many colors avail!!

*****Seiko Message Watch*****
-buitl in pager, weather,sports,stocks,lotto,ski, and other info!!
time zone correction and many other features!!

*****Motorola Email Pager*****
-instant email from ANY ISP!! Has own email address and telepone number,Tons more features!

*****NEW Motoroal Voice Mail Pager*****
-instant voice mail messages! Up to 4 minutes recording time! Has full
features of a answering machine! 10 volume setting and tons other features!

MANY OTHERS TO CHOSE FROM JUST ASK!!!

**********CALL 1-800-784-6452 CERTIFICATE #4248000**********

2616. SPUTNIK MODEL LAUNCH DELAYED

Newsgroup: rec.radio.amateur.space
Date: 1997-10-14 00:00:00 UTC
From: Jon Dickason <dickason@dickason-pc.eng.mc.xerox.com>
Message-ID: <NEWTNews.876861441.16775.dickason@testclone.eng.mc.xerox.com>
Source record: 17787

saw this on the APRS mailing list:
>From the ARRL Letter, VOl. 16, # 40:
==========
SPUTNIK MODEL LAUNCH DELAYED

It now appears that the launch of a working model Sputnik 1 from the Russian Mir space station won't happen until October 18-20, and perhaps later. According to AMSAT News Service, the model Sputnik, assembled by students in Russia and equipped with a 2-meter transmitter by students in France, was to be aboard the Progress rocket that docked aboard Mir earlier this week. Earlier information from several sources--including the sponsors--had indicated the model satellite would be launched from Mir October 4, the 40th anniversary of the original Sputnik 1 satellite.

The Sputnik-40, as it's called, reportedly will be hand-released by the Mir crew during a space walk. Latest information indicates the mini-satellite will transmit a "beep-beep" signal on 145.800 MHz (FM) from its 200-mW onboard transmitter. The batteries are expected to last a month or two.

For additional details--and photos--see http://www.oceanes.fr/~fr5fc/spoutnik.html.--thanks to AMSAT News Service and Keith Baker, KB1SF

2617. Re: Radio

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: oddjob@cix.co.uk
Message-ID: <memo.19971015083123.41839C@oddjob.compulink.co.uk>
Source record: 17788

In article <61nukdguc1@newton.pacific.net.sg>, p9719040@sp.ac.sg (Popot) wrote:

> I've been thinking of building a radio, of course, powerful enough to
> receive stellar objects. And possibly use it as a ham radio also. I
> would be
> very grateful for anyone who could tell me how I could go about making
> one.
>
> Nothing too fancy, I'm cash strapped! What I do have is some experience
> in
> electronics, soldering of parts together and even designing a electronic
> board(However I was only designing a board that gave out patterned
> lights).
>
> Wouldn't mind if any of you guys or gals could help me out. Thanks in
> advance.
>
> Best to send me at prompus@hotmail.com.
>
>
>

good luck.....

oddjob@cix.co.uk
Steve Walters: G7VFY: 0956-544202

2618. Space Photo Wallpaper program

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: Dave Spector <dspector@visionx.com>
Message-ID: <34452337.25A0357E@visionx.com>
Source record: 17789

Free full- screen digital wallpaper program

For more info: http://www.ScreenThemes.com

Space Shuttle
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=shut001

Solar System
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=sola001

Images From Mars
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=mars001

Hubble Telescope
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=hubb001

2619. Kenwood TS-790 mod for 9600 bps

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: Robert D Weaver <rweaver@scf.usc.edu>
Message-ID: <34456CF5.5D01C7FF@scf.usc.edu>
Source record: 17790

Anyone know if there is a 9600 baud mod for the Kenwood TS-790
transceiver? I called Kenwood, and they don't know of one, so it's
beginning to look like the Yaesu FT736R is the only game in town...

ROBERT D. WEAVER, Graduate Student tel (213)740-4686
EE/Systems - Communication Sciences Institute fax (213)740-8729
University of Southern California home (818)286-2987
MC2565 / EEB 516 <rweaver@scf.usc.edu>
Los Angeles, CA 90089-2565 http://www-scf.usc.edu/~rweaver/

2620. Kenwood TS-790 mod for 9600 bps

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: Robert D Weaver <rweaver@scf.usc.edu>
Message-ID: <34456D52.1D070975@scf.usc.edu>
Source record: 17791

Anyone know if there is a 9600 baud mod for the Kenwood TS-790
transceiver? I called Kenwood, and they don't know of one, so it's
beginning to look like the Yaesu FT736R is the only game in town...

ROBERT D. WEAVER, Graduate Student tel (213)740-4686
EE/Systems - Communication Sciences Institute fax (213)740-8729
University of Southern California home (818)286-2987
MC2565 / EEB 516 <rweaver@scf.usc.edu>
Los Angeles, CA 90089-2565 http://www-scf.usc.edu/~rweaver/

2621. Kenwood TS-790 mod for 9600 bps

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: Bob Weaver <rweaver@scf.usc.edu>
Message-ID: <Pine.SUN.3.92.971015182409.7020A-100000@milly.usc.edu>
Source record: 17792

Anyone know if there is a 9600 baud mod for the Kenwood TS-790
transceiver? I called Kenwood, and they don't know of one, so it's
beginning to look like the Yaesu FT736R is the only game in town...

ROBERT D. WEAVER, Graduate Student tel (213)740-4686
EE/Systems - Communication Sciences Institute fax (213)740-8729
University of Southern California home (818)286-2987
MC2565 / EEB 516 <rweaver@scf.usc.edu>
Los Angeles, CA 90089-2565 http://www-scf.usc.edu/~rweaver/

2622. NORAD Two-Line Orbital Element Sets (TLE080)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-15 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <621507$ru5$1@blackbird.afit.af.mil>
Source record: 17793

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #080 -
Alouette 1
1 00424U 62049A 97283.62957983 .00000067 00000-0 68063-4 0 3230
2 00424 80.4652 169.6809 0022186 238.0783 121.8209 13.67905200748023
ATS 1
1 02608U 66110A 97283.41677864 .00000018 00000-0 10000-3 0 424
2 02608 14.4414 347.6552 0005742 134.7428 225.3295 1.00311652 29687
ATS 3
1 03029U 67111A 97285.22688576 -.00000120 00000-0 10000-3 0 7081
2 03029 14.8625 354.5942 0010468 265.0631 97.5875 1.00272806109609
Starlette
1 07646U 75010A 97286.80825619 -.00000293 00000-0 -11610-3 0 929
2 07646 49.8261 40.2636 0205917 27.6585 333.5086 13.82192186145855
LAGEOS
1 08820U 76039A 97284.27890434 -.00000009 00000-0 00000+0 0 3241
2 08820 109.8195 190.8063 0044300 24.7305 335.5500 6.38664480244558
GOES 2
1 10061U 77048A 97285.28240278 .00000040 00000-0 10000-3 0 8939
2 10061 12.9541 31.6642 0010465 142.4299 131.0078 1.00270846 19278
IUE
1 10637U 78012A 97279.93275434 .00000109 00000-0 10000-3 0 4108
2 10637 36.2362 76.0069 1381035 69.8709 230.0210 1.00072841 24703
GOES 3
1 10953U 78062A 97284.30331256 -.00000083 00000-0 10000-3 0 8528
2 10953 11.9849 34.7640 0003786 192.8392 152.0270 1.00274355 23878
SeaSat 1
1 10967U 78064A 97284.49193518 .00000005 00000-0 46237-4 0 6109
2 10967 108.0003 90.7485 0002455 259.2560 100.8306 14.38195425 10646

```
Nimbus 7
1 11080U 78098A 97285.07891391 -.00000106 00000-0 -58479-4 0 7030
2 11080 98.8859 128.3296 0009641 105.7856 254.4361 13.83677962957819
GOES 5
1 12472U 81049A 97282.30619343 -.00000238 00000-0 10000-3 0 208
2 12472 8.9413 45.4667 0005424 97.9832 262.0892 1.00326666 17904
Cosmos 1383
1 13301U 82066A 97284.56115825 .00000022 00000-0 87064-5 0 6185
2 13301 82.9294 140.8512 0028085 356.4475 3.6478 13.68086359763195
LandSat 4
1 13367U 82072A 97286.91660582 .00000065 00000-0 24118-4 0 1058
2 13367 98.0123 327.2522 0008511 73.8221 286.3915 14.57215856810980
DMSP B5D2-1
1 13736U 82118A 97286.80107085 .00000330 00000-0 15684-3 0 3291
2 13736 98.6217 113.3557 0009257 60.6494 299.5610 14.25865866769984
IRAS
1 13777U 83004A 97286.52131732 .00000258 00000-0 20759-3 0 8008
2 13777 98.9731 107.9255 0011688 197.7863 162.2892 13.99290524420963
Cosmos 1447
1 13916U 83021A 97287.21085367 .00000044 00000-0 30301-4 0 7143
2 13916 82.9477 193.0293 0036151 243.2251 116.5204 13.74360435730220
TDRS 1
1 13969U 83026B 97286.37639228 -.00000303 00000-0 10000-3 0 7976
2 13969 9.6499 39.1142 0001807 163.2496 266.4904 1.00278078 26231
GOES 6
1 14050U 83041A 97285.30737617 .00000049 00000-0 10000-3 0 7266
2 14050 7.8050 49.2243 0003231 129.9181 180.5187 1.00294309111029
AO-10
1 14129U 83058B 97277.84210603 .00000065 00000-0 10000-3 0 5088
2 14129 26.2661 123.5522 6039277 157.0705 248.6734 2.05879961 79648
LandSat 5
1 14780U 84021A 97286.18691853 .00000076 00000-0 27101-4 0 6522
2 14780 98.2727 348.1950 0001197 229.1296 130.9800 14.57084887724293
UO-11
1 14781U 84021B 97284.05552181 .00000218 00000-0 44586-4 0 75
2 14781 97.8465 260.7288 0012145 358.3907 1.7252 14.69595621728274
Cosmos 1574
1 15055U 84062A 97285.45301321 .00000033 00000-0 18383-4 0 9124
2 15055 82.9565 250.2473 0029135 78.7196 281.7231 13.73653946667194
Cosmos 1602
1 15331U 84105A 97285.21842714 .00000511 00000-0 57009-4 0 5955
2 15331 82.5387 21.3632 0019900 150.3278 209.9041 14.84954916704502
ERBS
1 15354U 84108B 97283.43412413 -.00000048 00000-0 17227-4 0 3091
2 15354 56.9965 258.7973 0005852 61.1715 298.9905 14.95081578708669
NOAA 9
1 15427U 84123A 97286.84375607 .00000060 00000-0 55204-4 0 3225
2 15427 98.8886 356.4957 0015699 25.4541 334.7398 14.13887633661978
Mir
1 16609U 86017A 97287.08532726 .00009237 00000-0 11640-3 0 6982
```

```
2 16609 51.6537 208.2764 0006531 212.5016 147.5601 15.60395217665585
SPOT 1
1 16613U 86019A 97287.22355341 -.00000044 00000-0 00000+0 0 1247
2 16613 98.7862 358.8473 0000198 21.3498 338.7687 14.20004807289009
Cosmos 1766
1 16881U 86055A 97283.87170060 .00000429 00000-0 48647-4 0 5103
2 16881 82.5180 80.1724 0018466 188.9625 171.1278 14.83897044605125
EGP
1 16908U 86061A 97286.49872481 -.00000083 00000-0 10000-3 0 2157
2 16908 50.0135 311.1001 0011216 163.8849 196.2344 12.44417109176586
NOAA 10
1 16969U 86073A 97286.83614268 .00000070 00000-0 48176-4 0 2502
2 16969 98.5534 276.8182 0013999 25.8541 334.3337 14.25061334575481
MOS-1
1 17527U 87018A 97286.19621204 -.00000043 00000-0 00000+0 0 5941
2 17527 98.8732 341.9553 0020599 70.2462 290.0917 14.00461217542596
GOES 7
1 17561U 87022A 97286.48414203 -.00000154 00000-0 10000-3 0 4021
2 17561 4.0001 66.0566 0001390 203.3279 189.1983 1.00273830 22158
Kvant-1
1 17845U 87030A 97286.89317939 -.00007238 00000-0 -80302-4 0 1692
2 17845 51.6537 209.2478 0005757 215.9795 143.9695 15.60374254599667
DMSP B5D2-3
1 18123U 87053A 97286.66861140 .00000025 00000-0 34891-4 0 832
2 18123 98.7638 114.8500 0014119 318.1696 41.8397 14.15494564532899
RS-10/11
1 18129U 87054A 97283.58310100 .00000010 00000-0 -57191-5 0 4076
2 18129 82.9290 153.4497 0010191 263.5639 96.4358 13.72382980516068
Meteor 2-16
1 18312U 87068A 97286.21910662 .00000039 00000-0 21726-4 0 5960
2 18312 82.5557 328.9514 0011524 310.9695 49.0467 13.84105175512998
Meteor 2-17
1 18820U 88005A 97286.78783649 .00000120 00000-0 93225-4 0 3840
2 18820 82.5401 22.3819 0018098 11.7286 348.4291 13.84782909490451
DMSP B5D2-4
1 18822U 88006A 97287.22471284 .00000020 00000-0 26866-4 0 6447
2 18822 98.3886 102.2680 0006769 37.1706 322.9935 14.23243687503423
Glonass 34
1 19163U 88043A 97282.17202308 .00000042 00000-0 10000-3 0 2201
2 19163 65.4557 69.7110 0003760 192.8590 167.1441 2.13102433 72448
Glonass 36
1 19165U 88043C 97280.82217649 .00000038 00000-0 10000-3 0 6273
2 19165 65.4084 69.6964 0007673 327.5158 32.4445 2.13101660 73030
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1 19215U 88051A 97279.06434461 -.00000097 00000-0 00000+0 0 3419
2 19215 4.2034 65.2074 0006928 134.7741 225.6358 0.96948000 21795
OKEAN 1
1 19274U 88056A 97283.25680803 .00000457 00000-0 53654-4 0 2098
2 19274 82.5160 182.1767 0020362 347.9633 12.1091 14.82683309500505
Meteor 3-2
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1 19336U 88064A 97283.22617821 .00000051 00000-0 10000-3 0 6072
2 19336 82.5416 186.7338 0018115 112.3676 247.9373 13.16983605442667
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1 19503U 88085C 97286.01517976 .00000023 00000-0 10000-3 0 5114
2 19503 65.3826 308.3912 0005034 149.5162 210.5739 2.13101751 70630
NOAA 11
1 19531U 88089A 97286.82742384 .00000019 00000-0 35149-4 0 1406
2 19531 99.1398 322.4519 0011628 327.9298 32.1163 14.13147616466752
TDRS 3
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2 19548 3.4315 69.2860 0003178 101.2287 154.9199 1.00274868 20327
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2 19749 65.4132 69.0501 0007347 232.4509 127.5008 2.13100881 68146
Glonass 41
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2 19750 65.4459 69.2542 0007335 225.1563 134.7957 2.13101840 68096
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1 19802U 89013A 97283.77463463 .00000052 00000-0 00000+0 0 4799
2 19802 55.5779 91.4947 0024323 120.1213 240.1736 2.00552576 63350
Akebono
1 19822U 89016A 97286.83083332 .00020940 00000-0 11099-2 0 86
2 19822 75.0688 200.8574 3699569 98.2564 304.5010 8.00643464205189
Meteor 2-18
1 19851U 89018A 97284.47236406 .00000037 00000-0 19299-4 0 5947
2 19851 82.5158 257.3074 0015996 64.4282 295.8530 13.84439507435423
MOP-1
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2 19876 2.9585 70.2183 0015211 284.9353 75.3850 0.97109355 11286
TDRS 4
1 19883U 89021B 97275.48451302 -.00000274 00000-0 10000-3 0 3639
2 19883 0.8506 86.1602 0002014 165.2568 253.2372 1.00267470203841
GPS BII-02
1 20061U 89044A 97286.10994915 -.00000007 00000-0 10000-3 0 4643
2 20061 53.9074 266.4190 0188536 225.3658 133.0789 2.00563255 61140
Nadezhda 1
1 20103U 89050A 97287.00691882 .00000022 00000-0 67343-5 0 1595
2 20103 82.9565 111.8646 0037717 143.6502 216.7229 13.73882793415118
GPS BII-03
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2 20185 55.3820 92.0590 0027084 46.7724 313.4998 2.00567383 59574
GMS 4
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2 20217 2.7423 72.7350 0000920 246.3109 65.3805 1.00261328 30230
INTERCOSMOS 24
1 20261U 89080A 97285.13707661 .00000195 00000-0 53710-4 0 6248
2 20261 82.5952 322.8823 1242315 25.6839 340.0909 12.47451475365990
GPS BII-04
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2 20302 53.1766 206.0064 0130278 214.3084 144.8430 2.00558039 58535
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2 20322 98.9265 297.7551 0009233 131.1774 229.0189 14.03472322404521
Kvant-2
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COSMOS 2054 (Altair-1)
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SPOT 2
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UO-14
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2 20437 98.5079 3.3690 0010237 223.7777 136.2594 14.29975514402806
AO-16
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LO-19
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2 20480 99.0584 224.1644 0541606 114.3983 251.4607 12.83239226359601
MOS-1B R/B
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2 20508 82.9507 246.3334 0046103 98.4137 262.2251 13.73527588382292
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2 20510 82.5226 136.6269 0018748 170.4854 189.6715 14.78726021411118
GPS BII-07
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2 20533 54.2449 268.6549 0033586 47.1744 313.1072 1.91041159 54945
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2 20546 94.1159 268.7444 0045676 290.9330 68.7003 15.54463607419815
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2 20619 64.9676 307.3773 0028313 212.7878 147.0890 2.13102677 57594
Glonass 45
1 20620U 90045B 97282.31327520 .00000023 00000-0 10000-3 0 4094
2 20620 64.9801 307.5045 0009586 19.1868 340.8828 2.13102726 57554
Glonass 46
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2 20621 64.9849 307.4309 0016189 198.9394 161.0534 2.13103165 57630
Kristall
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2 20670 82.5464 324.0055 0015834 344.3445 15.7226 13.84133598368604
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2 20724 55.1970 89.3173 0140234 192.8667 166.8001 2.00563383 51107
Feng Yun1-2
1 20788U 90081A 97287.23778212 .00000108 00000-0 10000-3 0 4963
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Meteor 2-20
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GPS BII-09
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Glonass 49
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AO-21
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2 21089 82.9203 190.6513 0029428 330.0959 29.8513 13.74086636335457
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1 21140U 91015B 97286.18909722 -.00000093 00000-0 00000+0 0 3866
2 21140 1.5157 79.1459 0003284 124.0472 237.6190 1.00270174 26458
Nadezhda 3
1 21152U 91019A 97286.19936132 .00000057 00000-0 44165-4 0 8464
2 21152 82.9188 148.0213 0043441 78.0034 282.5986 13.73552644330057
Glonass 50
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2 21216 64.7153 306.7662 0010876 207.2105 152.7894 2.13103037 50819
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1 21217U 91025B 97286.24954789 .00000021 00000-0 10000-3 0 482
2 21217 64.7126 306.7568 0010041 234.6718 125.2906 2.13101798 50803
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2 21218 64.7038 306.7599 0003488 289.5041 70.5024 2.13102592 50799
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2 21225 28.4538 100.9204 0005148 81.0792 279.0387 15.19392097244175
Meteor 3-4
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ERS-1
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TUBSAT-A
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2 21577 98.2860 339.6467 0005631 270.4422 89.6125 14.36562621327213
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2 21578 98.3323 352.1441 0003879 257.7329 102.3421 14.39447262327721
TDRS 5
1 21639U 91054B 97285.25554861 .00000068 00000-0 10000-3 0 2235
2 21639 0.0808 76.3570 0002444 241.5861 340.5891 1.00271301 22681
Meteor 3-5
1 21655U 91056A 97284.68522661 .00000051 00000-0 10000-3 0 122
2 21655 82.5560 340.3997 0014815 50.1020 310.1398 13.16855939296045
UARS
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Glonass 53
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Glonass 54
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Glonass 55
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2 21855 65.3612 68.0644 0008493 209.9617 149.9958 2.13101984 44352
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GPS BIIA-13
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2 21930 55.5636 329.3451 0018694 191.0671 168.9550 2.00572102 40240
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2 22012 81.6686 329.7032 0118481 35.1027 325.7950 14.92107162287158
GPS BIIA-14
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2 22014 54.8891 149.2538 0099798 340.1556 19.5482 2.00552721 32114
Glonass 56
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Glonass 58
1 22058U 92047C 97284.24196505 .00000028 00000-0 10000-3 0 2459
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TDRS 6
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Glonass 61
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NOAA 13
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GPS BIIA-22
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Meteor 2-21
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2 22782 82.5498 323.8576 0023424 63.0316 297.3241 13.83083114207983
UFO F2
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SPOT 3
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2 22826 98.5346 357.0356 0008382 261.1739 98.8476 14.27849636210786
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2 22829 98.5318 355.8191 0009202 245.8616 114.1603 14.28179432210624
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2 22912 0.3502 59.6681 0002265 78.0521 316.4093 1.00271219 12654
HST Array
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2 22920 28.4524 184.6592 0003428 275.3249 84.6950 15.11192279212506
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2 22969 82.5584 279.6590 0016289 108.5238 251.7655 13.16747434178628
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2 22970 82.5560 280.0512 0017133 106.9792 253.3216 13.16830905178537
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2 23019 82.4928 3.7176 0027150 324.9252 35.0182 15.22605242199362
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2 23043 64.4393 307.0411 0007545 205.9459 154.0753 2.13103321 27273
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1 23045U 94021C 97285.06474867 .00000026 00000-0 00000+0 0 5378
2 23045 64.4229 307.0369 0010197 26.6253 333.4852 2.13102230 27273
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2 23051 0.2484 96.8614 0004862 125.1905 164.8495 1.00261213 20205
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2 23327 1.0159 90.5780 0002709 110.4100 111.0148 1.00271949 10829
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NOAA 14
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Glonass 73
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2 23513 64.4524 307.2908 0016309 199.3228 160.6699 2.13052021 20277
GMS 5
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DMSP B5D2-8
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OSC 1
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ERS-2
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2 23620 64.8037 187.8198 0018066 168.3440 191.7485 2.13103120 17301
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1 23734U 95068A 97286.66766140 .00000012 00000-0 00000+0 0 3485
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2 23757 22.9821 6.2983 0013679 78.3437 281.8585 14.97922611 97900
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FO-29
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Soyuz TM-26
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Meteosat 7
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2 24944 86.4026 51.0740 0001939 53.0282 307.1078 14.34280891 3942
Iridium 32
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Iridium 27
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Cosmos 2346
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2 24953 82.9236 266.7238 0038562 231.8737 127.8934 13.78969213 2784
FAISAT-2V
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Iridium 34
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Echostar III
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1997060A
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
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2623. NEW PRODUCT PRESS RELEASE

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Date: 1997-10-16 00:00:00 UTC
From: product@sparksintl.com
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Last month alone over 20,000 men and women
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Every three months
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a) the average minimum fat-loss per area (i.e,
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water-loss trick. The fat stays off forever -- as

long as you maintain sensible eating habits.

8. Affordable even for people on a budget.

FOR COMPLETE INFORMATION ON:
a) PRODUCT: http://www.sparksintl.com
b) BUSINESS OPPORTUNITY, reply to: info@sparksintl.com

2624. Modifying FM reviecers...

Newsgroup: rec.radio.amateur.space
Date: 1997-10-16 00:00:00 UTC
From: "Dr. Cosmo-SYS" <drkosmo@server.iso.net>
Message-ID: <Pine.BSF.3.95q.971016114629.10121H-100000@server.iso.net>
Source record: 17795

I heard one can do this by clipping the device to the antenna
and i think the negitive (-) side of the battery.
i want to make it recieve differnt Freq. s and maybey transmit on them
too. i know about the FCC and licenseing stuff so i will keep the power
down :)
i'm new in radio stuff so please use simple terms and maybey
scematics (i can read those :>)
thank you in advance.

Dr. Cosmo-SYS
--
"To keep milk from turning sour: Keep

2625. Re: Kenwood TS-790 mod for 9600 bps

Newsgroup: rec.radio.amateur.space
Date: 1997-10-16 00:00:00 UTC
From: shell@callamer.com
Message-ID: <344678e0.47114232@news.callamer.com>
Source record: 17796

Bob,

Check the Amsat web page. They have the mod for the 790 for 9600
baud. It is a very simple mod.

You can also find it on the Amsat ftp server at:
ftp://ftp.amsat.org/amsat/mods/ts790mod.txt

73, Bill
N6WS
shell@callamer.com

On 15 Oct 1997 18:25:07 -0700, Bob Weaver <rweaver@scf.usc.edu> wrote:

> Anyone know if there is a 9600 baud mod for the Kenwood TS-790
>transceiver? I called Kenwood, and they don't know of one, so it's
>beginning to look like the Yaesu FT736R is the only game in town...
>
>---
> ROBERT D. WEAVER, Graduate Student tel (213)740-4686
> EE/Systems - Communication Sciences Institute fax (213)740-8729
> University of Southern California home (818)286-2987
> MC2565 / EEB 516 <rweaver@scf.usc.edu>
> Los Angeles, CA 90089-2565 http://www-scf.usc.edu/~rweaver/

2626. Wxsat geographic overlays?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-17 00:00:00 UTC
From: STEVE MEIER <N9JGQ@worldnet.att.net>
Message-ID: <6295gm$7n8@bgtnsc02.worldnet.att.net>
Source record: 17797

Hi. I'm using WXSAT and JVFAX for my polar orbit pictures. Is there a way to
overlay borders/coastlines to my received pictures. I know there are commercial
programs that decode and overlay borders but they co$t too much as far as I'm
concerned. Thanks....Steve

2627. * SpaceNews 20-Oct-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-10-18 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1020.1997@ampr.org>
Source record: 17798
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1020
* SpaceNews 20-Oct-97 *

BID: $SPC1020

=========
SpaceNews
=========

MONDAY OCTOBER 20, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* UoSAT-OSCAR-11 NEWS *
======================
During the period 30-Sep-97 through 14-Oct-97, good signals have been
received from UoSAT-OSCAR-11's 145.826 MHz VHF-FM beacon. The gap between
this report and the last one is due to holidays. Telemetry has been nominal.
The battery voltage has been steady at around 14.0 volts.

The internal temperatures have continued to increase due to a reduction of
solar eclipses. The battery temperature is now 17.0 C, and the telemetry
electronics is 14.2 C. One consequence of the increased temperatures is
that the VHF-FM beacon power decreases. It is now 260 mW compared with
375 mW at the start of July. Over this period, the beacon temperature
increased from 1.8 C to 17.2 C. The S-band beacon is not affected in
this way, and the telemetry indicates that its power output has slightly
increased.

The WOD survey of channels 10, 20, 30, 40 (+Y, -X, +X array currents, array
voltage) dated 03-Sep-97 has now been replaced by channels 17, 18, 27, 28
(+X, +Y, -X, -Y facet temperatures), dated 16-Sep-97.

A single AMSAT-UK news bulletin dated 21-Jun-97 by Richard, G3RWL, has been
transmitted by the beacon. This featured the Sputnik-1 40th anniversary,
Mir frequencies, RS-10 news, and the Keplerian elements for OSCAR-11.

Reports of the Mode-S beacon have been received from Stan W3QBK, Fernando
LU1HKO, and Andy VK5LZ. Andy uses a VK5WA converter, and estimates the
signal level at -150 dBm. He gets DOVE at -130 dBm.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)

ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The Mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and is delivering only half power. Any reports of reception on 2401 MHz would be most welcome, and should be directed to Clive Wallis at: g3cwv@amsat.org.

The 435.025 MHz UHF beacon is normally OFF. However, it can sometimes be heard when the satellite is being commanded by ground control (ie. within range of Guildford, UK). When the 435 MHz beacon is transmitting, the 145 MHz beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit a Web sire created by Clive Wallis, G3CWV. The site contains some software for capturing data and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded as new data is captured. The URL is:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV]

* SCI-TEKNOFEST '97 NEWS *
==========
The Trinidad and Tobago Amateur Radio Society will be participating at the National Science and Technology Fair "Sci-Teknofest '97", sponsored by the National Institute of Science and Technology from 24-Oct-97 through 02-Nov-97 9Y4NED will be operating on KO-23, KO-25 and UO-22 and welcomes messages from all. School groups will be visiting from from 13:00 UTC each day.

[Info from Noel, 9Y4NED via KITSAT-OSCAR-25]

* CASSINI LAUNCH SUCCESSFUL *
==========
ESA's latest and farthest venture into the Solar System began at 10:43 Paris time on 15 October. The American Titan IVB/Centaur launcher sent NASA's large Cassini spacecraft on its way to Saturn. Cassini carries ESA's probe Huygens, as well as the high-gain antenna provided by ASI, the Italian Space Agency. In 2004, ESA's Huygens probe will plunge into the thick atmosphere of Saturn's largest moon, Titan.

About 500 representatives of the scientific, engineering and industrial teams in Europe, which created the Huygens Probe, were present at Cape Canaveral for the Cassini Huygens launch. They saw the powerful boosters of the Titan launcher light up the pre-dawn sky.

The launch sequence concluded with the completion of the second firing and separation of the Centaur upper stage rocket. NASA's ground station at

Canberra, Australia, obtained good signals from Cassini an hour after launch.

The European Space Operations Centre (ESOC) at Darmstadt will monitor the condition of the Huygens spacecraft. Their report is expected in 8-10 days' time.

The next major event will be the swingby of Cassini Huygens at Venus on 21-Apr-1998. This is the first of a sequence of "gravity-assist" operations at Venus, the Earth and Jupiter, to accelerate the spacecraft towards its destination.

[Info via ESA Press Release N 32-97]

* FO-29 OPERATING SCHEDULE *
============================

Date Time Mode

13-Oct-97 08:26z JD 1200
17-Oct-97 08:18z Digitalker
20-Oct-97 07:21z JD 9600
24-Oct-97 07:13z Digitalker
27-Oct-97 07:59z JA
31-Oct-97 07:51z Digitalker
04-Nov-97 07:43z JD 1200
07-Nov-97 08:29z Digitalker
10-Nov-97 07:31z JD 9600
14-Nov-97 07:23z JA
21-Nov-97 08:01z Digitalker
25-Nov-97 07:53z JD 1200
28-Nov-97 08:39z JD 9600
05-Dec-97 07:33z JA

FO-20 is expected to remain in Mode JA continuously.

[Info via Kazu Sakamoto, JJ1WTK]

* OMAN VIA SATELLITE *
======================
Members of the Whitton Amateur Radio Group will be visiting Muscat, Oman from 16-Oct-97 through 28-Oct-97. The group will include 3 satellite operators and will be active on satellites from the Headquarters station of the Royal Omani ARS. Activity will be via OSCAR-10 and RS-15. The group will be participating in the SSB leg of CQWW and have previously operated as ZC4EPI and C56DX via AO-10 and AO-13.

[Info via G0MRF]

* FEEDBACK/INPUT WELCOMED *
===========================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2628. Mir Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-10-18 00:00:00 UTC
From: "Dan C. Cui" <dcui@nh.ultranet.com>
Message-ID: <877210265.482619@ninsun.nh.ultra.net>
Source record: 17799

What's the correct frequencies for voice uplink to mir.....I heard MIR today on 143.625. Is the uplink 145.550, 145.985, 145.200???

Dan
dcui@nh.ultranet.com

2629. What radio should I start with

Newsgroup: rec.radio.amateur.space
Date: 1997-10-18 00:00:00 UTC
From: Clive A Churchward <clive@dashx.demon.co.uk>
Message-ID: <u0qoIFAU2TS0EwPe@dashx.demon.co.uk>
Source record: 17800

I currently have a UBC9000XLT scanner and I hope to purchase a short way radio in the near future. Initially it will be listen in to the world but I may want to try and do some Astronomical work. I'm not sure what and whatever it was it would be simple stuff but I would appreciate anyone pointing me in the right direction so that I don't have to upgrade shortly after.

I have not a lot of money so please keep that in mind.

Thanks
Kind Regards Clive
--
Clive A Churchward
Manchester, UK

2630. Re: Mir Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-10-19 00:00:00 UTC
From: Tom@astro.net
Message-ID: <62boe0$o7d$2@news.mhv.net>
Source record: 17801

In article <877210265.482619@ninsun.nh.ultra.net>, "Dan C. Cui" <dcui@nh.ultranet.com>
wrote:
>What's the correct frequencies for voice uplink to mir.....I heard MIR today
>on 143.625. Is the uplink 145.550, 145.985, 145.200???
>
>Dan
>dcui@nh.ultranet.com

143.625 is not a ham downlink. It's a ground control comm freq.
The uplink over the U.S. is 145.985. Most of the time they are in packet mode
however.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2631. sources for PSK-1 style modem

Newsgroup: rec.radio.amateur.space
Date: 1997-10-19 00:00:00 UTC
From: pmarkham@upmail.com
Message-ID: <62d2j8$7dm@drn.zippo.com>
Source record: 17802

I am looking for sources of a PSK-1 style modem, new or used.

Pete/wa4hei

2632. weather satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-10-19 00:00:00 UTC
From: salvador esteban <sesteban@compuserve.com>
Message-ID: <01bcdcd1$381e0ba0$ba1de8c3@sesteban>
Source record: 17803

--
http://ourworld.compuserve.com/homepages/sesteban

e- mail sesteban@compuserve.com

2633. FS: Test Equipment, NOS Tubes, Used tubes

Newsgroup: rec.radio.amateur.space
Date: 1997-10-19 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <62e02e$6bf$25@ha1.rdc1.occa.home.com>
Source record: 17804

```
NOS Tubes, large quantities of each available.
-----------------------------------------
6AZ8 Philips, $3.00 each
JAN 5751 GE, $4.00 each
6186W (6AG5WA) philips, $.25 each
JAN 6922 Philips, $3.00 each
7062/E188CC Amperex,$4.00

Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
-----------------------------------------
5U4G, $2.50 each
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each

Test Equipment, turned on and checked,working condition,but may need
minor repairs, has not been calibrated, no manuals or accessories
included .Re-conditioning, calibration, accesories & manuals are
available at extra cost, e-mail us for a quote.
-----------------------------------------
HP 141T with 8552B, 8553B, 8554B, 8555A Spectrum Analyzer $2495.00
HP 1741, 100 MHz Oscilloscope, $345.00
HP 8405 Vector Impedance Meter, $260.00
HP 8505A with 8503A & 8501A Network Analyzer $4275.00
HP 8614A, Signal Generator, 800 to 2400 MHz, $415.00
HP 8616A, Signal Generator, 1.8 to 4.5 GHz, $340.00
HP 8640B/323 ( AN/USM 323 ) Signal Generator, $485.00
HP 8640B, opt. 1 & 3, Signal Generator, $1095.00
Kay 5071B Signal Generator, 10 to 250 MHz, CW & Pulse, works, but has low
output, $75.00
Kikusui COS6100, 100 MHz 5 channel scope, $450.00
Tek 453, 50 MHz Oscilloscope, $200.00
Tek 455, 50 MHz Oscilloscope, $300.00
```

Tek 464, 100 MHz Storage scope, $375.00
Tek 465, 100 MHz Oscilloscope, $450.00
Tek 465M, 100 MHz Oscilloscope, $375.00
Tek 475, 200 MHz Oscilloscope, $545.00
Tek 485, 350 MHz Oscilloscope, $645.00
Tek 492, Spectrum Analyzer, $3995.00
Tek 1502 with thermal chart recorder & battery $1325.00
Tek 067-0520-01 Standard Amplitude calibrator $165.00

Microwave Components, used, untested, sold "as is".

HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount (conversion rate .73). No minimum order.
Prices valid until 10-31-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"

Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

2634. Hiking

Newsgroup: rec.radio.amateur.space
Date: 1997-10-19 00:00:00 UTC
From: Dwayne Rich <drichff@worldnet.att.net>
Message-ID: <62e3h7$p4g@bgtnsc02.worldnet.att.net>
Source record: 17805

Guys I am planning on hiking the Appalachian Trail in the spring of 2000. What does this have to do with ham radio? Please read on. I have hiked portions of the trail before and I would like to carry a ham radio station with me to be able to make voice contacts and send messages back either through the NTS,Packet,, or local hams that have satellite capabilities. I am looking at three possible options.
1) A small hf rig that may be able to hadle pactor,amtor,or g-tor
2) A small vhf packet/aprs station
3) A small satellite station.

Question does anyone have any information or experience about assembling a small satellite station (say 3-4 pounds or less) that could be used to contact hams via satellite? If you have any information on what could be used in either of the three cases above please email me. If you know of anyone in the raleigh,nc area that could help me decide on what equipment to purchase and help assemble a station it would be greatly appreciated. I am hoping to foster the spirit of ham radio while on the trail by allowing third party traffic if at all possible. Thanks for any of your help guys

Dwayne

2635. Re: Free Scope and spectrum analyser for you PC

Newsgroup: rec.radio.amateur.space
Date: 1997-10-20 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <344b59b1.5204742@news.crosslink.net>
Source record: 17806
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.policy,rec.radio.amateur.space,rpi.union.ham-radio,slac.rec.ham_radio,su.org.ham-radio,tnn.radio.amateur

On Sun, 19 Oct 1997 16:56:10 -0500, "Steven Hull"
<kc5wee@email.msn.com> wrote:

>What do you think? Hats off to vk1eme.
>

Where's the Beef?

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

2636. 1.2g vertical antenna?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-20 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <344cca1d.567092@news.mindspring.com>
Source record: 17807
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

There seem to be few antennas available on the market for 1.2g (23cm). I would like to put only one (1) antenna for 1.2g on my boom and have it handle both my SSB/data modes via P3D and also ATV on a local repeater (when I want to work ATV) which requires vertical polarization.

QUESTION: If I get a high gain yagi or loop yagi antenna for 1.2g and mount it so it is vertically polarized will it work ok on P3D? I know it would work fine for my ATV needs. But will it do 'double duty' for me?

W4SCO

2637. NORAD Two-Line Orbital Element Sets (TLE082)

Newsgroup: rec.radio.amateur.space
Date: 1997-10-20 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <62gm9r$d45$1@blackbird.afit.af.mil>
Source record: 17808

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #082 -
Alouette 1
1 00424U 62049A 97292.18728839 .00000044 00000-0 41812-4 0 3257
2 00424 80.4668 161.2400 0022321 215.4751 144.4911 13.67905558749196
ATS 1
1 02608U 66110A 97291.39140794 .00000012 00000-0 10000-3 0 432
2 02608 14.4367 347.5680 0007386 122.7855 237.2493 1.00313515 29763
ATS 3
1 03029U 67111A 97292.23005388 -.00000129 00000-0 10000-3 0 7106
2 03029 14.8605 354.5178 0010165 266.7096 104.0587 1.00272824109676
Starlette
1 07646U 75010A 97291.21870508 -.00000119 00000-0 20504-4 0 937
2 07646 49.8270 22.8590 0206024 42.1918 319.4627 13.82193092146461
LAGEOS
1 08820U 76039A 97292.57823103 -.00000005 00000-0 00000+0 0 3260
2 08820 109.8218 193.6484 0042969 22.3508 337.9077 6.38664429245087
GOES 2
1 10061U 77048A 97291.57138681 .00000031 00000-0 10000-3 0 8987
2 10061 12.9592 31.5937 0010867 138.7964 244.9232 1.00272644 19345
IUE
1 10637U 78012A 97287.13392551 .00000079 00000-0 10000-3 0 4116
2 10637 36.2478 75.8946 1381896 70.0437 304.2907 1.00075295 24780
GOES 3
1 10953U 78062A 97284.30331256 -.00000083 00000-0 10000-3 0 8528
2 10953 11.9849 34.7640 0003786 192.8392 152.0270 1.00274355 23878
SeaSat 1
1 10967U 78064A 97292.69943442 .00000037 00000-0 56640-4 0 6125
2 10967 108.0017 107.7413 0002560 262.8559 97.2287 14.38198307 11826

```
Nimbus 7
1 11080U 78098A 97289.12829247 -.00000104 00000-0 -57240-4 0 7045
2 11080 98.8863 132.1584 0009612 95.0839 265.1414 13.83677371958371
GOES 5
1 12472U 81049A 97289.28310108 -.00000255 00000-0 10000-3 0 219
2 12472 8.9488 45.4213 0005339 101.3444 258.6742 1.00324842 17973
Cosmos 1383
1 13301U 82066A 97292.89860156 .00000078 00000-0 74504-4 0 6202
2 13301 82.9278 134.7385 0027512 333.7031 26.2713 13.68087592764337
LandSat 4
1 13367U 82072A 97291.24248730 .00000086 00000-0 28668-4 0 1065
2 13367 98.0117 331.4131 0008485 63.2114 296.9951 14.57217014811616
DMSP B5D2-1
1 13736U 82118A 97292.83591648 .00000192 00000-0 98715-4 0 3342
2 13736 98.6212 119.2930 0009296 45.7235 314.4709 14.25868139770848
IRAS
1 13777U 83004A 97292.52766108 .00000035 00000-0 53987-4 0 8054
2 13777 98.9741 113.8119 0011890 181.4186 178.6945 13.99290780421800
Cosmos 1447
1 13916U 83021A 97291.21498059 .00000033 00000-0 18987-4 0 7159
2 13916 82.9481 190.0689 0036085 231.5357 128.2559 13.74360373730778
TDRS 1
1 13969U 83026B 97286.37639228 -.00000303 00000-0 10000-3 0 7976
2 13969 9.6499 39.1142 0001807 163.2496 266.4904 1.00278078 26231
GOES 6
1 14050U 83041A 97292.23402522 .00000039 00000-0 10000-3 0 7315
2 14050 7.8158 49.1433 0003067 128.7180 162.7997 1.00296614111090
AO-10
1 14129U 83058B 97277.84210603 .00000065 00000-0 10000-3 0 5088
2 14129 26.2661 123.5522 6039277 157.0705 248.6734 2.05879961 79648
LandSat 5
1 14780U 84021A 97290.23849585 -.00000252 00000-0 -45715-4 0 6530
2 14780 98.2723 352.2147 0001665 196.6443 163.4638 14.57082453724887
UO-11
1 14781U 84021B 97292.49828910 .00000195 00000-0 40768-4 0 92
2 14781 97.8477 268.8477 0011546 332.0652 27.9933 14.69600488729518
Cosmos 1574
1 15055U 84062A 97285.45301321 .00000033 00000-0 18383-4 0 9124
2 15055 82.9565 250.2473 0029135 78.7196 281.7231 13.73653946667194
Cosmos 1602
1 15331U 84105A 97289.32884065 .00000558 00000-0 62392-4 0 5969
2 15331 82.5370 17.5117 0020797 136.8585 223.4263 14.84959442705119
ERBS
1 15354U 84108B 97292.19329923 -.00000077 00000-0 14595-4 0 3117
2 15354 56.9956 223.7818 0006763 65.7063 294.4677 14.95086391709977
NOAA 9
1 15427U 84123A 97292.78812194 .00000073 00000-0 61868-4 0 3296
2 15427 98.8891 2.4066 0015486 9.1777 350.9670 14.13888949662815
Mir
1 16609U 86017A 97293.10527581 .00006577 00000-0 84455-4 0 7042
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2 16881 82.5152 72.5202 0019444 159.3976 200.8000 14.83901873606331
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2 16969 98.5526 282.6362 0013630 9.4061 350.7371 14.25063169576337
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2 17527 98.8712 345.8377 0020761 59.1421 301.1781 14.00459552543158
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2 18312 82.5547 325.5673 0011263 298.2022 61.8001 13.84105493513583
Meteor 2-17
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2 18820 82.5405 17.2653 0017330 355.2665 4.8310 13.84782250491342
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1 18822U 88006A 97292.84887626 .00000047 00000-0 38808-4 0 6484
2 18822 98.3901 107.6316 0006669 21.3107 338.8346 14.23244947504226
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Meteor 3-2
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2 19503 65.3710 308.2453 0005756 162.5340 197.5448 2.13101776 70723
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MOP-1
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2 19883 0.8730 85.4620 0004326 160.5126 206.4977 1.00273799203985
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2 20061 53.9044 266.2125 0188655 225.6168 132.8080 2.00563324 61243
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2 20103 82.9552 108.9093 0038131 132.7044 227.7337 13.73882930415663
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2 20185 55.3710 91.6358 0021691 356.5909 3.4100 2.00568675 59783
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2 20261 82.5940 319.7043 1242016 14.3973 348.9354 12.47454138366618
GPS BII-04
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COBE
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Kvant-2
1 20335U 89093A 97291.82448101 -.00011419 00000-0 -13000-3 0 499
2 20335 51.6550 184.4401 0006392 234.5309 125.6010 15.60443934449444
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2 20437 98.5088 11.6455 0010516 198.0667 162.0137 14.29976656404012
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2 20439 98.5314 8.0151 0010927 218.9427 141.0974 14.30021499403036
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2 20441 98.5340 12.3160 0011388 212.0724 147.9767 14.30131682403573
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1 20670U 90057A 97293.16424974 .00000075 00000-0 53706-4 0 4254
2 20670 82.5455 318.7209 0015574 325.8285 34.1872 13.84134673369521
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2 20788 98.8235 287.7905 0015067 208.9802 151.0694 14.01410006364688
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AO-21
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2 21152 82.9190 144.7873 0043647 67.2942 293.2813 13.73552859330653
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2 21232 82.5390 27.7478 0014337 27.3272 332.8603 13.16477616311759
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Meteor 3-5
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1 21798U 91082A 97292.68905279 .00000087 00000-0 69256-4 0 9191
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Glonass 61
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2 22779 54.0611 267.2420 0014102 299.4630 60.3756 2.00578034 30267
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1 22782U 93055A 97286.82013320 .00000036 00000-0 19075-4 0 5962
2 22782 82.5498 323.8576 0023424 63.0316 297.3241 13.83083114207983
UFO F2
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2 25010 0.0651 238.6179 1409092 254.3400 132.7574 0.84338964 49
1997062B
1 25011U 97062B 97290.13317133 .00003551 -10562-5 10000-3 0 14
2 25011 24.5279 311.8758 7841984 178.4354 187.8902 1.64659434 81
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

2638. Fodtrack satellite tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-10-21 00:00:00 UTC
From: Rudy Pycke <in000824@innet.be>
Message-ID: <01bcde08$dae55ae0$1dc9140a@innet.innet.be>
Source record: 17809

Who has good results with Fodtrack under Windows 95?
On my PC the tracking is not stable under Windows: sometimes the program
sends wrong values to the interface.
Who can give some hints?

Rudy Pycke
on6py@amsat.org

2639. FS: Andrew Heliax Jumpers

Newsgroup: rec.radio.amateur.space
Date: 1997-10-21 00:00:00 UTC
From: ve3gid@aol.com
Message-ID: <19971021165000.MAA24092@ladder01.news.aol.com>
Source record: 17810

```
==================================================
FOR SALE/TRADE
Andrew Heliax Jumpers

Brand New in Box:
```

Qty Description Model #
Price
---- -------------- -----------------
----
2 2' .5" Jumpers w/ Male N' DIN L4-PNMDM $124.00 ea.
2 1m .5" Jumpers w/ DIN Male L4-PDMDM $130.00 ea.

```
Plus shipping.
Canadian Funds
==================================================
73s, Frank (VE3GID) Ottawa, Canada
http://www.ncf.carleton.ca/~dg198/
```

2640. KC8CAJ Amateur Radio Page

Newsgroup: rec.radio.amateur.space
Date: 1997-10-21 00:00:00 UTC
From: raneschr@student.lansing.cc.mi.US
Message-ID: <Pine.A41.3.95.971021142454.33420B-100000@student.lansing.cc.mi.us>
Source record: 17811

Check out the KC8CAJ Amateur Radio Page! Bringing forth new horizons to you in the world of amateur radio, computer, and weather information. We have completly re-designed our site making it much easier to browse. Please feel free to take a look and tell others about it. Also, feel free to send us any comments on it and tell us of any links you would like posted.

The URL is: http://www.kb8uyz.com/kc8caj

73
Chris Ranes (KC8CAJ)

kc8caj@hotmail.com

2641. sputnik = rs-17 from Amsat news

Newsgroup: rec.radio.amateur.space
Date: 1997-10-21 00:00:00 UTC
From: Jon Dickason <dickason@dickason-pc.eng.mc.xerox.com>
Message-ID: <NEWTNews.877463936.7980.dickason@testclone.eng.mc.xerox.com>
Source record: 17812

The Sputnik 1/3 scale, PS-2, will be RS-17 when released,
according to sponsor's web page. Listen on 145.82 FM
(145.80-145.85 for doppler?). Date of release has again been
pushed back to November 3rd, during the next EVA (spacewalk) from MIR.

jdickaso@wb.xerox.com

2642. FS: Andrew Heliax 7/8" & Jumpers (1/2")

Newsgroup: rec.radio.amateur.space
Date: 1997-10-23 00:00:00 UTC
From: ve3gid@aol.com
Message-ID: <19971023193301.PAA11232@ladder02.news.aol.com>
Source record: 17813

```
================================================
FOR SALE/TRADE:
Hardline

Brand New Never Used:
Andrew Heliax Hardline, model LDF5-50A 7/8" with Female
Connectors on the ends. 127' contiguous run.
$450 CND + Shipping

LDF5-50A w/ no connectors: 27', 23', 14',15',24',27'
$negotiable...
================================================
FOR SALE/TRADE
Andrew Heliax Jumpers

Brand New in Box:

Qty Description Model #
Price
---- -------------- -----------------
-----------
2 2' .5" Jumpers w/ Male N' DIN L4-PNMDM $124.00 ea.
2 1m .5" Jumpers w/ DIN Male L4-PDMDM $130.00 ea.

Plus shipping.
Canadian Funds
================================================
73s, Frank (VE3GID) Ottawa, Canada
http://www.ncf.carleton.ca/~dg198/
```

2643. VANGUARD ELECTRONIC LABS

Newsgroup: rec.radio.amateur.space
Date: 1997-10-24 00:00:00 UTC
From: hamdan@ix.netcom.com
Message-ID: <62osre$4n3@dfw-ixnews6.ix.netcom.com>
Source record: 17814

I have been active on the amateur satellites for a few years now, and would like to get into receiving weather satellite photos directly. I would like to purchase a Vanguard WEPIX 2000B (described on page 3-5 of the "Weather Satellite Handbook"). However, I have tried calling Vanguard Labs, e-mailing them (their web site is active though it hasn't been updated since March, 1997), and faxing them (no response). Does anyone know if they are still open for business? And regardless, does anyone have one and have comments on its quality and ease of operation. In case Vanguard went down the tubes, does anyone have a Hamtronics Weather Satellite receiver, and if so, what do you think of that radio?

Thanks much for your help.

73's de Bernie, KF0QS

hamdan@ix.netcom.com

2644. ARLK083 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk083.1997@arrl.org>
Source record: 17815
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK083
ARLK083 Keplerian data

ZCZC SK83
QST de W1AW
Keplerian Bulletin 83 ARLK083
From ARRL Headquarters
Newington, CT October 25, 1997
To all radio amateurs

SB KEP ARL ARLK083
ARLK083 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97296.76673588 .00000067 00000-0 10000-3 0 5111
2 14129 26.3388 120.4528 6034485 162.1396 235.0470 2.05881692 80032
RS-10/11
1 18129U 87054A 97297.07087868 .00000039 00000-0 26098-4 0 04225
2 18129 82.9192 143.4774 0010384 220.6175 139.4209 13.72384257517916
UO-11
1 14781U 84021B 97296.99201114 .00000212 00000-0 43578-4 0 00117
2 14781 97.8482 273.1691 0011170 317.4983 42.5356 14.69602827730173
RS-12/13
1 21089U 91007A 97297.10414799 .00000076 00000-0 64625-4 0 00302
2 21089 82.9233 183.0407 0028727 301.2922 58.5421 13.74087509336862
UO-14
1 20437U 90005B 97296.77624900 .00000033 00000-0 29348-4 0 3066
2 20437 98.5088 15.6121 0010610 185.4984 174.6083 14.29977281404590
RS-15
1 23439U 94085A 97298.09817556 -.00000039 00000-0 10000-3 0 2555
2 23439 64.8168 302.7732 0146484 107.6903 254.0066 11.27528438116588
AO-16
1 20439U 90005D 97297.13656615 .00000026 00000-0 26655-4 0 01212
2 20439 98.5303 19.1885 0011064 186.4024 173.7019 14.30023459404666
RS-16
1 24744U 97010A 97297.11696027 .00004879 00000-0 15861-3 0 01055
2 24744 97.2644 199.7233 0008154 4.8388 355.2936 15.32336458035829
```

```
DO-17
1 20440U 90005E 97296.75978564 .00000033 00000-0 29554-4 0 01131
2 20440 98.5348 19.7718 0010981 186.2865 173.8182 14.30166456404641
WO-18
1 20441U 90005F 97298.22985368 .00000021 00000-0 24895-4 0 1079
2 20441 98.5312 21.0929 0011689 183.3268 176.7832 14.30133496404859
LO-19
1 20442U 90005G 97296.78746311 .00000060 00000-0 39670-4 0 01230
2 20442 98.5374 20.4229 0011975 186.1495 173.9542 14.30250197404670
FO-20
1 20480U 90013C 97296.83349442 -.00000060 00000-0 -69760-4 0 00055
2 20480 99.0624 234.3112 0541263 86.2492 280.0326 12.83238734361208
AO-21
1 21087U 91006A 97297.54851890 .00000093 00000-0 82657-4 0 8643
2 21087 82.9414 315.8355 0034054 269.3749 90.3505 13.74588369337924
UO-22
1 21575U 91050B 97297.12319699 .00000081 00000-0 41273-4 0 08134
2 21575 98.2865 353.0153 0006743 225.6672 134.3960 14.37091441329004
KO-23
1 22077U 92052B 97296.88731058 -.00000037 00000-0 10000-3 0 07127
2 22077 66.0788 235.7709 0002546 177.4535 182.6481 12.86303879244307
KO-25
1 22828U 93061F 97298.23581182 .00000031 00000-0 29589-4 0 5702
2 22828 98.5315 9.8661 0009392 202.5830 157.4935 14.28196478180775
IO-26
1 22826U 93061D 97298.23281461 .00000021 00000-0 26020-4 0 5916
2 22826 98.5345 9.7692 0008426 220.2841 139.7716 14.27851087212640
AO-27
1 22825U 93061C 97297.15310051 .00000025 00000-0 27666-4 0 05981
2 22825 98.5316 8.4336 0007813 223.2854 136.7717 14.27740555212470
FO-29
1 24278U 96046B 97297.06878167 -.00000019 00000-0 17642-4 0 01363
2 24278 98.5196 320.6307 0351745 211.9887 145.9468 13.52634270058547
Mir
1 16609U 86017A 97298.22841876 -.00005838 00000-0 -63131-4 0 7168
2 16609 51.6538 152.2201 0006331 256.4845 103.5393 15.60530789667324

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
October 28, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2645. * SpaceNews 27-Oct-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1027.1997@ampr.org>
Source record: 17816
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1027
* SpaceNews 27-Oct-97 *

BID: $SPC1027

=========
SpaceNews
=========

MONDAY OCTOBER 27, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MARS PATHFINDER MISSION STATUS *
==================================
The Mars Pathfinder operations team is continuing its efforts to reestablish communications with the Pathfinder lander. Although they are experiencing communications difficulties, the team is confident that the spacecraft is still operating on the surface of Mars, according to Mission Manager Richard Cook. The last time they were able to send a command to the Pathfinder lander instructing it to transmit a signal back to Earth was on Sol 93, which was Tuesday, 07-Oct-97 at 14:21 UTC.

Team members suspect that the spacecraft may not be receiving commands from Earth properly because the lander's hardware has become much colder than normal. In regular operations, when the lander's transmitter is turned on, spacecraft hardware warms up sufficiently to operate normally. Since the transmitter has not been on for several days, engineers suspect that temperatures within the lander are considerably colder than normal. Predicted internal temperatures drop to as low as -50 C (-58 F) in the early morning and only rise to about -30 C (-22 F) in the late afternoon. These temperatures are about 20 C (38 F) colder than the coldest previous operational temperatures.

The lower temperatures cause the spacecraft radio hardware to operate outside the range of radio frequencies that ground controllers have used in the past. During the past three weeks the operations team has been transmitting to the spacecraft at a lower frequency and sweeping through a wider frequency range, a technique that has been used on other missions to attempt to cause the spacecraft receiver to lock on to the transmitted signal. Once ground controllers finish this, they send commands instructing the lander to turn on its transmitter and send a signal back to Earth.

To be certain that they investigate all possibilities, team members are also consulting with experts knowledgeable about the radio and other key

elements of the spacecraft. They have identified some new scenarios that are being pursued to regain communications. These recommendations include doing more testing of the engineering model hardware in the laboratory to better understand how the spacecraft might be behaving. Another recommendation has suggested shifting and increasing the range of frequencies being swept through much more than previously attempted.

According to Project Manager Brian Muirhead, the possibility exists that an unrecoverable problem may have occurred. Team members expected that, once the lander's onboard battery died, cold and thermal cycling could result in a failure of some other element of Pathfinder and thereby end the mission. "However, the Pathfinder project is funded to continue operations until August 1998, and the team will continue to do everything possible to reestablish communications until all options have been exhausted," Muirhead said. The mission has already exceeded all of its goals in terms of spacecraft lifetime and data return.

The science team, meanwhile, continues to process and analyze the large volume of data sent back by Pathfinder's lander and rover. Further science products are planned and new results will continue to be presented as they develop.

[Info via JPL/NASA]

* MIR NEWS *
============
The current Mir crew is still very busy working and experimenting in their Lab in space. American Astronaut David Wolf, who is currently living on board the Russian Mir complex, said he is working 14-16 hours a day. Judging by the tone in his voice, he is enjoying every minute of this stay. During an Amateur Radio contact with David Wolf, Miles Mann, WF1F asked when he thought he could put the Amateur Radio 2-meter station back on the air. David said he had 6 items on this top priority list, and Amateur Radio was currently number 6. Miles assured David that everyone on earth understands his current work load, and that the Amateur Radio experiment (Personal Message System, PMS) is a low priority experiment. David said he would like to move the PMS experiment higher on this list of things to do. He said he is planning on reading the existing 40 mail messages waiting for him when he gets some free time. He is also planning on putting out a mail message to "ALL" on the PMS when he gets some free time.

In the mean time, the PMS 2-meter station has been turned off. The small 13k mailbox is completely full. The amount of time required by the crew to read, reply and delete the daily load of mail is approximately 30 to 60 minutes per day, just to keep the mailbox open for the public. At the present time, the crew's work load is just too heavy to support this type of time investment towards a non-essential project.

There are a few inconsiderate Amateur Radio stations who feel the crew's primary job is to read and reply to packet mail all day long. Most of us understand this is not the crew's job.

The SAFEX II 70 cm repeater is still turned off. It is not known when the this experiment will be turned back on, but we do know the crew is still trying to build up power reserves in the batteries of the space station. The space station is now getting power from all solar panels, except the one that was damaged by the Progress truck collision.

The crew performed an internal space walk last week. The crew repaired 5 data cables, and attached them to the special air tight feed through connectors on the new Specter hatch. (Experiment: Put on your thickest snow gloves and winter jacket. Then try to install a new coax connector on a cable. This is what is was like trying to repair the data cables on Mir.) The crew now can remotely steer two more of the Spectr module solar panels. An external space walk is planned for some time between October 30 and November 1. There are three more Space walks planned this year.

[Info via Miles Mann, WF1F]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2646. FS: Rf-Concept 4-110 70cm Amplifier

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bce20e$0077c500$f08d56cf@Kwiknet.ppp>
Source record: 17817

Hello All;
I'm selling a "like new" Rf-Concepts 4-110 Pre-amplified N/conn
10w-in 100-110w-out 70cm amplifier with all orignal boxes & docs.
Worked the satellites with this amp & a fantastic preamp. Reason
for sale is strictly financial. I am asking $275 + shipping OBO.
Please re: me via email: n2rif@amsat.org Or Packet
N2RIF@WM2F.#SNJ.NJ.USA.NOAM. You can also try
calling but my phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2647. FS: DSP-2232 Reduced w/Warranty

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bce20d$c8d0a360$f08d56cf@Kwiknet.ppp>
Source record: 17818

Hello All;
I am selling "like new mint" AEA DSP-2232 Digital Signal Processor
"Mutli-Mode Data Controller" few months old still under TW warranty
With all original boxes, docs, warranty card, receipt and etc. There is
absolutely nothing wrong with this unit and is basically new out of the
box. Reason is: I am selling all my satellite and amateur gear because
of seriously major financial problems. No More... No Less
Please Re Me Via: email n2rif@amsat.org Or
Packet N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
I am asking $445 + shipping obo.
Thank you for reading my bulletin. Thomas J or just T.j. -73

P.S. I have stated about TW not sending any of these out nor
selling them at $499 but it appears I have been lied to by TW.
So I am dropping the price. I paid $599.95+shipping just a few
months ago but I guess I've had the "u know whats" put to me.
Such is life I guess..

2648. FS: Yaesu G-5400B az/el Rotor & Box

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bce20c$e9925ea0$f08d56cf@Kwiknet.ppp>
Source record: 17819

Hello All;
I'm selling a used Yaesu G-5400B az/el rotor and control box.
Everyting is in great cosmetic and working shape. For details
Please re: me via Email: n2rif@amsat.org Or
Packet: N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
I am Asking $410 + shipping obo.
All cash offers will be considered. Sorry No CODs
Thank you for reading my bulletin. Thomas J or just T.j. -73

2649. MIR still on UHF ?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: The Marlin Family <marlins@ocracoke.net>
Message-ID: <34537403.6396@ocracoke.net>
Source record: 17820

I realize this is probably annoying because it should be a FAQ but
Ive lurked for a few weeks and not seen such mentioned....
is the MIR still using it's UHF repeater at all and has it changed
frequencies ? and what is coming down from there ? packet ?
voice ? have not heard any simplex packet either tnks/ kf4gfj

2650. Re: RS12/13 Info

Newsgroup: rec.radio.amateur.space
Date: 1997-10-26 00:00:00 UTC
From: brkille@mindspring.com
Message-ID: <63019t$jfk@camel15.mindspring.com>
Source record: 17821

Mike Stapp <stapp001@gold.tc.umn.edu> wrote:

>Just got back to this newsgroup after a long while so please excuse the
>bandwidth if this question has been asked. I thought I read that RS12/13
>is now in a different mode of operation, not uplink on 15 meters and
>downlink on 10 meters. Anyone know if true? If so, what is the present
>uplink/downlink frequencies? Many thanks and 73,
>Mike - KE0WW,
>Minneapolis

RS-12 is now in mode A. Uplink 145.910-145.950, downlink 29.410-
29.450. Its my understanding that this change was made due to the
failure of RS-10. I have worked 12 a couple times since it changed
to mode A, and it seems to be about the same as 10 was.
Good luck and 73, Bruce WA4JAV

2651. Any new info on the ESA concrete launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-27 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <5E112CDEC26D94DC.1E3BC45BEEB8C2B6.A96221E957EC4407@library-proxy.airnews.net>
Source record: 17822

Well?
Ken K5MBV

2652. Space Exoloration

Newsgroup: rec.radio.amateur.space
Date: 1997-10-27 00:00:00 UTC
From: Dave Spector <dspector@visionx.com>
Message-ID: <3454C314.87BDE010@visionx.com>
Source record: 17823

For more info:

ScreenThemes http://www.ScreenThemes.com

Space Shuttle
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=shut001

Solar System
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=sola001

Images From Mars
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=mars001

Hubble Telescope
http://www.visionx.com/vxsecure/st/showpack.cfm?PackID=hubb001

2653. Re: Any new info on the ESA concrete launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-27 00:00:00 UTC
From: Tovar <tvr@nospam.mocha.ecofe.com>
Message-ID: <4m67qj575x.fsf@spinner.ecofe.com>
Source record: 17824

Yeah, the contract was cancelled, AMSAT was not asked to supply concrete, and it looks like it'll go up on a later flight (where the probability of success will be higher for all concerned).

-- KD6PAG (Networking Old-Timer, RF newbie)

2654. Satellite workshop

Newsgroup: rec.radio.amateur.space
Date: 1997-10-28 00:00:00 UTC
From: ae4nj@aol.com
Message-ID: <19971028023801.VAA08537@ladder01.news.aol.com>
Source record: 17825

There will be a special satellite workshop sponsored by the ARRL and Amsat at the Orlando HamCation(sm) on Feb 13, 1998. For info...visit www.oarc.org or email AE4NJ@aol.com.

2655. Re: MIR still on UHF ?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-28 00:00:00 UTC
From: The Marlin Family <marlins@ocracoke.net>
Message-ID: <34560B12.EEF@ocracoke.net>
Source record: 17826

thanks very much for the MIR updates, guess i should have realized that power being a pretty important thing is in low supply right now as well as Ham radio as a priority. we shall keep a watch on. KF4GFJ

2656. RS12/13 Info

Newsgroup: rec.radio.amateur.space
Date: 1997-10-28 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue@amsat.org>
Message-ID: <wb5rue@amsat.org>
Source record: 17827

Mike Stapp <stapp001@gold.tc.umn.edu> writes:

-Just got back to this newsgroup after a long while so please excuse the
-bandwidth if this question has been asked. I thought I read that RS12/13
-is now in a different mode of operation, not uplink on 15 meters and
-downlink on 10 meters. Anyone know if true? If so, what is the present
-uplink/downlink frequencies? Many thanks and 73,
-Mike - KE0WW,
-Minneapolis

This is correct. Apparently the 15 meter uplink was
shut down because 15 meters is beginning to "wake up"
on a regular basis. A few weeks ago a message came
about warning those using the 15 uplink to LISTEN before
they transmit to avoid interfereing with ongoing QSOs.
For now RS-12 is operating in Mode-A.
The frequencies are a bit different from those of RS-15.
I'm sorry I can't remember what they are at the moment.
Perhaps someone else can post them, or if you can wait
I have then written down on a "posty" in my shack. I'll
send them to you this evening.

Kevin, WB5RUE
wb5rue@amsat.org

2657. Re: MIR still on UHF ?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-28 00:00:00 UTC
From: Tom@astro.net
Message-ID: <635737$3jc$3@news.mhv.net>
Source record: 17828

In article <34560B12.EEF@ocracoke.net>, The Marlin Family <marlins@ocracoke.net> wrote:
>thanks very much for the MIR updates, guess i should have realized that
>power being a pretty important thing is in low supply right now as well
>as Ham radio as a priority. we shall keep a watch on. KF4GFJ

It's not power so much as it is more pressing repairs and chores. They WILL
be back on the air! Could be anytime now so keep your ears open!

73!
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2658. ARLK084 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-10-28 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk084.1997@arrl.org>
Source record: 17829
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK084
ARLK084 Keplerian data

ZCZC SK84
QST de W1AW
Keplerian Bulletin 84 ARLK084
From ARRL Headquarters
Newington, CT October 28, 1997
To all radio amateurs

SB KEP ARL ARLK084
ARLK084 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97298.70763055 .00000047 00000-0 10000-3 0 05136
2 14129 26.3471 120.1437 6033977 162.6654 233.5774 2.05881639080073
RS-10/11
1 18129U 87054A 97301.08076075 .00000018 00000-0 30576-5 0 04279
2 18129 82.9195 140.5150 0010556 207.8487 152.2104 13.72383999518469
UO-11
1 14781U 84021B 97300.94103624 .00000195 00000-0 40779-4 0 115
2 14781 97.8489 276.9680 0010967 303.8738 56.1428 14.69604357730754
RS-12/13
1 21089U 91007A 97301.18187265 .00000016 00000-0 14900-5 0 00341
2 21089 82.9240 180.0160 0027874 289.0039 70.8098 13.74087021337426
UO-14
1 20437U 90005B 97301.18443944 .00000022 00000-0 25037-4 0 3075
2 20437 98.5091 19.9210 0010838 172.0365 188.0998 14.29977858405222
RS-15
1 23439U 94085A 97301.11375720 -.00000039 00000-0 10000-3 0 02724
2 23439 64.8160 297.8937 0146465 106.9989 254.7038 11.27528467116922
AO-16
1 20439U 90005D 97301.19476887 .00000012 00000-0 21280-4 0 01163
2 20439 98.5300 23.1644 0011213 173.8848 186.2474 14.30023820405242
RS-16
1 24744U 97010A 97301.23091391 .00006541 00000-0 21142-3 0 985
2 24744 97.2628 203.7607 0007840 352.4662 7.6484 15.32391345 36452
```

```
DO-17
1 20440U 90005E 97301.16739125 .00000026 00000-0 26725-4 0 01174
2 20440 98.5346 24.0935 0011149 172.7362 187.3985 14.30167200405277
WO-18
1 20441U 90005F 97301.16832692 .00000007 00000-0 19260-4 0 01241
2 20441 98.5315 23.9735 0011751 174.1795 185.9528 14.30133667405272
LO-19
1 20442U 90005G 97301.19481227 .00000045 00000-0 33906-4 0 01176
2 20442 98.5372 24.7463 0012182 172.8471 187.2891 14.30250835405307
FO-20
1 20480U 90013C 97301.04360992 .00000087 00000-0 26060-3 0 00128
2 20480 99.0622 237.7341 0541149 76.7197 289.3644 12.83240727361745
AO-21
1 21087U 91006A 97301.11523493 .00000093 00000-0 82657-4 0 8658
2 21087 82.9410 313.1947 0033943 259.2098 100.5236 13.74588699338415
UO-22
1 21575U 91050B 97301.16146878 .00000077 00000-0 39866-4 0 08153
2 21575 98.2859 356.9023 0006750 211.7644 148.3125 14.37092230329586
KO-23
1 22077U 92052B 97301.16355813 -.00000037 00000-0 10000-3 0 07216
2 22077 66.0777 226.8143 0002365 177.0738 183.0292 12.86303816244854
KO-25
1 22828U 93061F 97301.17826559 .00000030 00000-0 29198-4 0 05907
2 22828 98.5308 12.7389 0009479 192.5336 167.5614 14.28197026181195
IO-26
1 22826U 93061D 97301.17597885 .00000038 00000-0 32646-4 0 06015
2 22826 98.5336 12.6418 0008528 210.6821 149.3883 14.27851692213064
AO-27
1 22825U 93061C 97301.21778436 .00000025 00000-0 27677-4 0 5958
2 22825 98.5319 12.4031 0007891 208.2471 151.8283 14.27741037213051
FO-29
1 24278U 96046B 97301.06325353 -.00000028 00000-0 79814-5 0 01419
2 24278 98.5217 324.0761 0351782 201.6678 156.9263 13.52634216059083
MO-30
1 24305U 96052B 97300.91585164 .00000204 00000-0 20364-3 0 01653
2 24305 82.9319 256.4827 0028510 195.3760 164.6510 13.73099282057277
Mir
1 16609U 86017A 97301.17413448 .00005115 00000-0 66863-4 0 07247
2 16609 51.6529 137.3967 0006287 266.0988 93.9287 15.60567705667784

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
November 1, 1997, at 2230z on Baudot and AMTOR.
NNNN
/EX
```

2659. New! Novice Mac Ham Radio Test Simulator - Free

Newsgroup: rec.radio.amateur.space
Date: 1997-10-29 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2910970438360001@wd1v.mv.com>
Source record: 17731
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

FREE - BRAND NEW Macintosh HAM TEST SIMULATORS

Upgrade Fast!

S I M U L A T E the test and get S T I M U L A T E D!

Studying for the ham tests and have access to an Mac? If it runs System 7.XX
and has 4 Meg or more of memory, you're in business with WD1V's Ham Test
Simulators, Morse Programs, Ham Radio.FAQ, and superb "how to study" material.

The newest Macintosh Ham Test Simulators are HERE (and THERE if you can FTP)!

http://www.mv.com/ipusers/wd1v/Page2.html

Or you may obtain the latest Ham Test Simulator by mailing me a *FORMATTED
disk HD disk (1.4 M) and include a Self Addressed and Stamped disk mailer for
the return. Specify the test you need.

Simulator Name Version Valid Until

Advanced Ham Test 6.0 June 30, 1998
Extra Ham Test 6.0 June 30, 2000
General Ham Test 6.0 June 30, 1998
Novice Ham Test 7.0 June 30, 2001
Technician Ham Test 6.0 June 30, 1997 (new version
in development)

Your comments and suggestions for future versions are always welcome.

ATTN: PC and other platform users:
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
My Home Page also links to sites that offer live ham test simulations right
over the net - plus links to Ham Radio.FAQ and VE session schedules.

Good luck with YOUR next test!

73,

John Seney
http://www.mv.com/ipusers/wd1v

2660. Vanguard Address?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-29 00:00:00 UTC
From: Keith McDonnell <kg2ix@worldnet.att.net>
Message-ID: <6382cm$b2o@bgtnsc02.worldnet.att.net>
Source record: 17732

Does anyone have the address of Vanguard Electronics, the weather satellite radio people?

Thanks and 73 Keith kg2ix

2661. WWW.IW7CHV.ORG

Newsgroup: rec.radio.amateur.space
Date: 1997-10-29 00:00:00 UTC
From: iw7chv@linux.iw7chv.org
Message-ID: <34573b85.275411705@news.tin.it>
Source record: 17733

The site http://www.iw7chv.org has been modified. For who already knows
about it will find really interesting news, explained with a functional
graphics to quickly understand what are the services offered. I say
someone for who go to see it the first time:

- HamRadio Search Engine: with over 10000 entries is the most complete
HamRadio Search Engine. You can search/add/modify your URL. It's also
possible to put a banner the first page of the gate.

- Internet <-> Packet Link: You can send mail between Packet Radio
Network and Internet. The service is in testing way..test it.

- Internet Radio gateway: you can browse the gate reading the Packet
bulletins around the HamRadio World.

- TOP 10 HamRadio Site: TOP 10 permit you to vote your favorite Ham
Radio URL and suggest your one.

An more ... HamRadio news, POWWOW community, meteo page, etc. ...

For better information write to:

PacketAddress: IW7CHV@IW7CHV.IPUG.ITA.EU
E-mailAddress: iw7chv@linux.iw7chv.org
WWW: http://www.iw7chv.org
Greetings from Raffaello Di Martino

PacketAddress : IW7CHV@IW7CHV.IPUG.ITA.EU
FidoNET : 2:335/719.6
Radio E-mail : iw7chv@linux.iw7chv.org
Job E-mail : dimartino@webdes.com
HamRadio Site : http://www.iw7chv.org
My Job Site : http://www.webdes.com (WEB design s.r.l.)
Phone : Home:080-8775895 Job:080-5576911 Cell:0347-3604205

2662. Cybersched your next satellite/DX contact

Newsgroup: rec.radio.amateur.space
Date: 1997-10-30 00:00:00 UTC
From: wb6siv@cyberg8t.com
Message-ID: <wb6siv-2910972307220001@host64.clr.cyberg8t.com>
Source record: 17734

By combining the benefits of the World Wide Web and E-mail, you can use the internet to set up satellite schedules to contact hams all over the world.

DX stations will also find that by establishing prearranged schedules, they can avoid the pile-up mania that makes working the states anything but enjoyable.
Using the same procedure one would use to work the Space Shuttle, you can now (thanks to the World Wide Web) work DX and stateside stations in an orderly and productive way.

Visit http://www.sarrio.com and estabish your own cybersched

*********BELOW IS AN EXAMPLE OF A CYBERSCHED POST FROM MY WEB PAGE**********

Station: EI8ESB

Name: Robbie
QTH: Ireland
Mode: Satellite Comments: I would like any skeds on either RS10/11 or RS15 on SSB up on
2 down on 10Mtrs.I am available most evenings and e-mail me for details.
Regards Robbie...
Post Date: November 10,1996
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

2663. Re: Weather Satellite Operations

Newsgroup: rec.radio.amateur.space
Date: 1997-10-30 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34583DDE.23D8@primenet.com>
Source record: 17735

> Thanks to all who read this message. I have two questions. First,
> is this the only newsgroup where weather satellite folks are found (I
> operate amateur satellites too, but want to expand my horizons)?

There is an email mailing list (reflector) for WXSAT at QTH.Net.
Please try: http://www.qth.net

There are also over 100 other mailing lists as well as free web space
and email. For details: http://www.qsl.net

There is also over 500Mb of shareware available:
http://www.qsl.net/k7on/shareware

Also, please visit my personal web page: http://www.qsl.net/k7on

2664. Re: Weather Satellite Operations

Newsgroup: rec.radio.amateur.space
Date: 1997-10-30 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19971030140201.JAA21220@ladder01.news.aol.com>
Source record: 17736

Hi
Go to :
http://members.aol.com/jkktl/ham.htm

Everything you want to know about Weather Sats!

Lots of good links re:Wx sats, WxSAt software, etc.

Jim

2665. Arianne 502 successfully launched

Newsgroup: rec.radio.amateur.space
Date: 1997-10-30 00:00:00 UTC
From: tuffenuph@aol.com
Message-ID: <19971030224900.RAA29933@ladder01.news.aol.com>
Source record: 17737

Arianne 502, originally scheduled to carry AMSAT Phase IIID
into space, launched successfully on 30 Oct 97 carrying
several dummy payloads and a small scientific payload.

CNN has a good article on the launch at
http://www.cnn.com/TECH/9710/30/ariane.launch/

2666. Ariane 502 Launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-30 00:00:00 UTC
From: John Harmon <n4okl@amsat.org>
Message-ID: <63a9iugmh1@usenet48.supernews.com>
Source record: 17738

Hello,

Did the Ariane 502 launch and was it successful?

Thanks.

John - n4okl@amsat.org

2667. Re: Ariane 502 Launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-31 00:00:00 UTC
From: russell@elwood.probe.net
Message-ID: <63cog5$g7m$1@elwood.probe.net>
Source record: 17739

"John Harmon" <n4okl@amsat.org> writes:

>Hello,

>Did the Ariane 502 launch and was it successful?

Saw an announcement in (sci.space.announce?) stating that it did launch,
and as of 15 minutes into the flight everything was green.

Hopefully P3D will be on the next one (cross fingers).

--
Tim Russell System Admin, Probe Technology email: russell@probe.net
PGP RSA: C992 109C 6D7F 8D91 062E 817E 00D3 287A
"Don't mess with the Net - it is bigger than you, and it bites."
-- David Gerard

2668. Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-10-31 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <63dbjv$r7@news.mcn.net>
Source record: 17740
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Amsat stills needs donations to help complete the Phase 3D satellite in its final stages of construction and testing. Donations are tax deductible.

For more info see:
http://www.amsat.org

Send donation to:

Amsat-na
850 Sligo Ave. #600
Silver Spring, MD. 20910

or

Call Martha with your donation at: (301) 589-6062

Thanks, 73

2669. Re: Ariane 502 Launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-31 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EIxvKo.Bq5@pe1chl>
Source record: 17741

In <rlong-3110971026360001@ts12-1.homenet.ohio-state.edu> rlong@magnus.acs.ohio-state.edu (Ron Long) writes:

>In article <3459a3a9.42175087@news.atl.bellsouth.net>, ke4zv@bellsouth.net
>(Gary Coffman) wrote:

>> On Thu, 30 Oct 1997 10:33:34 -0500, "John Harmon" <n4okl@amsat.org> wrote:
>> >Did the Ariane 502 launch and was it successful?
>>
>> Yes, the concrete block is in orbit.
>>
>Gary why don't you find out what you are talking about before posting such
>stuff.

>1. Amsat was not required to supply a concrete block for P3D.
>2. The space in the SBS where P3D would have been was empty.

3. It wasn't that successful. The main stage engine cut off too early,
putting the satellites in a too low orbit.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2670. Re: Arianne 502 successfully launched

Newsgroup: rec.radio.amateur.space
Date: 1997-10-31 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EIxvn5.Brv@pe1chl>
Source record: 17742

In <19971030224900.RAA29933@ladder01.news.aol.com> tuffenuph@aol.com (Tuff Enuph) writes:

>Arianne 502, originally scheduled to carry AMSAT Phase IIID
>into space, launched successfully on 30 Oct 97 carrying
>several dummy payloads and a small scientific payload.

>CNN has a good article on the launch at
> http://www.cnn.com/TECH/9710/30/ariane.launch/

If the page is named ariane.launch, do you think the rocket is named arianne?
No, it isn't.

The launch was, although less catastrophical than the 501 launch, not
completely successful either.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2671. Re: Ariane 502 Launch?

Newsgroup: rec.radio.amateur.space
Date: 1997-10-31 00:00:00 UTC
From: Rob Janssen <Rob.Janssen@mizar.ursa.fi>
Message-ID: <cac114.5fbac0@mizar.ursa.fi>
Source record: 17743

From: rob@pe1chl (Rob Janssen)

In <rlong-3110971026360001@ts12-1.homenet.ohio-state.edu>
rlong@magnus.acs.ohio-state.edu (Ron Long) writes:

>In article <3459a3a9.42175087@news.atl.bellsouth.net>, ke4zv@bellsouth.net
>(Gary Coffman) wrote:

>> On Thu, 30 Oct 1997 10:33:34 -0500, "John Harmon" <n4okl@amsat.org> wrote:
>> >Did the Ariane 502 launch and was it successful?
>>
>> Yes, the concrete block is in orbit.
>>
>Gary why don't you find out what you are talking about before posting such
>stuff.

>1. Amsat was not required to supply a concrete block for P3D.
>2. The space in the SBS where P3D would have been was empty.

3. It wasn't that successful. The main stage engine cut off too early,
putting the satellites in a too low orbit.

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| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2672. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <D7DAFF4091D7AD73.6062D4874EBB0AA8.C331C33DE6AED313@library-proxy.airnews.net>
Source record: 17744
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
>
> Amsat stills needs donations to help complete the Phase 3D satellite in its
>final stages of construction and testing. Donations are tax deductible.
>
>_____

OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
another launch agency? The ESA sucess record is looking worse and worse
and information about what AMSAT is doing is not easy to come by.

Ken K5MBV

2673. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Krusty <Krusty@Springfield.com>
Message-ID: <63f3au$ble@news.webspan.net>
Source record: 17745
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

5mbv@airmail.net (Ken) wrote:
>In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
>>
>> Amsat stills needs donations to help complete the Phase 3D satellite in its
>>final stages of construction and testing. Donations are tax deductible.
>>
>>____
>
> OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
>another launch agency? The ESA sucess record is looking worse and worse
>and information about what AMSAT is doing is not easy to come by.
>
>Ken K5MBV
>

Maybe you'd get more donations if ARRL, would stop excluding
people by demanding they learn morse code.... Idiots ! I hope
your satellite blows up on the pad ...

Maybe then all the old men who whine about their latest operation
at the hospital would step aside and let the next generation of
ham operators update the hobby into the 21st century (where morse
code has outlived it's usefulness).

2674. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EIyzxL.Fvp@pe1chl>
Source record: 17746
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In <63f3au$ble@news.webspan.net> Krusty <Krusty@Springfield.com> writes:

>Maybe you'd get more donations if ARRL, would stop excluding
>people by demanding they learn morse code.... Idiots ! I hope
>your satellite blows up on the pad ...

What does ARRL have to do with AMSAT? With Phase 3D?
What does morsecode have to do with VHF/UHF licenses?

I think *you* are the idiot.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2675. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Steven Jepsen <NoSpam@continet.com>
Message-ID: <345B9468.4D68@continet.com>
Source record: 17747
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Krusty wrote:
>
> 5mbv@airmail.net (Ken) wrote:
> >In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
> >>
> >> Amsat stills needs donations to help complete the Phase 3D satellite in its<Stuff deleted>
> >Ken K5MBV
> >
>
> Maybe you'd get more donations if ARRL, would stop excluding
> people by demanding they learn morse code.... Idiots ! I hope
> your satellite blows up on the pad ...
>
> Maybe then all the old men who whine about their latest operation
> at the hospital would step aside and let the next generation of
> ham operators update the hobby into the 21st century (where morse
> code has outlived it's usefulness).

Another intelligent and considered argument from the 'No Code' lobby.

Is this supposed to have something to do with AMSAT or satellites?

Steve..AI7W

2676. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: notmbv@airmail.net
Message-ID: <63g7ep$go0$1@tilde.csc.ti.com>
Source record: 17748
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

>
>Are you prepared to kick in the cost difference between what ESA are
>charging us, and what another agency might charge us? Don't forget the
>zeros...
>
>AMSAT and ESA agreed not to discuss P3D's launch until after 502's
>flight - hence the lack of information. Now that 502 has happened,
>there will be more negotiations, but they may also be delicate, and
>not to be prematurely blabbed around the world.
>
>What aspects of ESA's record look "worse and worse"?

No, I'm not prepared to even *know* how much another agency
would be charging us. I haven't seen any discussion about the
subject coming from AMSAT. Why do you ask? Are you interested
in becoming my financial adviser or are you just being sarcastic?

As for "worse and worse", look to the thread "Arianne 502
Successfully Launched" and read the post from Rob Janssen.

"Delicate" negotiations that have to be kept secret might
not be in the best interest of the AMSAT members.

Ken K5MBV

2677. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Ken@mizar.ursa.fi
Message-ID: <eac113.611889@mizar.ursa.fi>
Source record: 17749

From: 5mbv@airmail.net (Ken)

In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
>
> Amsat stills needs donations to help complete the Phase 3D satellite in its
>final stages of construction and testing. Donations are tax deductible.
>
>_____

OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
another launch agency? The ESA sucess record is looking worse and worse
and information about what AMSAT is doing is not easy to come by.

Ken K5MBV

2678. * SpaceNews 03-Nov-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: "John A. Magliacane" <John.A..Magliacane@mizar.ursa.fi>
Message-ID: <1ac112.61874c@mizar.ursa.fi>
Source record: 17750

From: kd2bd@amsat.org (John A. Magliacane)

SB NEWS @ AMSAT $SPC1103
* SpaceNews 03-Nov-97 *

BID: $SPC1103

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SpaceNews
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MONDAY NOVEMBER 3, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* ARIANE 502 LAUNCH SUCCESSFUL *
================================
Several news sources sources have reported that the second flight test of the
Ariane 5 launch vehicle (Ariane 502) was a success, and ESA has reported it
as such. These same reports have also stated that the upper stage payloads,
the two MAQSATSS (B and H), have been separated and deployed into a
geostationary transfer orbit as planned. Early accounts noted that the
launch was initiated at 1343 Universal Time today October 30, 1997.
from the European Space Agency's Kourou launch facility in French Guiana,
South America.

Ariane 502 carries three payloads. Two are (MAQSATs B and H) which are
instrumented payloads designed to simulate two large geostationary
satellites as well as to measure the Ariane 5 flight environment.
The payload also included a smaller satellite, called TEAMSAT. TEAMSAT
is an experimental scientific satellite. No word has yet been received
rgarding its successful deployment or operation. No Amateur Radio
satellites were aboard.

The AMSAT Phase 3D spacecraft, currently nearing completion, was to have
flown on this flight test of the Ariane 5 series. However, in August, ESA
removed P3-D from the AR-502 manifest when it became clear that needed
structural modifications to the P3-D spaceframe would not be finished in
time to make the AR-502 launch and the Phase 3-D completion
schedules compatible. The modifications came as a result of ESA's
discovery that launch loads on the AR-502 flight might be significantly
higher than ESA had first anticipated.

AMSAT officials believe that it still too early to know what the effect
Ariane 502's now apparent success will have on the subsequent Ariane
schedule, on the possible Phase 3D launch, or the vehicle on which it will

ultimately ride. However, it was anticipated that a successful AR-502 flight would give ESA added flexibility in scheduling a subsequent launch for Phase 3-D on a future Ariane flight.

AMSAT-DL President Karl Meinzer DJ4ZC and AMSAT-NA President Bill Tynan W3XO, expressed their great joy and relief on hearing the news. In a joint statement they said, "After the failure of Ariane 501 in 1996, we at AMSAT-DL and AMSAT-NA were, quite naturally, very distressed to hear of that unfortunate occurrence." "This subsequent success of the Ariane 502 flight puts ESA's Ariane 5 program back on track and, even though we were not aboard this time, is very good news for us."

On behalf of the Amateur Radio satellite community, both AMSAT Presidents extend their sincere congratulations to ESA, Arianespace, CNES as well as to the members of the TEAMSAT Project.

[Info via Bill Tynan, W3XO, AMSAT-NA President]

* MIR NEWS *
============
The current Mir crew is still very busy working and experimenting in their Lab in space, but they have had a few moments to chat with the public via 2-meter Amateur Radio. A few times last week David Wolf was active on 145.985 FM simplex voice, and the packet PMS was also active for a day. American Astronaut David Wolf who is currently living on board the Russian Mir complex said he has been going to bed at midnight every day. Judging by the tone in his voice, he was enjoying every minute of his stay.

The Amateur Radio experiment (Personal Mail System, PMS) is a low priority experiment. The crew has been too busy with other experiments to devote much time to the mail box. However, David reported to Miles Mann, WF1F that Paval did try to connect the Lap top to the packet radio TNC on 28-Oct-97, but was unable to get the terminal program properly configured. David expects the crew will have a little more free time after this weekend's space walk. Anatoly and Paval will exit Mir early Monday morning to perform the EVA. One of the projects scheduled for this EVA is the launching of the Sputnik Amateur Radio Satellite. David reported that he been testing the Sputnik satellite and has used the Kenwood TM-733 transceiver to listen for the Sputnik's beacon during a test. There were some conflicting reports about the satellite's beacon frequency, so Miles Mann asked David if he remembered the exact frequency, but he was not sure. Then Miles called the Chief of the Amateur Radio Cosmonaut Department in Moscow and asked Sergej Samburov for a status update of the Sputnik. Sergej stated the plan is to launch the Sputnik on Monday morning around 5:00 am Moscow time (02:00 UTC). Sergej said the beacon frequency will be 145.820 MHz FM. Anatoly will perform the hand launching of Sputnik, and Paval will take pictures from outside. David Wolf will be inside Mir, and he will also be taking pictures.

A special QSL card is available to anyone who copies the beacon from the Sputnik satellite. Envelopes should be well sealed and not include cash. Send an SASE and an IRC coupon to the address below, and do not make any

visible notes on the outside of the envelope with Amateur Radio callsigns. Note that Dave Larsen, N6CO, will not be handling SWL cards for Sputnik. Please use the following address:

Sergej Samburov
PO Box 73
Kaliningrad-10 City
Moscow Area, 14070, Russia

In the meantime, the PMS 2-meter station can be expected to be off most of the time. The small 13k mail box was purged of most mail last week. David does not have time to issue personal responses to each station, but he does have a list off all callsigns who sent him mail. The tentative plan is to send out a message addressed to "ALL" thanking everyone for their support including the callsign list of those who sent messages to Dave.

The amount of time required by the crew to read, reply, and delete the daily load of mail is approximately 30 to 60 minutes per day. At the present time, the crew's work load is just too heavy to support this type of time investment towards non-essential projects. It is hoped that everyone understands this situation.

[Info via Miles Mann, WF1F / MIREX]

* FALCON GOLD SATELLITE LAUNCHED *
==========
On 24-Oct-97 at 06:46 UTC, an Atlas-Centaur rocket was launched carrying the Falcon Gold mission payload. Falcon Gold is a satellite designed and built by Air Force Academy cadets in conjunction with the University of Colorado-Colorado Springs.

The US Air Force Academy is the first undergraduate institution to get a live satellite in orbit, and Falcon Gold is the first presence of a GPS receiver above the constellation. Data is being made public as it comes available, and post processing at USAFA facilities is in progress.

On Monday, a Navy ground station succeeded in downloading the first bursts of data from the satellite. After digging out of the Denver snow storm, logging of spacecraft data took place using a 60' dish at the DSES facilities northwest of Boulder, Colorado.

Amateur Radio listeners from around the world have expressed interest in the satellite, and several satellite or moon-bounce stations are coming on line. Stations from the US, France, Astralia, and England have contacted the USAFA for information, and the USAFA is waiting for the first log from an overseas station. Data format is standard AX.25 9600 bps.

For information is available via the Internet at the following URL:

http://www.pcisys.net/~mork/

[Info via Captain Brian J. Mork (mork@usa.net)]

* MOON KEPS *
=============
The following Keplerian element set for November 1997 was computed by
HB9BNI and is provided for those wishing to track the moon this month
using satellite tracking software:

Moon
1 00000U 00000A 97287.82703585 .00000000 00000-0 00000-0 0 0004
2 00000 18.4218 003.0207 0479000 349.0988 009.6612 00.036600990 6

Satellite: Moon
Catalog number: 0
Epoch time: 97287.82703585
Element set: 0
Inclination: 18.4218 deg
RA of node: 3.0207 deg
Eccentricity: 0.0479000
Arg of perigee: 349.0988 deg
Mean anomaly: 9.6612 deg
Mean motion: 0.03660099 rev/day
Decay rate: 0.0000e+00 rev/day^2
Epoch rev: 0
Checksum: 229

[Info via Jean-Claude, FB1RCI]

* FEEDBACK/INPUT WELCOMED *
===========================
Comments and input for SpaceNews should be directed to the editor (John,
KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2679. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Christopher Cox <Christopher.Cox@mizar.ursa.fi>
Message-ID: <aac117.618a39@mizar.ursa.fi>
Source record: 17751

From: "Christopher Cox" <cobox@netexp.net>

>>its morse code's fault that ham operators are not "updating" to the 21st century.

I HAVE actually seen this...But the rest is tripe I will admit.
--
____
########## Christopher Cox, KC8FRJ, TRA#4901 L2, NAR 70155 ###########
~~~~~~
~~~~~~

2680. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Rob Janssen <Rob.Janssen@mizar.ursa.fi>
Message-ID: <3ac118.616eb6@mizar.ursa.fi>
Source record: 17752

From: rob@pe1chl (Rob Janssen)

In <63f3au$ble@news.webspan.net> Krusty <Krusty@Springfield.com> writes:

>Maybe you'd get more donations if ARRL, would stop excluding
>people by demanding they learn morse code.... Idiots ! I hope
>your satellite blows up on the pad ...

What does ARRL have to do with AMSAT? With Phase 3D?
What does morsecode have to do with VHF/UHF licenses?

I think *you* are the idiot.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2681. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Krusty@mizar.ursa.fi
Message-ID: <9ac115.615aa0@mizar.ursa.fi>
Source record: 17753

From: Krusty <Krusty@Springfield.com>

5mbv@airmail.net (Ken) wrote:
>In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
>>
>> Amsat stills needs donations to help complete the Phase 3D satellite in its
>>final stages of construction and testing. Donations are tax deductible.
>>
>>____
>
> OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
>another launch agency? The ESA sucess record is looking worse and worse
>and information about what AMSAT is doing is not easy to come by.
>
>Ken K5MBV
>

Maybe you'd get more donations if ARRL, would stop excluding
people by demanding they learn morse code.... Idiots ! I hope
your satellite blows up on the pad ...

Maybe then all the old men who whine about their latest operation
at the hospital would step aside and let the next generation of
ham operators update the hobby into the 21st century (where morse
code has outlived it's usefulness).

2682. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: "Michael P. Deignan" <Michael.P..Deignan@mizar.ursa.fi>
Message-ID: <3ac116.614a32@mizar.ursa.fi>
Source record: 17754

From: kh6hz@anomaly.ideamation.com.nospam (Michael P. Deignan)

In article <63f3au$ble@news.webspan.net>,
Krusty <Krusty@Springfield.com> wrote:

>> OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
>>another launch agency? The ESA sucess record is looking worse and worse
>>and information about what AMSAT is doing is not easy to come by.
>
>Maybe you'd get more donations if ARRL, would stop excluding
>people by demanding they learn morse code.... ...
>
>Maybe then all the old men who whine about their latest operation
>at the hospital would step aside and let the next generation of
>ham operators update the hobby into the 21st century (where morse
>code has outlived it's usefulness).

So, let me get this straight.

Morse code is to blame for people not sending in donations to support
this new technology, and because these people are not sending in
donations, its morse code's fault that ham operators are not "updating"
to the 21st century.

Right. Got it.

I wasn't aware the USPS required hams to use morse when sending a letter.

MD
--
-- Ted Kennedy has killed more people with his car than I have
-- with my guns.
--
-- If you don't like my opinions, that's just too damn bad.

2683. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: laura halliday <laura.halliday@mizar.ursa.fi>
Message-ID: <7ac11c.615b51@mizar.ursa.fi>
Source record: 17755

From: laura halliday <ve7ldh@direct.ca>

Ken wrote:

> OK, PH3D and AMSAT are great, but is AMSAT even shopping around for
> another launch agency? The ESA sucess record is looking worse and worse
> and information about what AMSAT is doing is not easy to come by.

Are you prepared to kick in the cost difference between what ESA are
charging us, and what another agency might charge us? Don't forget the
zeros...

AMSAT and ESA agreed not to discuss P3D's launch until after 502's
flight - hence the lack of information. Now that 502 has happened,
there will be more negotiations, but they may also be delicate, and
not to be prematurely blabbed around the world.

What aspects of ESA's record look "worse and worse"?
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

2684. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-01 00:00:00 UTC
From: Steven Jepsen <Steven.Jepsen@mizar.ursa.fi>
Message-ID: <aac11b.61a56a@mizar.ursa.fi>
Source record: 17756

From: Steven Jepsen <NoSpam@continet.com>

Krusty wrote:
>
> 5mbv@airmail.net (Ken) wrote:
> >In article <63dbjv$r7@news.mcn.net>, fiscus@mcn.net says...
> >>
> >> Amsat stills needs donations to help complete the Phase 3D satellite in
its<Stuff deleted>
> >Ken K5MBV
> >
>
> Maybe you'd get more donations if ARRL, would stop excluding
> people by demanding they learn morse code.... Idiots ! I hope
> your satellite blows up on the pad ...
>
> Maybe then all the old men who whine about their latest operation
> at the hospital would step aside and let the next generation of
> ham operators update the hobby into the 21st century (where morse
> code has outlived it's usefulness).

Another intelligent and considered argument from the 'No Code' lobby.

Is this supposed to have something to do with AMSAT or satellites?

Steve..AI7W

2685. Re: Vanguard Address?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Bernard Poskus and Cheryl Blehm-Poskus <hamdan@ix.netcom.com>
Message-ID: <63fqiq$h3i@sjx-ixn9.ix.netcom.com>
Source record: 17757

In article <6382cm$b2o@bgtnsc02.worldnet.att.net>,
"Keith McDonnell" <kg2ix@worldnet.att.net> wrote:
>Does anyone have the address of Vanguard Electronics, the weather satellite
>radio people?
>
>Thanks and 73 Keith kg2ix
>

Dear Keith:

I have been told by a variety of people that Vanguard is out of business. I have their address is you want it. Their phone does not answer, they don't answer their e-mail or their faxes. At any rate, if you want the info I have, I'll send it to you. Also, if you find them, please e-mail me, because I'd like to get one of their receivers.

73's de Bernie, KF0QS

2686. Re: Vanguard Address?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Bernard Poskus and Cheryl Blehm-Poskus <Bernard.Poskus.and.Cheryl.Blehm-Poskus@mizar.ursa.fi>
Message-ID: <3ac119.620ef4@mizar.ursa.fi>
Source record: 17758

From: Bernard Poskus and Cheryl Blehm-Poskus <hamdan@ix.netcom.com>

In article <6382cm$b2o@bgtnsc02.worldnet.att.net>,
"Keith McDonnell" <kg2ix@worldnet.att.net> wrote:
>Does anyone have the address of Vanguard Electronics, the weather satellite
>radio people?
>
>Thanks and 73 Keith kg2ix
>

Dear Keith:

I have been told by a variety of people that Vanguard is out of
business. I have their address is you want it. Their phone does not answer,
they don't answer their e-mail or their faxes. At any rate, if you want the
info I have, I'll send it to you. Also, if you find them, please e-mail me,
because I'd like to get one of their receivers.

73's de Bernie, KF0QS

2687. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <345C44EA.4192@trader.com>
Source record: 17759
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

laura halliday wrote:
> AMSAT and ESA agreed not to discuss P3D's launch until after 502's flight

Which aspects of the launch? Why?

> not to be prematurely blabbed around the world.

Why?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2688. Re: 1.2g vertical antenna?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: luap@webtv.net
Message-ID: <63hcsc$191$1@newsd-105.bryant.webtv.net>
Source record: 17760

Get one that is circulatly polarized.

At my age, a little feedback is appreciated.

2689. Belden 9913

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: "willy.wilson" <willy.wilson@virgin.net>
Message-ID: <345C57DD.5A5@virgin.net>
Source record: 17761

Anyone know the velocity factor of Belden 9913 pse?
Tks, Willy/GM3NUF.

2690. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Mercenary PGP ROT 13 <Mercenary.PGP.ROT.13@mizar.ursa.fi>
Message-ID: <cac121.622c39@mizar.ursa.fi>
Source record: 17762

From: gnpulba@abfcnz.vpbz.arg (Mercenary PGP ROT 13)

Krusty <Krusty@Springfield.com> wrote:

>Maybe you'd get more donations if ARRL, would stop excluding
>people by demanding they learn morse code.... Idiots ! I hope
>your satellite blows up on the pad ...

AMSAT is not a part of ARRL. I myself support AMSAT, not ARRL.

PGP encrypt your email to me
http://www.icom.net/~tachyon/pgp.key

2691. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Dennis Erwin Thurlow <Dennis.Erwin.Thurlow@mizar.ursa.fi>
Message-ID: <fac122.620a0d@mizar.ursa.fi>
Source record: 17763

From: Dennis Erwin Thurlow <geosynq@trader.com>

laura halliday wrote:
> AMSAT and ESA agreed not to discuss P3D's launch until after 502's flight

Which aspects of the launch? Why?

> not to be prematurely blabbed around the world.

Why?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2692. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Doran Platt <jeepp@erols.com>
Message-ID: <345C97E4.FF5C640A@erols.com>
Source record: 17764
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

and "Mars needs Women" (ed. note: title of 1960's grade B sci-fi
movie)

Michael P. Deignan wrote:

> In article <63f3au$ble@news.webspan.net>,
> Krusty <Krusty@Springfield.com> wrote:
>
> >> OK, PH3D and AMSAT are great, but is AMSAT even shopping around
> for
> >>another launch agency? The ESA sucess record is looking worse and
> worse
> >>and information about what AMSAT is doing is not easy to come by.
> >
> >Maybe you'd get more donations if ARRL, would stop excluding
> >people by demanding they learn morse code.... ...
> >
> >Maybe then all the old men who whine about their latest operation
> >at the hospital would step aside and let the next generation of
> >ham operators update the hobby into the 21st century (where morse
> >code has outlived it's usefulness).
>
> So, let me get this straight.
>
> Morse code is to blame for people not sending in donations to support
> this new technology, and because these people are not sending in
> donations, its morse code's fault that ham operators are not
> "updating"
> to the 21st century.
>
> Right. Got it.
>
> I wasn't aware the USPS required hams to use morse when sending a
> letter.
>
> MD
> --
> -- Ted Kennedy has killed more people with his car than I have
> -- with my guns.
> --
> -- If you don't like my opinions, that's just too damn bad.

2693. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EJ0L9B.MqA@pe1chl>
Source record: 17765

In <345BE823.696AB8FA@direct.ca> laura halliday <ve7ldh@direct.ca> writes:

>> As for "worse and worse", look to the thread "Arianne 502
>> Successfully Launched" and read the post from Rob Janssen.

>I knew about the issues with the orbit quite early on, in detail.
>I am not prepared to trash ESA or the Ariane 5 project because of
>it - this was a test flight, and this is why they do it.

Also note that I am not trying to bash ESA/Arianespace reputation. There
was a problem with this launch, but it was a qualification launch and
it will certainly be evaluated in much detail. "we" can consider ourselves
lucky that P3D was not on the launch, or we could have lived with the
lower orbit. It is not so bad that it would re-enter.

Of course, most participants in discussions like this have a completely
unrealistic view on launch possibilities and failure rates. I find it
disturbing that people who don't even know how to spell Ariane think they
can state that it has a bad reputation.

Rob
--
+----------------------------------+---------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+---------------------------------------+

2694. Re: 1.2g vertical antenna?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: paul scholz <paul.scholz@mizar.ursa.fi>
Message-ID: <9ac123.620206@mizar.ursa.fi>
Source record: 17766

From: luap@webtv.net (paul scholz)

Get one that is circulatly polarized.

At my age, a little feedback is appreciated.

2695. ARLK085 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk085.1997@arrl.org>
Source record: 17767
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK085
ARLK085 Keplerian data

ZCZC SK85
QST de W1AW
Keplerian Bulletin 85 ARLK085
From ARRL Headquarters
Newington, CT November 1, 1997
To all radio amateurs

SB KEP ARL ARLK085
ARLK085 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97298.70763055 .00000047 00000-0 10000-3 0 05136
2 14129 26.3471 120.1437 6033977 162.6654 233.5774 2.05881639080073
RS-10/11
1 18129U 87054A 97304.06994441 .00000038 00000-0 25550-4 0 4149
2 18129 82.9195 138.3046 0010634 199.2430 160.8325 13.72384384518871
UO-11
1 14781U 84021B 97303.93684343 .00000265 00000-0 52416-4 0 00354
2 14781 97.8496 279.8508 0010978 294.2894 65.7159 14.69606571731197
RS-12/13
1 21089U 91007A 97304.09453107 .00000069 00000-0 57920-4 0 00228
2 21089 82.9234 177.8555 0027798 280.7248 79.0774 13.74087817337825
UO-14
1 20437U 90005B 97304.26317400 .00000032 00000-0 29210-4 0 03263
2 20437 98.5091 22.9302 0010958 162.7462 197.4094 14.29978425405665
RS-15
1 23439U 94085A 97304.04064541 -.00000039 00000-0 10000-3 0 02624
2 23439 64.8146 293.1602 0146335 106.4139 255.2927 11.27528419117259
AO-16
1 20439U 90005D 97304.20343445 .00000052 00000-0 36771-4 0 01087
2 20439 98.5302 26.1131 0011204 165.3892 194.7605 14.30024476405678
RS-16
1 24744U 97010A 97304.23465558 .00006870 00000-0 22165-3 0 990
2 24744 97.2624 206.7074 0007322 341.6879 18.4092 15.32434417 36918
```

```
DO-17
1 20440U 90005E 97304.24571764 .00000034 00000-0 29748-4 0 01053
2 20440 98.5345 27.1118 0011269 163.8320 196.3222 14.30167721405712
WO-18
1 20441U 90005F 97304.24672676 .00000003 00000-0 18011-4 0 01167
2 20441 98.5320 26.9928 0011878 165.0259 195.1281 14.30133786405719
LO-19
1 20442U 90005G 97304.20300086 .00000060 00000-0 39952-4 0 01112
2 20442 98.5375 27.6985 0012228 164.0610 196.0953 14.30251462405731
FO-20
1 20480U 90013C 97303.85033644 .00000038 00000-0 15043-3 0 00282
2 20480 99.0622 240.0156 0541042 70.3390 295.5252 12.83240739362101
AO-21
1 21087U 91006A 97304.53637210 .00000093 00000-0 82657-4 0 8661
2 21087 82.9408 310.6623 0033842 249.3881 110.3643 13.74588993338882
UO-22
1 21575U 91050B 97304.71236314 .00000051 00000-0 31186-4 0 8117
2 21575 98.2815 0.3190 0006765 200.4498 159.6424 14.37092613330091
KO-23
1 22077U 92052B 97304.19580574 -.00000037 00000-0 10000-3 0 07058
2 22077 66.0774 220.4657 0002103 177.3974 182.7051 12.86303848245244
KO-25
1 22828U 93061F 97304.26083575 .00000007 00000-0 20177-4 0 05815
2 22828 98.5305 15.7494 0009628 183.1361 176.9761 14.28197236181631
IO-26
1 22826U 93061D 97304.04906714 -.00000003 00000-0 16355-4 0 05975
2 22826 98.5337 15.4482 0008641 200.5552 159.5264 14.27851655213472
AO-27
1 22825U 93061C 97304.23125524 .00000048 00000-0 36928-4 0 06154
2 22825 98.5320 15.3457 0007913 199.8424 160.2449 14.27741765213488
FO-29
1 24278U 96046B 97304.09610023 -.00000008 00000-0 27426-4 0 01257
2 24278 98.5217 326.6906 0351803 193.8193 165.3125 13.52634480059499
Mir
1 16609U 86017A 97304.95224037 .00005143 00000-0 67087-4 0 7330
2 16609 51.6517 118.3864 0006183 282.5607 77.4699 15.60611407668371

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
November 4, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2696. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Gary Coffman <Gary.Coffman@mizar.ursa.fi>
Message-ID: <4ac126.62782b@mizar.ursa.fi>
Source record: 17768

From: ke4zv@bellsouth.net (Gary Coffman)

On Sun, 02 Nov 1997 01:16:26 -0800, Dennis Erwin Thurlow <geosynq@trader.com>
wrote:
>laura halliday wrote:
>> AMSAT and ESA agreed not to discuss P3D's launch until after 502's flight
>
>Which aspects of the launch? Why?
>
>> not to be prematurely blabbed around the world.
>
>Why?

That would be telling, #6.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2697. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-02 00:00:00 UTC
From: Jim Garver <k7@teleport.com>
Message-ID: <345D6F3D.17C8@teleport.com>
Source record: 17769

Uh, what's the history of the whole sad story here, eh?
Lemme guess:

Amsat builds satellite, but not ready for rocket that explodes.
Amsat has to store satellite in expensive refridgerator while waiting.
Amsat decides to tweak satellite while waiting.
Another rocket is suddenly ready, Amsat is not.
Rocket flies, Amsat doesn't, but rocket fails to hit apogee.

Can't we make some sense out of this? I'm not sure that this does:

http://www.amsat.org/amsat/news/ans1997/ans97286.html#01

K7YO

2698. the deadzone

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: cg@see.sig.if.used.com
Message-ID: <345d9b55.164989432@news.cport.com>
Source record: 17770

This group is known as the deadzone! :(

2699. Satellites (was Re: Amsat needs donations for Phase 3D.)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: willcarney@aol.com
Message-ID: <19971103092001.EAA01396@ladder02.news.aol.com>
Source record: 17771

>AMSAT is a nonprofit corporation that designs and builds satellites.
>

This brings up a question I have had in mind for quite some
time.

Could the basic satellite made by them be used in other fields
of exploration. For instance using the control/power module
as a base for a photo/survey probe to be sent to other planets.

I realize that the power is by solar cells so there is a limitation
on that factor.

But could you use the basic satellite in building relatively cheap
exploration probes for the Moon, Mars or close asteroids where
mission time would be rather short (no more than a few years)??

****
It's not what you got, it's what you do with it.
Try helping other's instead of hurting them.
Quote "I before You, She before Me", light'n
up.
****

2700. Spoutnik 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19971103.085313.3998.2.harrymue@juno.com>
Source record: 17772

Hi all,

Well it sounds like Spoutnik 1 is alive and well.
I heard it for the full pass this morning here in
Tulsa, Oklahoma USA November 3 @ 1402-1411 UTC on
145.820 mhz. I am using a Cushcraft 10-ele vert/horiz
@ 30 feet with no elevation rotor and no preamp into
an Icom IC-271H. Spoutniks signal was 5/5 on both
vert. and horiz. polarization with no fading.

Congratulations are in order to all the students,
support personnel and the MIR crew for a job well done.
Hearing the "bird" takes me back to the 50's when I
listened to the original Spoutnik and when I first got
interested in Amateur Radio.

Again, CONGRATULATIONS!!!

73...Harry Mueller, KC5TRB in Tulsa, Oklahoma USA

2701. Re: Belden 9913

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: gsteve490@aol.com
Message-ID: <19971103204401.PAA09825@ladder02.news.aol.com>
Source record: 17773

>Anyone know the velocity factor of Belden 9913 pse?
>Tks, Willy/GM3NUF.

84 percent, per Belben Master Catolog, 1992 edition, Pg. 132

n2lzh

2702. Re: Spoutnik 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mn2jlsgf1.fsf@spinner.ecofe.com>
Source record: 17774

> Well it sounds like Spoutnik 1 is alive and well.
> an Icom IC-271H. Spoutniks signal was 5/5 on both
> vert. and horiz. polarization with no fading.

Interesting about the fading; I saw on the very early news a few
seconds of
film on the Mir EVA that also showed the satellite in the background, and
it was
tumbling like crazy. Havn't had a chance to hear it myself yet, can't
wait! Dan WA7TDZ CN92 Oregon

Thanks for the confirmation of tumbling. I heard it this afternoon (CM87)
on two passes and both times, heard cycles of 4-5 beeps followed by one
faded or absent beep. Yaesu FT5100 with a homebrew quarter-wave.

-- KD6PAG

P.S. No packet today, and no response from the MIR repeater yet.

2703. RS27 heard times

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971103172413.19414D-100000@oso.slonet.org>
Source record: 17775

RS 27 appears about one minute before MIR does, at least for the present time. Determine arrival times for MIR and listen a few minutes earlier on 145.825 (FM) Cliff K7RR

2704. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EJ3Gys.75q@pe1chl>
Source record: 17776

In <345D6F3D.17C8@teleport.com> Jim Garver <k7@teleport.com> writes:

>Uh, what's the history of the whole sad story here, eh?
>Lemme guess:

>Amsat builds satellite, but not ready for rocket that explodes.
>Amsat has to store satellite in expensive refridgerator while waiting.
>Amsat decides to tweak satellite while waiting.
>Another rocket is suddenly ready, Amsat is not.
>Rocket flies, Amsat doesn't, but rocket fails to hit apogee.

Your guesses are completely wrong, this is not at all what the story was.

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2705. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-03 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <345db0e5.2017191@news.sprynet.com>
Source record: 17777
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Obviously I seem to be more out of touch than I thought I am. I was
reading about phase 3 serveral years ago. How come it is still not up
yet?
Perhaps someone could bring me up to date with my missing knowledge.
Larry ve3fxq

2706. Simulation & Synthesis on Every Desktop

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: "Kathryn J. Goerg" <kgoerg@webblabs.com>
Message-ID: <345F46C6.255B@webblabs.com>
Source record: 17681

Site License puts Simulation & Synthesis on Every Desktop

For general analysis with noise capability, filter and structure
synthesis, and system and receiver engineering support, the
Webb Laboratories Professional Partnership Program is
unprecedented:

http://www.webblabs.com/pp.htm

The one-time $975 investment in the PP Program will drastically
reduce your annual software budget, freeing up dollars for
other needed equipment and analysis support tools. The
larger your company or organization, the lower the PP Program
cost on a per-user basis - the $975 licensing fee is for site-wide
use, and there are no annual fees! More information available
on request - free shipping worldwide!

Kathy Goerg
PP Program Coordinator

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005

TEL 414.367.6825 FAX 414.367.6824
http://www.webblabs.com

2707. Re: Spoutnik 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: John Charles <jaycee@midmarsh.demon.co.uk>
Message-ID: <WPRcKCAar0X0Ewy7@midmarsh.demon.co.uk>
Source record: 17682

In article <19971103.085313.3998.2.harrymue@juno.com>, harrymue@juno.COM
writes
>Well it sounds like Spoutnik 1 is alive and well.
>I heard it for the full pass this morning here in
>Tulsa, Oklahoma USA November 3 @ 1402-1411 UTC on
>145.820 mhz. I am using a Cushcraft 10-ele vert/horiz
>@ 30 feet with no elevation rotor and no preamp into
>an Icom IC-271H. Spoutniks signal was 5/5 on both
>vert. and horiz. polarization with no fading.

Heard here in the UK this morning (4th Nov, 10.21 GMT), using an FT-480R
on a triband vertical (5/5) and on an IC-821H with a 5 el horizontal
(5/9+60 with the preamp).

It seemed to be about 1.5 min behind the predicted pass for MIR.

On the next pass I tried my scanner using its own telescopic antenna and
the signals were received up to S3 outdoors and hearable with no signal
strength indicated when indoors.
>
>Congratulations are in order to all the students,
>support personnel and the MIR crew for a job well done.

I second that. In spite of all the problems the ageing MIR has they
still find time to encourage the spirit of adventure.

73 John M1BTR

--
John Charles jaycee@midmarsh.demon.co.uk

2708. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <63nkru$a3m$1@blackbird.afit.af.mil>
Source record: 17683

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-two-character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

```
Line 1
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Julian Day and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
or Ballistic Coefficient (Depending on ephemeris type)
45-52 Second Time Derivative of Mean Motion (decimal point assumed;
blank if N/A)
54-61 BSTAR drag term if GP4 general perturbation theory was used.
Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63 Ephemeris type
65-68 Element number
69-69 Check Sum (Modulo 10)
```

(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01-01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6
1 11416U 86 50.28438588 0.00000140 67960-4 0 5293
2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2709. NORAD Two-Line Orbital Element Sets (TLE090)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <63nkl6$a38$1@blackbird.afit.af.mil>
Source record: 17684

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #090 -
Alouette 1
1 00424U 62049A 97305.06042017 .00000057 00000-0 56170-4 0 3286
2 00424 80.4650 148.5376 0022755 181.3554 178.7516 13.67906943750956
ATS 1
1 02608U 66110A 97301.35968989 .00000037 00000-0 10000-3 0 442
2 02608 14.4312 347.4596 0007509 121.6844 238.3842 1.00316362 29865
ATS 3
1 03029U 67111A 97307.34649701 -.00000108 00000-0 10000-3 0 7150
2 03029 14.8553 354.3531 0011331 271.6736 156.0452 1.00272649109821
Starlette
1 07646U 75010A 97308.20955566 -.00000102 00000-0 34086-4 0 979
2 07646 49.8253 315.8041 0205724 98.4541 263.9725 13.82193365148816
LAGEOS
1 08820U 76039A 97305.57531593 .00000007 00000-0 00000+0 0 3298
2 08820 109.8173 198.1015 0044595 20.0865 340.1653 6.38664586245917
GOES 2
1 10061U 77048A 97307.39556297 .00000053 00000-0 10000-3 0 9066
2 10061 12.9793 31.4253 0010573 144.3265 191.9834 1.00277394 19491
IUE
1 10637U 78012A 97298.12538879 .00000023 00000-0 10000-3 0 4144
2 10637 36.2675 75.7209 1380858 70.5013 303.8992 1.00078463 24893
GOES 3
1 10953U 78062A 97306.40928792 -.00000073 00000-0 10000-3 0 8586
2 10953 12.0102 34.5351 0004179 193.3205 211.8820 1.00275752 24109
SeaSat 1
1 10967U 78064A 97305.08021494 -.00000003 00000-0 43389-4 0 6150
2 10967 108.0040 133.3758 0002791 256.5960 103.4861 14.38201042 13608

```
Nimbus 7
1 11080U 78098A 97306.12122315 -.00000043 00000-0 -20688-5 0 7080
2 11080 98.8874 148.2231 0009855 50.9875 309.2158 13.83676341960722
GOES 5
1 12472U 81049A 97308.22169099 -.00000248 00000-0 10000-3 0 263
2 12472 8.9761 45.2766 0005035 114.8166 245.2143 1.00318758 18169
Cosmos 1383
1 13301U 82066A 97305.11223723 .00000015 00000-0 89482-7 0 6233
2 13301 82.9261 125.7811 0026883 299.7303 60.1174 13.68086949766005
LandSat 4
1 13367U 82072A 97308.20265865 .00000092 00000-0 30072-4 0 1102
2 13367 98.0093 347.7217 0007675 17.5153 342.6310 14.57220877814082
DMSP B5D2-1
1 13736U 82118A 97304.83541714 .00000166 00000-0 87882-4 0 3462
2 13736 98.6199 131.0993 0008852 11.0685 349.0691 14.25870052772556
IRAS
1 13777U 83004A 97308.04407881 -.00000232 00000-0 -12944-3 0 8192
2 13777 98.9760 129.0200 0012203 140.0368 220.1697 13.99284445423971
Cosmos 1447
1 13916U 83021A 97307.15869574 .00000015 00000-0 18937-6 0 7173
2 13916 82.9440 178.2808 0037177 185.9063 174.1661 13.74360904732960
TDRS 1
1 13969U 83026B 97307.37563385 -.00000287 00000-0 10000-3 0 8039
2 13969 9.6833 38.9098 0002885 197.8644 252.5844 1.00270063 26443
GOES 6
1 14050U 83041A 97307.28850706 .00000053 00000-0 10000-3 0 7404
2 14050 7.8399 49.0186 0002881 129.3532 198.2087 1.00301900111248
AO-10
1 14129U 83058B 97298.70763055 .00000047 00000-0 10000-3 0 5125
2 14129 26.3471 120.1437 6033977 162.6654 233.5774 2.05881639 80073
LandSat 5
1 14780U 84021A 97308.23026209 .00000078 00000-0 27448-4 0 6582
2 14780 98.2695 10.0680 0002607 141.8104 218.3279 14.57085121727507
UO-11
1 14781U 84021B 97304.95814134 .00000245 00000-0 49186-4 0 123
2 14781 97.8497 280.8330 0010932 290.7873 69.2159 14.69607002731347
Cosmos 1574
1 15055U 84062A 97306.86778249 .00000021 00000-0 62611-5 0 9176
2 15055 82.9537 234.4487 0029234 21.6156 338.6223 13.73655645670134
Cosmos 1602
1 15331U 84105A 97306.57898259 .00000467 00000-0 51762-4 0 6000
2 15331 82.5365 1.3490 0021904 82.7999 277.5706 14.84972572707671
ERBS
1 15354U 84108B 97305.09799209 -.00000061 00000-0 16132-4 0 3144
2 15354 56.9954 172.1985 0008031 73.5756 286.6156 14.95092935711905
NOAA 9
1 15427U 84123A 97308.00284111 .00000089 00000-0 70459-4 0 3496
2 15427 98.8894 17.5343 0014766 326.6233 33.4006 14.13892725664968
Mir
1 16609U 86017A 97308.15396342 .00004906 00000-0 64262-4 0 7412
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2 16609 51.6556 102.2784 0006624 294.9783 65.0522 15.60620415668871
SPOT 1
1 16613U 86019A 97306.60053875 -.00000044 00000-0 00000+0 0 1305
2 16613 98.7854 18.0713 0001160 158.3529 201.7699 14.20007512291751
Cosmos 1766
1 16881U 86055A 97304.37091520 .00000328 00000-0 36457-4 0 5154
2 16881 82.5159 60.9509 0020082 119.9732 240.3477 14.83909264608163
EGP
1 16908U 86061A 97306.89827685 -.00000083 00000-0 10000-3 0 2206
2 16908 50.0125 248.3766 0011452 215.5943 144.4129 12.44417415179125
NOAA 10
1 16969U 86073A 97307.96999635 .00000058 00000-0 43008-4 0 2789
2 16969 98.5549 297.4222 0012859 325.8247 34.2104 14.25065382578490
MOS-1
1 17527U 87018A 97307.48669283 -.00000043 00000-0 00000+0 0 6015
2 17527 98.8720 2.6227 0019853 13.2386 346.9294 14.00453828545574
GOES 7
1 17561U 87022A 97307.32532374 -.00000135 00000-0 10000-3 0 4128
2 17561 4.0345 65.9108 0001815 212.2964 143.8146 1.00272918 22357
Kvant-1
1 17845U 87030A 97306.55311026 -.00002959 00000-0 -28801-4 0 1892
2 17845 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415602736
DMSP B5D2-3
1 18123U 87053A 97308.01583607 .00000018 00000-0 31765-4 0 1093
2 18123 98.7622 135.8304 0013532 254.6983 105.2696 14.15497377535916
RS-10/11
1 18129U 87054A 97307.56947600 .00000063 00000-0 52636-4 0 4178
2 18129 82.9203 135.7173 0010893 189.1125 170.9839 13.72384843519355
Meteor 2-16
1 18312U 87068A 97307.54451464 .00000025 00000-0 94722-5 0 6019
2 18312 82.5537 312.0328 0010877 244.2356 115.7682 13.84106363515944
Meteor 2-17
1 18820U 88005A 97308.24729687 .00000114 00000-0 88408-4 0 4030
2 18820 82.5418 5.3135 0016131 313.5258 46.4561 13.84784314493426
DMSP B5D2-4
1 18822U 88006A 97308.03410292 .00000036 00000-0 34163-4 0 6606
2 18822 98.3903 122.1102 0005842 338.9783 21.1155 14.23247126506383
Glonass 34
1 19163U 88043A 97304.69651683 -.00000010 00000-0 10000-3 0 2292
2 19163 65.4577 68.9340 0005454 235.1559 124.7834 2.13101961 72927
Glonass 36
1 19165U 88043C 97304.75456839 -.00000010 00000-0 10000-3 0 6325
2 19165 65.4628 68.8901 0004815 318.4487 41.5026 2.13101586 73544
METEOSAT 3
1 19215U 88051A 97295.56662386 -.00000142 00000-0 10000-3 0 3462
2 19215 4.2342 65.1197 0007296 136.9053 223.1643 0.96948529 21955
OKEAN 1
1 19274U 88056A 97304.91997264 .00000341 00000-0 39322-4 0 2141
2 19274 82.5144 161.8995 0018448 274.9761 84.9350 14.82696980503717
Meteor 3-2
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2 19336 82.5430 171.6355 0018220 62.7634 297.5348 13.16984319445472
Glonass 39
1 19503U 88085C 97303.37780792 -.00000004 00000-0 10000-3 0 5166
2 19503 65.3726 307.8034 0005980 163.0106 197.0401 2.13101800 71009
NOAA 11
1 19531U 88089A 97308.06832847 .00000073 00000-0 64124-4 0 1686
2 19531 99.1400 344.1368 0011008 264.0827 95.9089 14.13151173469750
TDRS 3
1 19548U 88091B 97305.85330302 -.00000184 00000-0 10000-3 0 3094
2 19548 3.4782 69.1926 0003677 104.6792 259.7514 1.00269749 20573
Glonass 40
1 19749U 89001A 97302.47676161 -.00000021 00000-0 10000-3 0 7331
2 19749 65.4229 68.5028 0006403 241.7695 118.1526 2.13101277 68491
Glonass 41
1 19750U 89001B 97306.28525706 -.00000001 00000-0 10000-3 0 6386
2 19750 65.4496 68.4681 0011127 251.9801 107.9035 2.13101548 68597
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1 19802U 89013A 97301.72411925 .00000013 00000-0 00000+0 0 4877
2 19802 55.5829 90.7837 0019791 142.2912 217.8897 2.00553476 63719
Akebono
1 19822U 89016A 97305.56278388 .00015522 00000-0 82618-3 0 216
2 19822 75.0674 189.7928 3695957 83.7770 316.2309 8.01272608206683
Meteor 2-18
1 19851U 89018A 97304.85305428 .00000061 00000-0 41038-4 0 5980
2 19851 82.5204 241.0566 0015262 13.3583 346.7975 13.84441139438240
MOP-1
1 19876U 89020B 97308.05677029 -.00000125 00000-0 00000+0 0 2938
2 19876 3.0034 70.4775 0015528 282.6123 76.7230 0.97110563 11524
TDRS 4
1 19883U 89021B 97306.79074078 -.00000261 00000-0 10000-3 0 3679
2 19883 0.9054 85.8044 0004307 161.0972 38.8412 1.00267390204154
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1 20061U 89044A 97307.05022130 -.00000008 00000-0 10000-3 0 4711
2 20061 53.8961 265.5517 0185428 226.5167 131.9143 2.00563382 61560
Nadezhda 1
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2 20103 82.9568 96.4453 0039140 87.0668 273.4966 13.73884069417984
GPS BII-03
1 20185U 89064A 97308.24629961 .00000028 00000-0 10000-3 0 5001
2 20185 55.3758 90.8792 0023709 351.4950 8.3520 2.00570026 60167
GMS 4
1 20217U 89070A 97308.06226273 -.00000361 00000-0 10000-3 0 6566
2 20217 2.7943 72.5635 0000730 251.1355 222.3566 1.00274449 30481
INTERCOSMOS 24
1 20261U 89080A 97306.54905975 .00000396 00000-0 12051-3 0 6295
2 20261 82.5910 309.1935 1241442 337.0281 17.9557 12.47463882368668
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2 20302 53.1958 205.2737 0066351 196.4102 161.7050 2.00558842 58872
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2 20305 82.5486 136.2210 0006884 146.9419 213.2133 13.04422076383895
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1 20322U 89089A 97305.05739252 -.00000244 00000-0 -12775-3 0 3474
2 20322 98.9271 317.3444 0009794 76.1490 284.0764 14.03463990407325
Kvant-2
1 20335U 89093A 97306.55311026 -.00002959 00000-0 -28801-4 0 621
2 20335 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415451747
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2 20361 56.2606 33.5102 0098167 147.1878 213.4519 2.00567490 48369
COSMOS 2054 (Altair-1)
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2 20391 4.7665 60.3745 0003385 133.3393 226.5984 1.00246866 29037
SPOT 2
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UO-14
1 20437U 90005B 97305.24277132 .00000026 00000-0 26704-4 0 3087
2 20437 98.5090 23.8873 0011088 159.9168 200.2454 14.29978518405805
AO-16
1 20439U 90005D 97307.28206979 .00000006 00000-0 19021-4 0 1042
2 20439 98.5306 29.1311 0011454 156.0622 204.1095 14.30024427406115
DO-17
1 20440U 90005E 97308.23354788 .00000031 00000-0 28758-4 0 1025
2 20440 98.5341 31.0212 0011305 152.1120 208.0667 14.30168393406280
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2 20441 98.5329 29.5323 0011840 157.1613 203.0062 14.30134533406089
LO-19
1 20442U 90005G 97307.28114745 .00000034 00000-0 29678-4 0 1078
2 20442 98.5375 30.7184 0012448 155.0824 205.0962 14.30251678406177
GPS BII-06
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2 20452 54.1002 146.2346 0073175 97.1508 263.6128 2.00573320 56917
MOS-1B
1 20478U 90013A 97308.22153608 -.00000044 00000-0 00000+0 0 896
2 20478 99.0771 16.0225 0005536 317.5802 42.4933 13.93982453314917
DEBUT
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2 20479 99.0637 242.7716 0540883 62.6303 302.8769 12.83358580362510
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1 20480U 90013C 97307.04686992 -.00000086 00000-0 -12757-3 0 78
2 20480 99.0618 242.6131 0541044 63.0902 302.4427 12.83239821362514
MOS-1B R/B
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2 20491 99.0236 323.0758 0470046 191.7364 167.2463 13.03017059367584
LACE
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2 20508 82.9522 231.3421 0046186 43.7494 316.7306 13.73528964385085
OKEAN 2
1 20510U 90018A 97304.27386438 .00000230 00000-0 28141-4 0 6228
2 20510 82.5201 120.2115 0020107 114.8776 245.4503 14.78732844413722
GPS BII-07
1 20533U 90025A 97305.14112724 -.00000024 00000-0 00000+0 0 3704
2 20533 54.2259 267.8703 0033682 48.1194 312.1408 1.91041105 55342
PegSat
1 20546U 90028A 97307.94006272 .00014284 00000-0 20265-3 0 1586
2 20546 94.1122 281.3246 0046541 200.6262 159.3127 15.55122288423211
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2 20608 89.9248 168.9868 0107970 102.0492 259.2847 14.65044147399695
Glonass 44
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2 20619 64.9647 306.6190 0031123 205.0104 154.8550 2.13102794 58069
Glonass 45
1 20620U 90045B 97308.12249231 .00000008 00000-0 10000-3 0 4154
2 20620 64.9671 306.6123 0010658 19.3998 340.6601 2.13102954 58106
Glonass 46
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2 20621 64.9798 306.7754 0015486 204.2158 155.7333 2.13103493 58044
Kristall
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ROSAT
1 20638U 90049A 97306.81772404 .00000293 00000-0 37637-4 0 7025
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Meteor 2-19
1 20670U 90057A 97307.54954941 .00000042 00000-0 24523-4 0 4387
2 20670 82.5426 307.2865 0014710 283.4452 76.5068 13.84135274371513
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1 20712U 90065A 97306.80931531 .00000240 00000-0 32542-3 0 5178
2 20712 18.1188 44.5081 7188914 37.7404 355.2632 2.35971035 55007
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1 20724U 90068A 97307.55844121 .00000020 00000-0 10000-3 0 2971
2 20724 55.2291 88.3963 0140765 193.2372 166.4032 2.00563509 51567
Feng Yun1-2
1 20788U 90081A 97308.22836769 .00000108 00000-0 10000-3 0 5374
2 20788 98.8245 302.6374 0016476 164.9024 195.2475 14.01277318366831
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GPS BII-09
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GPS BIIA-10
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1 20978U 90105A 97307.88155305 .00000149 00000-0 68024-4 0 2814
2 20978 98.5463 19.3940 0079843 119.2023 241.7179 14.32795853361983
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Glonass 49
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2 21008 65.4209 67.8323 0008235 272.4026 87.5550 2.13098396 53648
AO-21
1 21087U 91006A 97308.03030272 .00000093 00000-0 82657-4 0 8676
2 21087 82.9403 308.0749 0033526 238.8927 120.8938 13.74589109339367
RS-12/13
1 21089U 91007A 97303.73044857 .00000072 00000-0 60581-4 0 182
2 21089 82.9231 178.1249 0027804 281.7448 78.0585 13.74087796337776
MOP-2
1 21140U 91015B 97307.12473380 -.00000073 00000-0 00000+0 0 3914
2 21140 1.5597 79.1788 0003538 143.0856 215.8618 1.00271046 26654
Nadezhda 3
1 21152U 91019A 97307.03293160 .00000059 00000-0 46312-4 0 8512
2 21152 82.9230 132.5956 0043227 22.4076 337.8956 13.73553598332915
Glonass 50
1 21216U 91025A 97306.35341501 -.00000000 00000-0 10000-3 0 6594
2 21216 64.7096 306.0608 0026895 207.2499 152.8389 2.13104548 51248
Glonass 51
1 21217U 91025B 97298.91957811 .00000003 00000-0 10000-3 0 501
2 21217 64.7046 306.3148 0010160 229.8787 130.0687 2.13101751 51077
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1 21218U 91025C 97306.06699532 -.00000001 00000-0 10000-3 0 5235
2 21218 64.6950 306.0407 0006324 234.6979 125.2640 2.13102824 51235
GRO
1 21225U 91027B 97306.24449290 .00001282 00000-0 49630-4 0 5096
2 21225 28.4599 321.9147 0004633 301.8543 58.1599 15.19431049247320
Meteor 3-4
1 21232U 91030A 97308.24608791 .00000050 00000-0 10000-3 0 201
2 21232 82.5388 15.7152 0013625 346.2796 13.7952 13.16477142313999
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1 21263U 91032A 97308.03112777 .00000098 00000-0 62859-4 0 5823
2 21263 98.5362 318.0001 0011764 247.1897 112.8039 14.22761160336241
OKEAN 3
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2 21574 98.5479 19.8213 0001165 92.1210 268.0119 14.32254360329567
UO-22
1 21575U 91050B 97304.71236314 .00000051 00000-0 31186-4 0 8117
2 21575 98.2815 0.3190 0006765 200.4498 159.6424 14.37092613330091
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1 21576U 91050C 97306.61577974 .00000078 00000-0 40730-4 0 9079
2 21576 98.2820 359.3963 0003220 201.6895 158.4158 14.36516182330227
TUBSAT-A
1 21577U 91050D 97307.19331309 .00000014 00000-0 18876-4 0 8057
2 21577 98.2825 0.6075 0005841 193.6721 166.4308 14.36565914330348
SARA
1 21578U 91050E 97307.23983835 .00000405 00000-0 14379-3 0 93
2 21578 98.3293 13.2127 0004490 182.1654 177.9515 14.39464537330848
TDRS 5
1 21639U 91054B 97307.34046204 .00000088 00000-0 10000-3 0 2330
2 21639 0.0271 260.0994 0002131 306.2278 144.5375 1.00272894 22903
Meteor 3-5
1 21655U 91056A 97304.59156853 .00000051 00000-0 10000-3 0 176
2 21655 82.5550 326.3419 0014562 1.2273 358.8881 13.16856656298666
UARS
1 21701U 91063B 97304.66258983 .00000041 00000-0 24587-4 0 8871
2 21701 56.9848 260.1196 0005743 103.3286 256.8391 14.96634622335435
DMSP B5D2-6
1 21798U 91082A 97308.04324453 .00000097 00000-0 74351-4 0 9382
2 21798 98.9122 330.8041 0011964 238.3873 121.6135 14.14084823306276
Glonass 53
1 21853U 92005A 97304.87215294 -.00000012 00000-0 10000-4 0 2246
2 21853 65.3667 67.3817 0007199 208.1228 151.8211 2.13102159 44815
Glonass 54
1 21854U 92005B 97304.21431172 -.00000016 00000-0 00000+0 0 5229
2 21854 65.3580 67.3987 0016456 18.3697 341.6784 2.13105696 44784
Glonass 55
1 21855U 92005C 97304.28807297 -.00000015 00000-0 00000+0 0 4488
2 21855 65.3682 67.4113 0007548 208.9159 151.0301 2.13101920 44775
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2 21867 97.7389 24.7883 0002964 119.0285 241.1215 14.98625399313502
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1 21890U 92009A 97307.24894737 .00000027 00000-0 00000+0 0 674
2 21890 53.6649 205.8550 0047356 245.4343 114.2022 2.00571325 41754
GPS BIIA-13
1 21930U 92019A 97307.41099364 -.00000036 00000-0 00000+0 0 9650
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1 21987U 92031A 97305.59147377 .00001712 00000-0 66779-4 0 6705
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2 21987 28.4306 43.2939 0010055 158.4801 201.6223 15.20574019300205
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2 22012 81.6710 307.6009 0116068 327.0530 32.3491 14.92133219290276
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2 22014 54.8981 148.5723 0102564 342.7573 16.9871 2.00552323 32453
Glonass 56
1 22056U 92047A 97299.02074773 .00000002 00000-0 00000+0 0 3910
2 22056 64.5489 306.2675 0007231 270.8978 89.0396 2.13103591 40752
Glonass 57
1 22057U 92047B 97306.35812569 -.00000001 00000-0 00000+0 0 4088
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Glonass 58
1 22058U 92047C 97305.35856414 -.00000004 00000-0 10000-3 0 2519
2 22058 64.5466 306.0846 0008225 245.8735 114.0578 2.13102766 40916
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KO-23
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S80/T
1 22078U 92052C 97308.20746066 -.00000037 00000-0 10000-3 0 7000
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GPS BIIA-15
1 22108U 92058A 97306.96691067 .00000027 00000-0 10000-3 0 9786
2 22108 53.9127 206.8719 0126621 172.5969 187.6034 2.00562883 37690
LAGEOS II
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2 22195 52.6732 33.4704 0137616 297.1356 61.5231 6.47293689118860
GPS BIIA-16
1 22231U 92079A 97307.15073657 .00000067 00000-0 00000+0 0 169
2 22231 54.7299 149.5489 0018658 268.2973 91.5586 2.00574829 36272
GPS BIIA-17
1 22275U 92089A 97301.72994461 .00000073 00000-0 10000-3 0 9891
2 22275 54.6820 147.2067 0053342 248.9733 110.5399 2.00594175 35576
TDRS 6
1 22314U 93003B 97305.57514389 -.00000275 00000-0 10000-3 0 7350
2 22314 0.0625 66.4455 0004184 206.5736 288.0647 1.00273160 17613
GPS BIIA-18
1 22446U 93007A 97307.36408882 -.00000006 00000-0 00000+0 0 9831
2 22446 53.8875 266.3771 0118025 16.8643 343.5567 2.00574122 34679
Glonass 59
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Glonass 60
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2 22513 65.3773 67.1797 0006867 188.3194 171.6697 2.13102788 36620
Glonass 61
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ASTRO-D
1 22521U 93011A 97306.82514660 .00002330 00000-0 15348-3 0 6251
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GPS BIIA-19
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2 22581 55.0276 327.7261 0073145 40.2060 320.3839 2.00558499 33663
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1 22657U 93032A 97308.14079555 -.00000035 00000-0 10000-3 0 9377
2 22657 55.0667 327.4795 0098390 230.3726 128.7974 2.00573001 29076
RADCAL
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2 22698 89.5531 245.4614 0092243 128.8090 232.1366 14.21411312225769
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2 22700 54.0925 207.8831 0066201 13.7206 346.5199 2.00556545 31790
NOAA 13
1 22739U 93050A 97307.95070662 .00000079 00000-0 69694-4 0 4608
2 22739 99.1120 274.5289 0009240 248.6564 111.3618 14.11007237218237
GPS BIIA-22
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2 22779 54.0519 266.6029 0013827 300.9782 58.8655 2.00579164 30570
Meteor 2-21
1 22782U 93055A 97306.49736258 .00000014 00000-0 -55659-6 0 6003
2 22782 82.5482 308.2527 0022873 11.2460 348.9210 13.83084305210707
UFO F2
1 22787U 93056A 97303.94259715 -.00000061 00000-0 10000-3 0 7342
2 22787 3.6463 330.1671 0003736 296.3426 183.5020 1.00267663 13859
SPOT 3
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2 22823 98.7095 17.4278 0017661 37.8854 322.3562 14.17004631212591
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2 22824 98.5279 15.4535 0005679 197.0984 163.0006 14.27109445213579
AO-27
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IO-26
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2 22826 98.5336 18.5284 0008723 190.3000 169.8004 14.27852382213924
HEATHSAT
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KO-25
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2 22877 55.9019 29.1079 0035007 311.5938 48.1547 2.00570564 29481
METEOSAT 6
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HST Array
1 22920U 90037C 97307.51787540 .00020547 00000-0 11556-2 0 7320
2 22920 28.4688 48.8048 0005355 146.4696 213.6241 15.11916304215603
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1 22969U 94003A 97307.38204373 .00000051 00000-0 10000-3 0 3859
2 22969 82.5586 264.7464 0016636 58.6837 301.5916 13.16748580181408
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1 22970U 94003B 97306.90522054 .00000051 00000-0 10000-3 0 3745
2 22970 82.5537 264.9210 0017512 58.3787 301.9027 13.16831066181355
CORONAS I
1 23019U 94014A 97306.52833515 .00002608 00000-0 10948-3 0 4299
2 23019 82.4906 340.4658 0025895 239.8854 119.9816 15.22711832202904
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1 23027U 94016A 97305.33358748 -.00000043 00000-0 00000+0 0 6139
2 23027 54.9347 329.4870 0069612 212.6203 146.9970 2.00564830 26777
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2 23043 64.4321 306.3347 0007396 206.8065 153.1771 2.13103162 27702
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1 23044U 94021B 97306.94122137 .00000001 00000-0 00000+0 0 5393
2 23044 64.4184 306.2660 0033077 205.2413 154.6139 2.13102626 27744
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1 23045U 94021C 97306.65061556 .00000000 00000-0 00000+0 0 5455
2 23045 64.4103 306.2729 0010310 26.4857 333.5839 2.13102834 27737
GOES 8
1 23051U 94022A 97307.28160113 -.00000248 00000-0 10000-3 0 9063
2 23051 0.3030 93.2710 0004175 152.0917 183.5264 1.00281961 20428
MSTI 2
1 23101U 94028A 97306.56402123 .00014363 00000-0 17265-3 0 5399
2 23101 97.0560 141.7157 0007413 252.0910 107.9534 15.60926774197616
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1 23125U 94034B 97306.11180693 .00000713 00000-0 28274-3 0 5215
2 23125 7.5464 20.7194 7211996 129.0644 320.1198 2.35891903 27884
STRV-1B
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2 23126 7.5639 19.6891 7210414 130.9899 317.8575 2.36530992 27956
Nadezhda 4
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2 23179 82.9491 223.7730 0036280 156.0386 204.2472 13.75699967165958
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2 23233 98.7610 3.5923 0012277 183.5545 176.5539 14.12850596164118
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2 23317 82.5405 314.4638 0024439 236.7478 123.1397 14.74147903164928
ELEKTRO (GOMS)
1 23327U 94069A 97305.60541278 -.00000095 00000-0 00000+0 0 3686
2 23327 1.0607 90.2754 0002854 91.5512 153.1602 1.00271842 11030
RESURS 1-3
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2 23397 65.3052 67.1824 0010884 315.1606 44.7479 2.13101699 22986
Glonass 70
1 23398U 94076C 97307.27841035 .00000004 00000-0 00000+0 0 4850
2 23398 65.2849 67.1526 0002258 265.0027 94.9683 2.13101818 22993
LUCH (Altair-2)
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2 23426 0.4377 242.4242 0002252 61.1301 32.4606 1.00276341 10548
RS-15
1 23439U 94085A 97306.96753271 -.00000039 00000-0 10000-3 0 2576
2 23439 64.8162 288.4260 0146234 105.8231 255.8869 11.27528475117587
NOAA 14
1 23455U 94089A 97308.01013645 .00000071 00000-0 64136-4 0 2474
2 23455 99.0075 259.7174 0008751 262.9001 97.1174 14.11706565146676
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1 23511U 95009A 97308.17063667 .00000007 00000-0 00000+0 0 4124
2 23511 64.4441 306.5102 0008444 225.7184 134.2291 2.13104730 20738
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2 23512 64.4372 306.5415 0007182 302.9357 57.0116 2.13101146 20711
Glonass 73
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2 23513 64.4357 306.5854 0016327 199.6924 160.2616 2.13052459 20707
GMS 5
1 23522U 95011B 97292.37247106 -.00000312 00000-0 10000-3 0 4715
2 23522 0.4273 338.5411 0003556 271.3954 51.2015 1.00256553 9355
DMSP B5D2-8
1 23533U 95015A 97307.97259224 .00000119 00000-0 87924-4 0 1843
2 23533 98.8513 310.2422 0008239 63.7138 296.4885 14.12816017134906
OSC 1
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1 23545U 95017A 97306.87034451 .00000299 00000-0 10160-3 0 2622
2 23545 69.9705 81.0678 0014357 207.2515 152.7870 14.45626319136448
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1 23546U 95017B 97306.83271583 .00000410 00000-0 13263-3 0 2967
2 23546 69.9768 81.5291 0013616 199.4179 160.6457 14.45639621136448
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1 23547U 95017C 97304.86724480 .00000292 00000-0 99316-4 0 2331
2 23547 69.9774 85.6234 0013774 204.7081 155.3394 14.45780939136175
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2 23549 143.3626 99.0539 0169520 115.7982 246.0357 15.31523277143361
GFZ-1
1 23558U 86017JE 97306.58836469 .00007714 00000-0 77708-4 0 2949
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1 23560U 95021A 97307.88127670 -.00000062 00000-0 -68420-5 0 4527
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Spektr
1 23579U 95024A 97306.55311026 -.00002959 00000-0 -28801-4 0 8162
2 23579 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415140059
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1 23581U 95025A 97304.61696456 .00000085 00000-0 00000+0 0 6456
2 23581 0.1210 269.8651 0003775 329.8556 248.0802 1.00285934 8950
Helios 1A
1 23605U 95033A 97307.05394605 .00000475 00000-0 10000-3 0 6351
2 23605 98.0939 241.6430 0001788 86.7290 273.4150 14.63852946124278
UPM SAT 1
1 23606U 95033B 97305.88148021 .00000374 00000-0 74707-4 0 3192
2 23606 98.1461 244.4692 0008641 39.2265 320.9541 14.67489830124433
CERISE
1 23607U 95033C 97305.86354678 .00000160 00000-0 37287-4 0 2158
2 23607 98.1495 244.1016 0007270 39.2266 320.9459 14.67068759124437
TDRS 7
1 23613U 95035B 97307.33975372 .00000103 00000-0 10000-3 0 4108
2 23613 1.7061 80.3616 0002506 162.3356 111.0019 1.00271256 8437
Glonass 74
1 23620U 95037A 97306.96001161 .00000057 00000-0 00000+0 0 3520
2 23620 64.8026 187.1273 0018439 165.9134 194.2400 2.13103967 17745
Glonass 75
1 23621U 95037B 97304.32324790 .00000057 00000-0 00000+0 0 3671
2 23621 64.8165 187.2218 0018136 177.9517 182.1477 2.13102579 17683
Glonass 76
1 23622U 95037C 97307.19638045 .00000057 00000-0 00000+0 0 3693
2 23622 64.8141 187.1209 0036117 165.2464 194.9515 2.13102924 17742
Prognoz-M2
1 23632U 95039A 97307.63944140 -.00001082 00000-0 00000+0 0 1699
2 23632 72.5100 246.0800 7100360 336.0990 334.6470 0.26384407 2137
SICH-1
1 23657U 95046A 97306.85552531 .00000218 00000-0 29913-4 0 2088
2 23657 82.5323 96.9274 0026424 212.5877 147.3709 14.73597874117000
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1 23710U 95059A 97305.24050037 .00000114 00000-0 61032-4 0 3318
2 23710 98.5846 310.7832 0001336 91.7107 268.4323 14.29991204103998
Glonass 79
1 23734U 95068A 97305.43811563 .00000060 00000-0 00000+0 0 3542
2 23734 64.8123 187.0978 0016965 324.2995 35.6883 2.13102398 14676
Glonass 78
1 23735U 95068B 97306.06641767 .00000060 00000-0 00000+0 0 3359
2 23735 64.8117 187.0629 0007092 208.7372 151.3225 2.13124613 14680
Glonass 77
1 23736U 95068C 97307.08018502 .00000057 00000-0 00000+0 0 3332
2 23736 64.8011 187.0405 0007353 191.0181 169.0561 2.13102124 14703
XTE
1 23757U 95074A 97307.27893814 .00000938 00000-0 48896-4 0 1853
2 23757 22.9841 219.7661 0012816 332.9864 26.9971 14.97947209101139
Polar
1 23802U 96013A 97284.15558702 .00000117 00000-0 00000+0 0 1627
2 23802 86.3669 20.8151 6548915 262.7278 24.2312 1.35671210 8103
1996010E
1 23824U 96010E 97301.64178455 .00020770 00000-0 29553-1 0 3530
2 23824 47.9431 88.7111 6755044 180.4452 178.5394 2.88666426 15595
GPS BIIA-25
1 23833U 96019A 97307.45807535 -.00000038 00000-0 00000+0 0 2698
2 23833 54.5232 327.3779 0016061 142.1054 218.0506 2.00565429 11794
Priroda
1 23848U 96023A 97306.55311026 -.00002959 00000-0 -28801-4 0 5045
2 23848 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415 87148
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1 23851U 96024A 97305.06776053 -.00000047 00000-0 00000+0 0 2824
2 23851 99.4235 302.0810 0006976 220.3246 139.7400 13.97395067 77596
SAX
1 23857U 96027A 97305.59041722 .00002065 00000-0 12552-3 0 1075
2 23857 3.9514 39.3772 0014396 107.3542 252.8115 14.92004843 82295
MSTI 3
1 23868U 96031A 97307.06829377 .00004747 00000-0 93107-4 0 2173
2 23868 97.1163 134.9067 0009815 117.4099 242.8117 15.47783755 82704
TOMS-EP
1 23940U 96037A 97306.22694569 .00005696 00000-0 24077-3 0 1701
2 23940 97.4141 211.4893 0013813 26.1174 334.0753 15.23539122 74156
GPS BIIA-26
1 23953U 96041A 97303.38959200 .00000004 00000-0 00000+0 0 2132
2 23953 55.2305 88.1590 0026916 355.1508 4.7693 2.00570634 9506
ADEOS
1 24277U 96046A 97307.56703326 .00000004 00000-0 19368-4 0 2476
2 24277 98.5886 22.6257 0001413 132.4663 227.6641 14.27034731 63241
FO-29
1 24278U 96046B 97307.57278189 .00000011 00000-0 46516-4 0 1182
2 24278 98.5223 329.6888 0351841 184.8087 174.9637 13.52634924 59961
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1 24285U 96049A 97305.19133534 .00001829 00000-0 17580-3 0 1437
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2 24285 82.9841 335.2293 2203864 111.2260 273.7351 10.82775401 47240
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2 24286 83.0001 334.3855 2202727 106.2650 279.0514 10.83363147 47509
Microsat
1 24291U 96050A 97305.54797279 .00058076 70144-5 52438-3 0 3213
2 24291 62.7884 40.2316 0454071 171.3248 189.5862 14.96169584 63403
MO-30
1 24305U 96052B 97305.87096383 .00000204 00000-0 20364-3 0 1563
2 24305 82.9289 252.8154 0027971 180.9052 179.1993 13.73100155 57953
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1 24320U 96056A 97304.25241541 -.00000029 00000-0 00000+0 0 1223
2 24320 54.4800 268.0582 0045527 101.9146 258.6980 2.00562364 8183
SAC-B/HETE
1 24645U 96061A 97307.85342910 .00000825 00000-0 48114-4 0 1080
2 24645 37.9750 107.4866 0049336 324.5384 35.2105 15.15300098 55255
ZEYA
1 24744U 97010A 97308.21778138 .00005477 00000-0 17703-3 0 1011
2 24744 97.2637 210.6156 0006826 326.1738 33.9067 15.32475558 37520
DMSP B5D2-9
1 24753U 97012A 97308.02880451 .00000120 00000-0 88366-4 0 2356
2 24753 98.9183 351.8826 0009851 17.5435 342.6080 14.13010547 30138
MINISAT 01
1 24779U 97018A 97305.85156903 .00002362 00000-0 11965-3 0 545
2 24779 150.9688 299.9558 0014130 182.1004 177.9548 14.98553803 29187
CELESTIS
1 24780U 97018B 97305.55466120 .00002245 00000-0 10511-3 0 567
2 24780 150.9762 300.5285 0019519 176.6423 183.4293 14.99781407 29168
GOES 10
1 24786U 97019A 97307.36201771 -.00000092 00000-0 00000+0 0 1371
2 24786 0.1053 280.6525 0005578 353.3257 154.7518 1.00271798 1950
Feng Yun 2B
1 24834U 97029A 97307.73838222 -.00000326 00000-0 00000+0 0 812
2 24834 0.9384 260.6409 0000717 301.3398 211.1576 1.00270943 1466
GPS BIIR-02
1 24876U 97035A 97306.89222006 .00000069 00000-0 00000+0 0 675
2 24876 54.9363 148.0720 0018691 255.7532 104.1326 2.00535683 2107
SeaStar
1 24883U 97037A 97305.54371701 .00000085 00000-0 29753-4 0 739
2 24883 98.2186 42.0779 0003080 69.4003 290.7525 14.55489047 13600
Soyuz TM-26
1 24886U 97038A 97306.55311026 -.00002959 00000-0 -28801-4 0 961
2 24886 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415 13892
Meteosat 7
1 24932U 97049B 97308.13345486 -.00000084 00000-0 00000+0 0 599
2 24932 1.7008 290.2132 0003278 309.9878 200.9508 1.00271860 640
Progress M-36
1 25002U 97058A 97306.55311026 -.00002959 00000-0 -28801-4 0 414
2 25002 51.6513 110.3296 0006674 292.9601 67.0999 15.60617415 4376
1997058B
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1 25003U 97058B 97280.67608796 .08968674 12597-4 21592-3 0 184
2 25003 51.6465 240.1385 0006567 70.3872 126.5633 16.45796307 322
Echostar III
1 25004U 97059A 97304.23002475 -.00000281 00000-0 00000+0 0 269
2 25004 0.0275 272.5162 0003168 256.7618 251.6684 1.00270018 310
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1 25005U 97059B 97303.08097223 .00055343 -13614-6 29141-2 0 177
2 25005 25.8939 146.2270 7424215 193.3442 122.5273 2.13640355 510
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1 25006U 97060A 97296.29533513 .00057524 80024-5 87272-4 0 240
2 25006 62.8095 185.7734 0108643 110.5346 250.7413 15.94206120 2163
1997060B
1 25007U 97060B 97304.44466770 .34009998 90699-5 13751-3 0 819
2 25007 62.7834 152.2521 0013696 127.3349 232.9406 16.56707904 3495
APSTAR 2R
1 25010U 97062A 97307.20774884 -.00000100 00000-0 10000-3 0 254
2 25010 0.1015 159.6435 0002625 61.4571 332.7224 1.00271938 182
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1 25011U 97062B 97304.03369597 .00010007 -10778-5 37081-3 0 101
2 25011 23.8775 308.1962 7837921 184.7078 156.0695 1.64997704 317
STEP-M4
1 25013U 97063A 97307.45760470 .00001594 00000-0 57602-4 0 214
2 25013 44.9646 322.0042 0049766 211.4290 148.3618 15.32811871 1830
1997063B
1 25014U 97063B 97305.23838531 .00004506 00000-0 14216-3 0 100
2 25014 44.9783 334.1672 0046915 198.5012 161.4140 15.33377677 1496
1997060C
1 25015U 97060C 97308.22141287 .00533092 00000-0 31333-2 0 245
2 25015 62.8100 141.0891 0068448 27.3756 333.0907 15.73306229 4036
1997060D
1 25016U 97060D 97308.31266966 .07618343 27108+0 19888-1 0 278
2 25016 62.7967 140.3950 0027642 0.2936 16.0410 16.04316891 1828
1997064B
1 25018U 97064B 97304.91574560 .00001924 00000-0 10815-3 0 87
2 25018 57.0080 124.5512 0177106 179.1281 181.0097 15.06089799 1189
1997065B
1 25020U 97065B 97305.58441866 .00067779 00000-0 63202-2 0 107
2 25020 26.3394 213.1879 7267480 182.1132 171.9448 2.32212400 168
1997065C
1 25021U 97065C 97307.23969978 -.00000051 00000-0 00000+0 0 38
2 25021 0.0251 280.2653 0008030 162.3966 277.4606 1.01066919 869
MAQSAT H
1 25023U 97066A 97307.96958016 .00000372 00000-0 23096-2 0 85
2 25023 7.7906 57.1129 6536659 179.7690 180.9300 3.07844774 136
MAQSAT B
1 25024U 97066B 97307.95842823 -.00000029 00000-0 17941-3 0 64
2 25024 7.7901 56.8601 6533279 179.9979 180.0124 3.08569168 137
1997066C
1 25025U 97066C 97306.99770847 -.00000057 00000-0 10000-3 0 42
2 25025 7.7845 57.5460 6531113 178.7581 184.2639 3.07790272 89
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1997066D
1 25026U 97066D 97307.32093759 .00002349 00000-0 12665-1 0 76
2 25026 7.7958 57.4291 6536599 179.0831 183.1886 3.07934153 115
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2710. Re: SPUTNIK 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: The Ronney's <pronney@sprynet.com>
Message-ID: <63nfn7dch1@juliana.sprynet.com>
Source record: 17685

Mike Lamanna wrote in article <345F0A5B.584C1473@kickit.pgh.net>...

>Does anyone know where to get keps for Sputnik 1???....

Use the MIR Keps.... It is close enough, at least for now.
I found Sputnik-40 about 1 or 2 minutes behind MIR's predicted path.
Maybe I need more recent Keps for MIR or maybe it really has separated some.
Martin, WB6YMI

2711. Re: Spoutnik 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: efricha@alumni.cs.colorado.edu
Message-ID: <345e97a6.4871625@news>
Source record: 17778

harrymue@juno.COM wrote:

> Hi all,
>
> Well it sounds like Spoutnik 1 is alive and well.
> I heard it for the full pass this morning here in
> Tulsa, Oklahoma USA November 3 @ 1402-1411 UTC on
> 145.820 mhz. I am using a Cushcraft 10-ele vert/horiz
> @ 30 feet with no elevation rotor and no preamp into
> an Icom IC-271H. Spoutniks signal was 5/5 on both
> vert. and horiz. polarization with no fading.

Overkill! :-)

I picked it up on a discone! DN70jb, 14:04-14:09Z
It did fade in and out but usually well above the
noise floor. At the start of pass the signal
centered on 145.823 MHz; when I lost it the signal
was centered at 145.817.

> Congratulations are in order to all the students,
> support personnel and the MIR crew for a job well done.
> Hearing the "bird" takes me back to the 50's when I
> listened to the original Spoutnik and when I first got
> interested in Amateur Radio.
>

Ditto!

Now, about QSLing the thing... just how do I do that?

73, Eric, KB0YDN
--
Eric F. Richards
efricha@alumni.cs.colorado.edu
"The weird part is that I can feel productive even when I'm doomed."
- Dilbert

2712. SPUTNIK 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: Mike Lamanna <mustang@kickit.pgh.net>
Message-ID: <345F0A5B.584C1473@kickit.pgh.net>
Source record: 17779

Does anyone know where to get keps for Sputnik 1???....I heard it this morning loud and clear

near Pittsburgh thanks

Mike (WA3O)

2713. Spoutnik 1 heard nr WASHDC

Newsgroup: rec.radio.amateur.space
Date: 1997-11-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <345f5078.57718650@news.erols.com>
Source record: 17780

I fired up my old TRAKSAT program and noticed that MIR (with Spoutnik alongside) would be making a very convenient pass over my location at around 1136 UTC (6:36 AM local) 4 November. I quickly pulled out a 2 meter receive converter and hooked it up to my trusty Drake 2-B. Antenna was a hastily deployed 2 meter vertical dipole supported by my bicycle and a broomstick!

Heard Spoutnik 1 right on time. Signals were very strong throughout the nearly overhead pass. Didn't notice any signs of spinning or fading. Doppler shift was quite pronounced but easy to deal with. I recorded the signals for replay at the next meeting of my local radio club (Vienna Wireless Society).

What is the significance of the number of beeps being transmitted?

This was all lots of fun. Congratulations to those who put it together and to the Cosomnauts who deployed it.

73 de Bill N2CQR Falls Church, Virginia USA

2714. Re: Ham-Space Digest V97 #360

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: RRRoss@aol.COM
Message-ID: <971104160136_276176342@mrin39>
Source record: 17686

Please don't send me this crap ever
again!!!

2715. Re: Spoutnik 1 Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: webmaster@radiotelephone.net.ham
Message-ID: <34600987.1150620@news.total.net>
Source record: 17687

>{{{the 145.820 the only freq?

watch out for doppler effect. it may be around 145.825.

>The little fellow will be close to the Mir space station and that's
>the only freq.

Is 145.800- operational right now ?

I am not monitoring MIR's frequency lately...

>Burton
>kf4jrg

do you wanna work code with me ??

M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : Webmaster@RadioTelephone.Net.Ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2716. Re: Spoutnik 1 Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: jmh@titan.mpae.gwdg.de
Message-ID: <63pfef$7sj$1@gwdu19.gwdg.de>
Source record: 17688

FYI, there are WWW pages concerning the subject which can be
found at http://www.oceanes.fr/~fr5fc/spoutnik.html (in French).
They haven't included yet (05/XI/1997, 09:30 UTC) the news
of the launch.

vy 73 de DG0LFH/p, Jan-Martin, Lindau (Eichsfeld), Germany

PS: just heard the signals of the model sputnik around 09:20 UTC.
My congratulations to all who were involved in the project!

2717. SPUTNIK 1 (keps)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue@amsat.org>
Message-ID: <19971105.153854.wb5rue@amsat.org>
Source record: 17689

Mike Lamanna <mustang@kickit.pgh.net> writes:

-Does anyone know where to get keps for Sputnik 1???....I heard it this
-morning loud and clear
-
-near Pittsburgh thanks
-
-Mike (WA3O)

.ask and ye shall receive...
I received these this morning, I assume they are official although
the RS-17 designator is not. I believe it is officially PS-2.

RS-17
1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160

Kevin, WB5RUE
wb5rue@amsat.org

2718. ARLK086 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk086.1997@arrl.org>
Source record: 17690
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK086
ARLK086 Keplerian data

ZCZC SK86
QST de W1AW
Keplerian Bulletin 86 ARLK086
From ARRL Headquarters
Newington, CT November 4, 1997
To all radio amateurs

SB KEP ARL ARLK086
ARLK086 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

AO-10
1 14129U 83058B 97298.70763055 .00000047 00000-0 10000-3 0 05136
2 14129 26.3471 120.1437 6033977 162.6654 233.5774 2.05881639080073
RS-10/11
1 18129U 87054A 97307.56947600 .00000063 00000-0 52636-4 0 4178
2 18129 82.9203 135.7173 0010893 189.1125 170.9839 13.72384843519355
UO-11
1 14781U 84021B 97306.93264930 .00000256 00000-0 50901-4 0 00293
2 14781 97.8500 282.7325 0010744 282.9460 77.0550 14.69608112731630
RS-12/13
1 21089U 91007A 97307.15282523 .00000036 00000-0 22914-4 0 00476
2 21089 82.9247 175.5907 0027788 272.1667 87.6306 13.74087746338248
UO-14
1 20437U 90005B 97306.78213784 .00000030 00000-0 28284-4 0 03158
2 20437 98.5085 25.3901 0011051 155.2727 204.8969 14.29978857406020
RS-15
1 23439U 94085A 97306.96753271 -.00000039 00000-0 10000-3 0 2576
2 23439 64.8162 288.4260 0146234 105.8231 255.8869 11.27528475117587
AO-16
1 20439U 90005D 97307.28206979 .00000006 00000-0 19021-4 0 1042
2 20439 98.5306 29.1311 0011454 156.0622 204.1095 14.30024427406115
RS-16
1 24744U 97010A 97307.17303674 .00005866 00000-0 18947-3 0 01129
2 24744 97.2634 209.5903 0006811 329.9482 30.1368 15.32465970037367
```

```
DO-17
1 20440U 90005E 97307.18411881 .00000049 00000-0 35686-4 0 01225
2 20440 98.5340 29.9920 0011276 155.1653 205.0075 14.30168407406132
WO-18
1 20441U 90005F 97307.18519681 .00000037 00000-0 30835-4 0 01131
2 20441 98.5330 29.8755 0011836 156.1274 204.0461 14.30134571406132
LO-19
1 20442U 90005G 97307.28114745 .00000034 00000-0 29678-4 0 1078
2 20442 98.5375 30.7184 0012448 155.0824 205.0962 14.30251678406177
FO-20
1 20480U 90013C 97307.04686992 -.00000086 00000-0 -12757-3 0 78
2 20480 99.0618 242.6131 0541044 63.0902 302.4427 12.83239821362514
AO-21
1 21087U 91006A 97307.08402987 .00000093 00000-0 82657-4 0 08935
2 21087 82.9405 308.7757 0033592 241.7011 118.0754 13.74589063339235
UO-22
1 21575U 91050B 97307.14924893 .00000063 00000-0 35348-4 0 08266
2 21575 98.2820 2.6657 0007022 190.8409 169.2627 14.37093289330442
KO-23
1 22077U 92052B 97307.22805574 -.00000037 00000-0 10000-3 0 7011
2 22077 66.0776 214.1172 0001801 170.6080 189.4972 12.86303821245636
KO-25
1 22828U 93061F 97307.20328762 .00000014 00000-0 22724-4 0 5720
2 22828 98.5303 18.6235 0009855 173.8376 186.2928 14.28197744182058
IO-26
1 22826U 93061D 97307.20245587 .00000029 00000-0 29142-4 0 5931
2 22826 98.5336 18.5284 0008723 190.3000 169.8004 14.27852382213924
AO-27
1 22825U 93061C 97307.17464552 .00000030 00000-0 29390-4 0 06096
2 22825 98.5314 18.2185 0008006 191.3230 168.7769 14.27742061213902
FO-29
1 24278U 96046B 97307.57278189 .00000011 00000-0 46516-4 0 1182
2 24278 98.5223 329.6888 0351841 184.8087 174.9637 13.52634924 59961
MO-30
1 24305U 96052B 97306.89113406 .00000204 00000-0 20364-3 0 01618
2 24305 82.9290 252.0617 0027656 178.5289 181.5912 13.73100358058095
Mir
1 16609U 86017A 97307.12941103 .00004540 00000-0 59907-4 0 07435
2 16609 51.6533 107.4286 0006537 293.4816 66.5484 15.60631633668714

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
November 8, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2719. Information Please!?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: Erv <kb8tnq@voyager.net>
Message-ID: <3460B063.4CD0376C@voyager.net>
Source record: 17691

Hi all:

I am looking for information on the Spoutnik, which is floating around
in space for the commemorative. Specifically, I need an address to send
my report to. Please reply to email address.

Thanks and 7-3,
Erv KB8TNQ

--
Please visit our Web Site at:
http://www.kb8uyz.com/kb8tnq

"Dare to Dream, It Sets Your
Spirit Free!"

2720. Re: tuning for doppler corrrection

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <34620232.760131@news.mindspring.com>
Source record: 17692

Martyn Kinder <g0czd@clara.net> wrote:

>I have a feeling that I am going to regret asking this 50/50 question but here
>goes...
>
>When tuning and in QSO on say FO-20 - does one tune the TX to correct for
>doppler, the Rx or (unlikely) both at the same time. I always believed it should
>be Tx...however recent experiences have made me doubt this.................
>
>73, (and ducking)
>
As I understand it, the Europeans go one way and we Americans go the
other. It will need to be standardized when P3D goes up.
>Martyn
>
>
>Martyn Kinder G0CZD
>
>Operating Microwaves from a tree lined house is only the second stage of madness
>;->

2721. Re: SPUTNIK 1 (keps)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: Rick Collins <rcollin2@ix.netcom.com>
Message-ID: <34613D77.23AE@ix.netcom.com>
Source record: 17693

Kevin Muenzler WB5RUE wrote:
>
> Mike Lamanna <mustang@kickit.pgh.net> writes:
>
> -Does anyone know where to get keps for Sputnik 1???....I heard it this
> -morning loud and clear
> -
> -near Pittsburgh thanks
> -
> -Mike (WA3O)
>
> .ask and ye shall receive...
> I received these this morning, I assume they are official although
> the RS-17 designator is not. I believe it is officially PS-2.
>
> RS-17
> 1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
> 2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160
>
> Kevin, WB5RUE
> wb5rue@amsat.org

Mike:
Being the Cosmonauts "tossed" the satellite out of MIR's hatch, you can
use MIR's keps. Sputnik will be designated as RS-17 in the upcoming
days. Bear in mind that Sputnik's batteries are only expected to last
about a month. 73's-

Rick, N8CZA

2722. Re: Information Please!?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-05 00:00:00 UTC
From: Rick Collins <rcollin2@ix.netcom.com>
Message-ID: <34613A1E.4713@ix.netcom.com>
Source record: 17694

Erv wrote:
>
> Hi all:
>
> I am looking for information on the Spoutnik, which is floating around
> in space for the commemorative. Specifically, I need an address to send
> my report to. Please reply to email address.
>
> Thanks and 7-3,
> Erv KB8TNQ
>
> --
> Please visit our Web Site at:
> http://www.kb8uyz.com/kb8tnq
> ----------
> "Dare to Dream, It Sets Your
> Spirit Free!"
> ----------

Erv:

There are two addresses, one for the radio builder, and one for the
satellite builder. Here they are:

Radio:

Radio Club FR5KJ
College Jules Reydellet
103 Rue de la Republique
St. Denis, Cedex 79489
Reunion Island

Satellite:

Sergei Sambourov
P.O. Box 73
Kaliningrad-10 City
Moscow Area, 14070 Russia

In both cases, send 1 IRC and an SASE. See ARRL Bulletin ARLS034.
73's- Rick, N8CZA

2723. Re: tuning for doppler corrrection

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34635389.57175543@news>
Source record: 17695

On Wed, 5 Nov 97 21:57:37 GMT, Martyn Kinder <g0czd@clara.net> wrote:

>I have a feeling that I am going to regret asking this 50/50 question but here
>goes...
>
>When tuning and in QSO on say FO-20 - does one tune the TX to correct for
>doppler, the Rx or (unlikely) both at the same time. I always believed it should
>be Tx...however recent experiences have made me doubt this.................
>
>73, (and ducking)
>
>Martyn

I believe you are supposed to tune whichever one is the higher
frequency. That is if you are transmitting on 70 cm. and receiving on
2 mtrs., you should tune the transmitter.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

2724. Re: Ham-Space Digest V97 #362

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19971106.100924.4926.5.harrymue@juno.com>
Source record: 17696

Hi all,

In Ham-Space Digest V97 #362 the posting from
Rick, N8CZA, concerning Spoutnik QSL cards,
part of the address for the French radio club
is different than what is listed on their web page.

Here is the mail address as
it appears on their web page;

FR5KJ radio club
103 rue de la Republique
97489 Saint Denis Cedex
Reunion Island

73... Harry, KC5TRB in Tulsa, Oklahoma USA

2725. Re: SPUTNIK 1 (keps)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: wowens@dpnet.net
Message-ID: <346212d5.12893643@news.dpnet.net>
Source record: 17697

On Wed, 05 Nov 1997 22:45:59 -0500, Rick Collins
<rcollin2@ix.netcom.com> wrote:

>Kevin Muenzler WB5RUE wrote:
>>
>> Mike Lamanna <mustang@kickit.pgh.net> writes:
>>
>> -Does anyone know where to get keps for Sputnik 1???....I heard it this
>> -morning loud and clear
>> -

Quoted from MIles Mann

Hi Folks
The number are in.

Sputnik is flying approximalty 2km higher than the Russian Space
Station
Mir.
And Sputnik is now 2 Minutes behind Mir (Baised on Keps from Nov 4 at
17:30
utc).
(Your actual millage may varry)

Altitude
Sputnik Mir
Per 383 381
Apo 391 390

Mir Amateur Radio Status:
It does not take much to hear Sputnik, even a rubber duck on a good
day.
The Mir crew just finished their thrid Space Walk in two week.
Amateur Radio activity with the 2-meter PMS has been very limited du
to the
crews
work load

73 Miles WF1F Mirex

Sputnik 40
1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160
Mir
1 16609U 86017A 97308.92237261 .00008528 00000-0 10698-3 0 7430
2 16609 51.6554 98.4101 0006533 298.2757 61.7619 15.60637522668995
Kvant-1

```
1 17845U 87030A 97308.79433344 .00002629 00000-0 37332-4 0 1912
2 17845 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205603084
Kvant-2
1 20335U 89093A 97308.79433344 .00002629 00000-0 37332-4 0 640
2 20335 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205452095
Kristall
1 20635U 90048A 97308.79433344 .00002629 00000-0 37332-4 0 8564
2 20635 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205422927
Spektr
1 23579U 95024A 97308.79433344 .00002629 00000-0 37332-4 0 8181
2 23579 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205140407
Priroda
1 23848U 96023A 97308.79433344 .00002629 00000-0 37332-4 0 5064
2 23848 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205 87495
Soyuz TM-26
1 24886U 97038A 97308.79433344 .00002629 00000-0 37332-4 0 980
2 24886 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205 14241
Progress M-36
1 25002U 97058A 97308.79433344 .00002629 00000-0 37332-4 0 433
2 25002 51.6542 99.0551 0006386 299.2014 60.9883 15.60627205 4724
```

2726. Re: Ham-Space Digest V97 #362

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: RRRoss@aol.COM
Message-ID: <83474b5.34623aa9@aol.com>
Source record: 17698

I said if you ever send me this again I just might bring you to court!

2727. Re: Ham-Space Digest V97 #362

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34627198.68C1@inreach.com>
Source record: 17699

Robert W. Cunningham wrote:
>
> RRRoss wrote:
> >
> > I said if you ever send me this again I just might bring you to
> > court!
>
> Anybody got a dime we can send to this poor soul so he can go out and buy a
> clue?
>
> He seems to think newsgroup postings are being sent to him alone, and that his
> replies go only to the originator of a posting.
>
> And if nobody thinks it is worth sending a dime (I don't), then there are some
> free clues available at:
>
> http://www.dsv.su.se/~jpalme/e-mail-book/usenet-news.html
>
> And he can ask more questions about Usenet news and newsgroups at:
>
> news:news.newusers.questions
>
> If a clue won't do it, then it is probably something genetic, and he deserves
> not our dimes, but our pity.
>
> -BobC
> KE6RGA
hey, I know! lets all get vicious and attack the stupid.

2728. Re: Ham-Space Digest V97 #362

Newsgroup: rec.radio.amateur.space
Date: 1997-11-06 00:00:00 UTC
From: Rick Collins <rcollin2@ix.netcom.com>
Message-ID: <34628999.3593@ix.netcom.com>
Source record: 17700

harrymue@juno.COM wrote:
>
> Hi all,
>
> In Ham-Space Digest V97 #362 the posting from
> Rick, N8CZA, concerning Spoutnik QSL cards,
> part of the address for the French radio club
> is different than what is listed on their web page.
>
> Here is the mail address as
> it appears on their web page;
>
> FR5KJ radio club
> 103 rue de la Republique
> 97489 Saint Denis Cedex
> Reunion Island
>
> --
> 73... Harry, KC5TRB in Tulsa, Oklahoma USA

Harry:
The address I posted came from the Buckmaster call server. Where is
FR5KJ's homepage? Gee....I hope they get my sig report and QSL ok.
Thanks for the input.

Rick, N8CZA

2729. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <63v9fq$8es_001@leeds.ac.uk>
Source record: 17701
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <345db0e5.2017191@news.sprynet.com>,
lar01@sprynet.com (larry) wrote:
>Obviously I seem to be more out of touch than I thought I am. I was
>reading about phase 3 serveral years ago. How come it is still not up
>yet?
>Perhaps someone could bring me up to date with my missing knowledge.
>Larry ve3fxq
>

I don't know the whole story but initially P3D was supposed to go on Arianne
501 but was replaced by more important payload (DOH! :-)), it missed 502
because of a change in the P3D launching structure requirements... any news
of then new Sputnik that was supposed to be up on Mon.?

73 de Laurens M1CCO

2730. Kepler sputnik - sputnik.txt (1/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: eb2dvt@arrakis.es
Message-ID: <3463a8a9.0@news.arrakis.es>
Source record: 17702
Body handling: Inline uuencoded payload not displayed: sputnik.txt

[Inline uuencoded payload not displayed: sputnik.txt]

2731. Kepler sputnik - sputnik.txt (0/1)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: eb2dvt@arrakis.es
Message-ID: <3463a8a2.0@news.arrakis.es>
Source record: 17703

```
Hello
I send the new data kepler to sputnik...
You can heard in 145.825

bye.. but if you want more data kepler go to my web in:

www.arrakis.es/~eb2dvt
```

2732. Radio Meteor Obs. Bull. Oct 1997 Orionids, no Draconids 1/2

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.143.3463A1E5@vvs.innet.be>
Source record: 17704

Radio Meteor Observation Bulletin No. 51 November 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Enric Fraile Algeciras
Location: Barcelona, Spain (01 59' E, 41 21' N)
Frequency: 48.250 MHz
Transmitter location: most likely Czech television C2 C. Budejovica,
100 kW, horizontal polarisation.
Antenna: 6-element Yagi 617-6B, 14 dBd gain.
Antenna: astronomical azimuth 215 deg (=NE), elevation 0 deg.
Receiver: home made converter 20 dB gain, 1 dB noise and Kenwood TS-830S.
Introduced 10 dB attenuator in the receiver from October 12,
13h UT onwards in order to reduce direct reception.
Sensitivity: 0.25 uV for 10 dB S/N
Observing method: the audio signal of the video carrier is received using
a narrow CW filter (100 Hz) and fed into the PC in real time.
Data sampling system: using a super 14 bits A/D card to PC/XT and
"Data Capture" software with 9 second/18 sampling interval to store
all the > 1.0 s signal increases.

| Oct 1997
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+---
0 | 74 48 71 65 71 82 69 58 30 65 71 30 | 2 6 2
1 | 58 50 58 49 66 79 74 51 35 56 66 34 | 4 5 9
2 | 80 55 66 70 61 95 76 75 45 57 132 63 | 6 2 6
3 | 104 74 58 91 71 112 114 79 84 98 182 101 |12 7 9
4 | 109 101 91 101 89 119 115 102 110 105 165 135 |11 15 16
5 | 108 135 125 103 123 126 115 128 100 113 199 143 | 7 17 11
6 | 130 121 118 117 141 99 108 111 117 98 239 155 | 6 6 26
7 | 124 101 98 95 124 125 96 95 93 85 211 86 | 8 4 11
8 | 139 150 119 97 139 114 115 122 98 69 132 66 | 5 11 16
9 | 116 124 120 117 117 168 107 104 80 90 107 58 | 4 12 9
10 | 119 133 84 115 115 127 98 106 86 78 94 50 | 3 14 8
11 | 105 112 91 100 96 77 103 86 57 87 71 62 |28 7 6
12 | 112 97 103 106 96 104 91 73 50 94 80 _80_|78? 8 10
13 | 115 134 107 80 83 87 89 76 56 66 91 | 3 17 4 21
14 | 84 99 137 101 72 72 69 76 85 78 126 | 2 12 11 71?
15 | 77 87 74 64 75 60 81 69 46 61 87 |27 3 2 43
16 | 59 48 91 53 69 60 59 59 49 79 82 | 3 1 6 57
17 | 59 42 62 58 79 65 58 64 52 67 84 | 5 0 4 105?
18 | 37 132 78 43 0 52 38 45 39 54 0 | 4 0 5 17
19 | 47 92 54 54 0 65 68 58 48 51 30 | 5 0 6 11
20 | 43 105 64 59 0 80 57 63 60 47 31 | 8 3 1 64?

```
21 | 76 76 58 65 0 80 68 54 60 54 42 | 9 4 6 11
22 | 70 64 71 84 0 88 73 68 63 64 37 | 5 1 6 2
23 | 62 57 77 80 0 90 64 69 64 88 25 | 4 2 2 14
---+-------------------------------------------------------
UT | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Oct 1997

| Oct 1997
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+-----------------------------------------------------------------
0 | 7 5 7 8 27 41 29 24 65 25 30 5 1 8 3 6
1 | 9 8 3 6 33 33 30 26 46 30 16 8 5 4 4 3
2 | 7 6 4 15 49 45 26 30 71 29 24 26 4 6 3 8
3 | 11 5 8 7 35 70 45 29 65 28 18 8 5 10 13 10
4 | 30 10 20 20 65 66 59 50 69 45 51 21 13 12 15 10
5 | 32 13 28 24 47 78 62 47 86 64 64 6 16 10 18 14
6 | 29 20 17 21 65 76 56 51 78 50 45 5 9 19 13 7
7 | 20 17 22 20 62 75 76 64 77 43 51 6 19 12 24 12
8 | 14 14 15 14 45 89 76 59 172? 61 37 7 8 17 7 7
9 | 24 12 16 12 23 50 49 44 107? 39 39 11 3 18 13 7
10 | 11 10 8 9 27 56 54 57 41 35 41 35 3 5 22 18
11 | 5 9 10 7 54 51 23 28 19 34 24 41 3 4 9 7
12 | 5 8 8 2 31 16 29 90? 17 32 42 11 7 6 9 14
13 | 8 4 2 8 50 21 33 102? 16 37 39 8 4 12 4 5
14 | 5 7 9 18 32 34 30 14 24 26 44 12 6 6 16 6
15 | 16 7 12 15 44 76 27 33 27 30 35 4 6 3 20 8
16 | 13 6 14 0 22 69 23 33 21 26 37 2 10 8 12 7
17 | 8 8 3 0 23 12 15 34 14 19 23 8 8 5 9 8
18 | 6 7 9 20 18 16 57? 15 30 27 2 4 10 8 6
19 | 7 10 9 22 29 16 39 84? 77? 15 22 4 6 7 3 5
20 | 7 3 3 34 25 20 28 89? 94? 33 13 2 4 3 4 3
21 | 7 5 7 21 23 19 28 45 35 21 33 4 5 5 12 7
22 | 6 6 10 33 35 28 23 59 16 23 18 4 3 4 4 6
23 | 9 6 9 14 41 24 21 47 20 28 21 1 5 4 3 8
---+-----------------------------------------------------------------
UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
| Oct 1997
```

Notes:
. ? probably affected by sporadic-E, direct reception
. Orionids between Oct 20-26

Enric Fraile Algeciras

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 20 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver

Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

| Oct 1997 | 10x % reflec. time | horiz: day | vert: time |

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0	36	38	53	37	40	31	36	40	31	31	42	29	35	32	54
1	28	39	38	43	52	47	48	34	41	24	41	30	23	43	42
2	27	41	48	41	45	42	54	45	33	20	54	45	44	64	55
3	36	56	54	51	47	39	47	53	38	31	60	32	44	67	63
4	51	62	61	60	59	55	69	58	41	37	67	55	33	70	84
5	81	80	53	87	77	58	63	56	75	56	73	50	31	85	68
6	79	84	72	91	49	54	70	56	53	71	52	43	36	50	66
7	72	61	68	86	52	65	55	40	35	23	73	26	8	30	47
8	46	36	75	75	53	31	21	18	31	38	38	65	20	20	38
9	59	51	67	72	35	24	16	19	30	16	42	27	13	21	29
10	47	39	57	66	55	25	20	21	18	40	38	26	6	34	24
11	26	15	30	76	51	23	11	18	16	14	34	19	15	15	14
12	22	13	21	41	31	17	5	8	18	6	18	36	11	16	10
13	20	8	13	36	27	7	4	4	13	8	14	14	8	10	5
14	14	16	12	10	18	4	7	9	3	10	13	8	3	4	9
15	8	15	12	25	17	8	15	6	7	13	11	12	15	23	15
16	12	9	11	17	12	10	8	9	7	10	10	9	16	11	14
17	9	20	22	19	13	10	12	7	16	17	18	13	14	12	16
18	17	19	18	14	43	20	17	17	12	12	27	12	27	20	20
19	20	24	32	25	34	24	22	18	18	29	19	23	24	29	35
20	35	30	41	47	46	42	31	28	25	33	28	31	32	38	36
21	38	36	34	32	34	28	28	27	25	52	31	19	44	51	57
22	40	28	43	32	49	31	28	34	30	34	20	11	24	43	37
23	28	27	33	38	28	57	28	28	26	31	19	11	37	48	43

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

| Oct 1997 | 10x % reflec. time | horiz: day | vert: time |

| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

```
---+-------------------------------------------------------------
0 | 42 41 47 49 47 56 15 67 64 31 28 44 31 31 11 19
1 | 53 68 50 63 51 38 94 47 70 54 43 41 51 28 19 27
2 | 50 102 73 62 83 94 59 89 81 62 70 53 52 38 22 35
3 | 81 71 81 116 92 86 65 119 148 91 79 75 46 53 31 30
4 | 68 65 67 70 66 107 37 95 93 98 68 95 70 82 44 28
5 | 46 120 70 114 69 110 63 151 84 145 71 84 49 31 63 41
6 | 45 67 54 84 44 90 35 57 101 93 84 82 44 42 54 59
7 | 17 24 40 41 32 28 17 52 45 89 73 58 48 23 33 43
8 | 20 26 35 32 49 42 30 27 37 44 35 41 45 13 41 36
9 | 25 27 38 68 15 10 43 35 32 41 16 29 11 51 15
10 | 24 16 29 45 7 27 15 41 62 22 28 13 25 24
11 | 15 27 42 51 11 7 7 26 39 29 58 51 8 8 20
12 | 8 15 29 32 12 4 5 10 31 37 30 24 40 4 18 6
13 | 17 11 27 29 7 3 8 42 13 47 16 5 11 10 7 12
14 | 9 13 10 20 9 2 9 11 26 11 24 15 9 8 3 8
15 | 15 9 11 21 11 3 5 10 9 21 14 6 11 3 10 8
16 | 9 22 9 18 16 3 21 10 31 12 17 18 8 5 6 5
17 | 14 9 13 13 10 1 8 12 14 18 15 11 17 18 7 14
18 | 18 21 27 22 18 6 16 22 83 21 32 20 13 14 13 23
19 | 29 31 19 26 19 15 30 32 37 27 37 23 20 25 20 24
20 | 29 23 29 55 36 9 31 35 44 38 43 34 24 35 26 37
21 | 47 32 48 47 32 15 50 57 54 49 54 44 29 37 38 35
22 | 43 40 45 34 21 13 48 53 43 35 54 36 47 37 27 34
23 | 42 32 39 40 31 13 41 39 41 31 61 34 40 22 27 20
---+-------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

Notes:
. no Draconids (Oct 8)
. Orionid activity between Oct 21-25
. local time = UT + 2 hours (summer hour) until Oct 25,
. local time = UT + 1 hours (winter hour) from Oct 26 onwards.

Pierre De Groote / comments by C. Steyaert

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south, elevation 65 deg
Receiver: IC-706 at 53.76055 MHz, CW-R mode, 500 Hz CW filter, fast AGC.
Transmitters: 1) 30 kW TV video carrier from Bari, Italy, distance 700 km, direction south 2) a 30 kW TV video carrier from Sicilia, Italy, distance 900 km, south. Both transmitters are on the same frequency (+/- 10 Hz) and are processed within the same 40 Hz receiver channel. Several high mountains in transmitter direction prevent direct and tropospheric reception.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record the audio signal. 20 channels of 2 Hz width are used for meteor identification, pictures with interference, sporadic-E, E-layer and FAI propagation are manually rejected.

All meteor counts below are corrected for a full hour observing time. If the recording duration is 20-40 minutes, a dot is shown after the value. Data for less than 20 minutes observing time are not shown here.

Counts of reflections longer than 6.5 seconds: assumed to be overdense.

| Oct 1997
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---+--
0| 0 0 3 4 2 0 3 1 4 0
1| 1 1 2 3 1 1 10 1 3 0
2| 2 2 1 4 5 3 3 7 6 0
3| 1 1 1 2 4 2 7 7 4 1
4| 4 2 4 8 4 4 1 3 5 1
5| 5 4 6 6 5 12 6 7 5 2
6| 3 5 5 6 4 10 2 1 6 5
7| 7 6 2 3 3 4 3 11 9 6
8| 6 7 4 4 1 5 2 7 5 1
9| 2 6 3 3 3 3. 10 3 7 0
10| 3 1 4 3 0 2 10. 2 4
11| 0 6 7 2 2 2 4 6
12| 1 1 1 2 1 0 5 2
13| 0 1 1 1 0 1 2
14| 1 0 1 0 0 1 3 0
15| 1 1 1 0 0. 0. 1 0.
16| 0. 0 0. 0. 3
17| 0. 0 0. 0. 5. 0
18| 0 0 1 0 0. 1
19| 2 1 2 1 1 3. 0 0 0
20| 0 1 1 2 0 1 7 4 0 0
21| 0 0 3 0 3 2 1 7 2 1 1
22| 1 0 2 0 2 2 4 6 0 1 1
23| 1 2 0 4 7 4 4 6 1 0 0
---+--
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
| Oct 1997

| Oct 1997
UT| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+--
0| 1 5 4 1 9 9 11 6 1 6 4 3 1 2 0
1| 1 1 3 6 6 3 11 10 13 3 7 5 4 1 2 2
2| 2 0 3 3 5 7 5 8 8 8 4 5 5 4 2 0
3| 2 4 9 6 10 8 19 9 11 10 5 3 2 2 5 2
4| 1 2 3 6 2 8 9 5 5 8 4 3 9 3 3 2
5| 4 11 4 7 9 17 18 10 8 11 11. 1 8 1 5 4
6| 1 6 6 4 8 14 2 6 7 5 7 8 4 3 2
7| 6 8 5 4 7 2 11 9 2 8 1 4 5 1 1
8| 3 6 2 8 6 2 7 9 5 12 3 3 1 5
9| 3 3 3 8 3 3 4 3 10 13. 4 4 3 5 4
10| 2 0 5. 1 4 12 10 13. 6. 1 2 1 10 2
11| 0 1 8. 6 4 4 5 1 6 4 2 0

```
12| 2 4 3 5 3 4 3 2. 2 6 2 5 1
13| 1 0 2 1 3 1 0 3. 0 0 0 1 0
14| 0 0 0 0 6 2 1 1 1 5 1 1 1
15| 0. 2 1 0 3 0 0 1 0 0 1 0
16| 1 1 0 3 0 1 0
17| 1 0 1 0.
18| 0 1 0. 0
19| 0. 0 2 1 0. 0. 4. 3 2. 3.
20| 0 0 1 1 0 0 1 4 1 2 3 2 2
21| 0 0 2 2 2 1 2 5 3. 1 3 2 0 1
22| 2 2 0 8 5 1 2 1 5 6 2 4 0 1 2
23| 0 2 3 3 5 11 3 6 3 6 2 2 0 1 2
---+------------------------------------------------------------
UT| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
| Oct 1997
```

Propagation overview for Oct 97: E = Sporadic-E, F = FAI (Field Aligned Irr)

```
| Oct 1997
UT| 1 2 3 4 5 6 7 8 9101112131415161718192021222324252627282930 31
---+------------------------------------------------------------
0| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
1| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
2| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
3| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
4| - - - - - - - - - - - - - - - - E - - - - - - - - - - - - -
5| - - - - - - - - - - - - - - - - E - - - - - - - - - - - - -
6| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
7| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
8| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
9| - - - - - - - - - - - - - - E - - - - - - - - - - - - - - -
10| - - - - - - - - E - - - - - E E - - - - - - - - - - - - - -
11| - - - - - - - - E - E - - - E E - - - - E - - - - - - - - -
12| - - - - - - - - E - - - E - E E E - - - - - - - - - - - - -
13| - - - - - - - - E - - - E - E - E - - - - - - - - - - - - -
14| - - - - - - - - E - - - - - - - - E - - - - - - - - - - - -
15| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
16| - - - E - - - - - - - - - - - - - - - - - - - - - - - - - -
17| - - - E - E - - - - - - - - - - - - - - - - - - - - - - - -
18| - - - E - - - - - - - F - - - - - - - - - - - - - - - - - -
19| - - - - - - - - - - - - - - - - - - - - - - F F - - - - - -
20| - - - - - - E - - - - - - - - - - - - - - - - - - F - - - -
21| - - - - - - - E - - - - - - - - - - - - - - - - - F - - - -
22| - - - - - - - E - - - - - - - - E - - - - - - - - F - - - -
23| - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
---+------------------------------------------------------------
UT| 1 2 3 4 5 6 7 8 9101112131415161718192021222324252627282930 31
| Oct 1997
```

Notes:
. blank value means either few or no data available, interference,

sporadic-E or FAI propagation, or offline.
. the Orionids showed up very marginal. Have observed the Orionids now
in 1995, 1996 and 1997. The only really good Orionid shower was in 1995.
. no activity detected from the Draconids on Oct. 8, 1997.
. while September was without sporadic-E propagation, October turned out
to be very active! Lot's of sporadic-E, several times even on 144 MHz.
. local time conversion: 2 hours ahead of UT (04h00 UTC is 06h00 local)
until Oct. 25, later 1 hour ahead of UT.

Werfried Kuneth

Observer: Sadao Okamoto
Location: Damine Meteor Observatory, Japan (137.53 E, 35.07 N)
Transmitter: HAM beacon for RMO (50 W CW, 53.7500 MHz) by
JA9BOH Kimio Maegawa. No modulation except for identification.
Antenna: 2 element Cross Yagi 4 dBi aiming to Zenith. Omnidirectional
in azimuth and elevation above 15 deg elevation.
Location: Fukui-NCT at Sabae city (136.2 E, 35.9 N)
At present time about 10 observer are listing for
Kimio Maegawa's 53.75 MHz beacon.
Receiver: IC575 (CW mode 500 Hz IF filter)
Antenna: 2 element Yagi, pointed to the zenith
Observing method: FFTDSP software,automatic data saving and manual count.

Notes:
-: lost counts because of high noise level or machine failure.
@: Hourly rate estimated by effective observation time less than 60 min.
n: Contamination due to interference.
e: Contamination due to sporadic E opening.
f: No data available due to TX failure or maintenance
JST = UT + 9 h

Hourly echoes over 10 dB SNR
1997

Oct|JST	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Oct|UT	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
01	37	50	49	58	52	57	51	46	31	33	28	23	22	20	18	16	17	18	13	17	31	33	44@39	
02	30	33	54	40	48	54	46	57	31	29	28	32	26	32	34	17	14	11	13	12	20	27	34@23	
03	32	38	41	45	44	45	51	34	25	35	26	35	33	26	16	17	22	13	12	14	22	25	36@31	
04	37	35	42	50	42	51	39	37	39	31	20	15	26	25	20	14	16	6	16	12	24	31	41@32	
05	28	25	43	47	29	43	37	43	22	29	--	31	23	n	n	n	n	12	9	7	23	25	36	--
06	41	35	49	57	53	64	70	49@36	@36	20	29	19	21	19	14	10	15	8	20	22	27	30@30		
07	26	28	27	40	45	39	51	32	27	37	22	15	20	17	19	13	15	13	15	15	26	31	40@44	
08	40	33	46	40	50	38	52	50@36	@28	n	n@27@24	14	f@12	14	9	17	18	20	35@26					
09	27	29	36	39	40	49	45	51	26	28	23	21	18	14	30	19	17	14	14	18	25	30	33@30	
10	38	36	48	45	41	44	41	29	25	24	25	30	f	22	21	15	11	10	9	14	25	30	30	--
11	35	35	29	40	40	31	50	45	41	20	24	31	13	17	12	18	23	10	12	13	16	19	25@36	
12	31	38	35	42	42	47	29	35	40	14	n	21@21	19@19	13	17	13	11	14	16	27	29@19			
13	32	30	38	41	37	40	48	31	26	29	22	23	15	21	11	16	12	13	9	10	8	16	21@21	

```
14 |34 43 35 40 31 39 58 44 37 17 8@15 24 17 12 17 19 12 12 13 6 27 28@34
15 |28 33 48 54 44 46 50 29 26 28 20 19 21@16@10 13 11 13 13 12 14 31 41@31
16 |33 31 47 46 33 41 43 35 31 32 25 26 20 26 10 14 7 15 8 17 18 27 24@28
17 |27 34 49 45 49 62 50 35 42 33 27 31 14 17 19 15 8 10 13 18 15 25 32@42
18 |28 36 55 46 49 47 43 35 29 14 15 15 16 16 14 15 19 -- 15 15 20 27 30 --
19 |26 n n n n n@60 39 35 38 18 19 12 23 20 9 3 12 11 12 20 26 27@26
20 |34 43 40 33 38 34 41 46 46 32 27 30 20 18 10 16 10 20 5 22 17 27 37@28
21 |40 45 46 42 39 55 61 58 46 33 15 25 25 22 18 12 12 8 12 12 21 27 28@36
22 |39 39 51 51 40 50 45 32 39 33 21 21 16 19 12 15 19 12 13 10 16 26 31@30
23 |30 41 57 45 40 45 54 34 40 n n n 15@18 27 15 13 13@19 21 24 32 44 --
24 |35 36 49 46 35 50 53 68 42 29 29 23 15 15 18 15 20 11 14 21 19 26 39@31
25 |29 32 43 52 41 50 42 43 36 20 16 19 15 24 14 17 11 17 9 20 29 27 20@32
26 |32 39 44 48 52 55 45 38 29 36@25 18 25 17 13 12 12 11 15 17 26 32@39@31
27 |39 36 50 59 45 53 40 45 35 37 24 42 17 22 21 17 13 11 7 10 25 25 30@16
28 |38 42 48 41 61 52 60 48 36 32 n 33 18 16 17 13 13 11 11 18 23 32 37@38
29 |32 44 53 49 43 52 74 46 44 34 n n n 8 10@10 -- 10 10 15 30 20 16@24
30 |22 24 33 36 31 42 35 32 17 22 16 8 14 10 11 7 4 15 17 11 20 25 44@29
31 |28 36 45 42 36 33 29 28 16 18 12 7 11 15 12 11 18 19 12 8 13 28 25@37
---+--------------------------------------------------------------------
Oct|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
UT Oct|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22
23 JST
1997

Echoes with duration > 5 s

1997
Oct|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Oct|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+--------------------------------------------------------------------
01 | 1 3 3 1 1 4 2 2 4 6 3 1 1 2
02 | 1 3 4 2 5 1 2 3 3 1 1
03 | 3 4 5 3 1 3 3 4 3 2 1
04 | 1 2 1 1 2 2 1 2 4 1 2 1 1 1
05 | 1 1 1 2 4 3 4 1 1 1
06 | 2 4 1 3 1 4 4 2 1 1 1 3 1 1 2 1 2 1
07 | 2 3 2 5 2 2 1 1
08 | 1 1 4 2 2 2 2 3 2 2 2 1
09 | 2 2 2 2 7 5 2 2 3 2 1 1 1 1
10 | 2 1 1 2 2 1 3 1 1 1 1 1 1
11 | 1 1 1 3 2 1 2 1 2 1 1 1
12 | 2 3 2 5 1 6 1 1 2 1 1 1 1
13 | 2 1 1 3 3 1
14 | 2 1 1 1 2 1 2 1
15 | 1 2 2 2 5 6 1 1 1 1 2 1 1 2
16 | 1 4 6 4 2 4 1 2 1 2 1
17 | 2 1 2 3 4 1 8 3 1 1 2 1 5 1
18 | 3 2 2 3 1 1 1
19 | 2 3 1 6 4 4 5 1 1 2 1 1 2
20 | 3 2 1 5 1 2 2 4 1 1 1 1 1 1 1
21 | 2 1 4 2 8 8 4 3 2 1 1 1 1 1 2 1
```

```
22 | 2 3 2 5 4 5 6 6 5 4 1 1 1
23 | 3 3 5 3 3 1 8 1 2 2 2 2 1 2 1 1 1 1
24 | 2 4 5 2 9 9 5 1 2 3 1 1 1
25 | 1 2 7 3 3 4 5 9 1 2 1 2 1 1 1 2 2
26 | 1 3 1 3 2 1 1 2 4 2 1 5 3 1
27 | 5 2 2 2 1 2 2 3 1 1 2
28 | 5 1 3 1 4 1 4 5 2 1 1
29 | 1 1 5 1 2 9 3 3 1 1 1
30 | 1 2 1 1 2 1 1 1 1 1 1 1 2 6
31 | 1 2 4 3 1 1 3 1 3 1 1 2 1 1 2
---+------------------------------------------------------------------------
Oct|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
UT Oct|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22
23 JST
1997

Daily rate of long echoes (T > 20 s)

Oct 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
---------------------------------------------------------------
Rate 1 2 4 1 1 2 2 4 3 3 3 6 4 1 3

Oct 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---------------------------------------------------------------
Rate 3 2 1 4 5 11 11 6 7 11 5 2 4 5 3 2

Sadao Okamoto / via Kimio Maegawa

------------------------------------------------------------------------
Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

Oct | UT
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
-----+-------------------------------------------------+-----------
1 | 14 24 14 25 10 23 21 31 25 37 36 38 | 18.3 31.3
2 | 15 20 22 26 23 24 28 28 19 31 34 40 | 21.7 30.0
3 | 10 19 22 24 27 16 28 22 32 27 27 35 | 19.7 28.5
4 | 21 21 21 25 14 21 28 26 38 49 22 | 20.4 30.7
5 | 20 20 16 30 18 20 36 22 27 33 27 32 | 20.7 29.5
6 | 13 21 13 28 23 26 19 17 31 32 29 29 | 20.7 26.2
7 | 12 29 27 23 21 25 31 26 16 26 23 29 | 22.8 25.2
8 | 19 23 21 20 28 25 28 28 28 25 27 26 | 22.7 27.0
9 | 11 22 31 26 28 18 18 33 24 29 30 22 | 22.7 26.0
10 | 13 19 32 40 18 29 22 29 21 31 25 30 | 25.2 26.3
11 | 18 24 25 27 21 25 29 22 27 34 34 24 | 23.3 28.3
```

```
12 | 18 24 19 28 21 23 33 31 28 23 29 25 | 22.2 28.2
13 | 17 21 27 27 20 29 22 30 38 20 24 29 | 23.5 27.2
14 | 22 18 30 23 21 20 27 24 23 37 29 30 | 22.3 28.3
15 | 21 24 27 34 20 22 32 34 28 31 41 32 | 24.7 33.0
16 | 22 22 24 22 22 32 31 24 18 26 30 29 | 24.0 26.3
17 | 14 26 20 28 19 24 34 24 29 21 31 22 | 21.8 26.8
18 | 14 22 19 22 22 19 25 25 24 36 28 28 | 19.7 27.7
19 | 15 18 21 17 26 35 29 26 24 27 28 26 | 22.0 26.7
20 | 26 28 28 29 35 43 35 31 35 25 35 | 29.2 34.0
21 | 17 19 22 29 42 41 41 32 25 29 38 48 | 28.3 35.5
22 | 19 12 31 34 32 35 44 29 33 29 41 33 | 27.2 34.8
23 | 16 16 18 22 23 31 39 34 23 20 33 23 | 21.0 28.7
24 | 18 29 25 22 22 34 25 29 31 34 29 | 23.2 30.3
25 | 17 12 29 28 26 26 25 27 28 25 22 19 | 23.0 24.3
26 | 15 27 28 33 23 27 32 31 33 27 28 26 | 25.5 29.5
27 | 23 26 15 22 20 19 21 26 21 25 32 26 | 20.8 25.2
28 | 19 21 16 22 26 24 25 12 22 33 33 30 | 21.3 25.8
29 | 13 16 16 21 20 21 21 28 23 29 21 26 | 17.8 24.7
30 | 19 17 26 21 15 21 26 21 26 21 22 23 | 19.8 23.2
31 | 11 22 13 17 17 21 22 23 20 26 25 25 | 16.8 23.5
-----+-------------------------------------------------+-----------
1997 | 11 12 13 14 15 16 17 18 19 20 21 22 | *(1) **(2)
Oct | UT
```

* (1) average hourly rate between 11h -17h UT
**(2) average hourly rate between 17h -23h UT

. local time = JST = UT + 9 hours

Chikara Shimoda

2733. Radio Meteor Obs. Bull. Oct 1997 Orionids, no Draconids 2/2

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.144.3463A287@vvs.innet.be>
Source record: 17705

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)

Meteor counts in one hour intervals starting at:

Orionids 1997

UT	18 Oct	19 Oct	20 Oct	21 Oct
0	324	364	344	421
1	311	302	340	443
2	310	390	366	516
3	338	333	368	412
4	369	332	316	577
5	328	347	376	412
6	307	329	295	486
7	275	290	312	371
8	307	228	265	334
9	262	256	277	313
10	317	282	238	281
11	266	217	179	184
12	218	192	130	218
13	148	169	120	168
14	170	175	175	169
15	136	186	139	140
16	146	165	159	149
17	145	203	157	173
18	226	250	233	148
19	237	229	245	244
20	287	285	294	283
21	280	281	312	430
22	325	349	337	401
23	398	338	422	606

```
----+----------------------------------
UT | 18 Oct 19 Oct 20 Oct 21 Oct
```

Ilkka Yrjola

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

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If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. CONTRIBUTORS / USEFUL ADDRESSES

Enric Fraile Algeciras (EA3BTZ)
Frederic Corominas 58, Torrelles de llobregat, E-08629 Barcelona
E-mail: EA3BTZ@mx3.redestb.es
http://www.redestb.es/personal/ea3btz (in Spanish)

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: kuneth@net4you.co.at

Kimio Maegawa
Fukui National College of Technology, Electro-Information Course
Geshi, Sabae Fukui 916 JAPAN

Call:JA9BOH,JA9YDB
E-mail: kmaegawa@fukui-nct.ac.jp
http://www.fukui-nct.ac.jp/~kmaegawa/hro

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Sadao Okamoto
E-mail: okamoto@jim.sugiyama-u.ac.jp

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

--
Christian Steyaert (RMOB9710) 7 November 1997
--

2734. Radio Meteor Obs. Bull. Oct 1997 Orionids, no Draconids 2/2

Newsgroup: rec.radio.amateur.space
Date: 1997-11-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.146.3463A35F@vvs.innet.be>
Source record: 17706

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth: 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)

Meteor counts in one hour intervals starting at:

Orionids 1997

UT	18 Oct	19 Oct	20 Oct	21 Oct
0	324	364	344	421
1	311	302	340	443
2	310	390	366	516
3	338	333	368	412
4	369	332	316	577
5	328	347	376	412
6	307	329	295	486
7	275	290	312	371
8	307	228	265	334
9	262	256	277	313
10	317	282	238	281
11	266	217	179	184
12	218	192	130	218
13	148	169	120	168
14	170	175	175	169
15	136	186	139	140
16	146	165	159	149
17	145	203	157	173
18	226	250	233	148
19	237	229	245	244
20	287	285	294	283
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23	398	338	422	606

```
----+---------------------------------
UT | 18 Oct 19 Oct 20 Oct 21 Oct
```

Ilkka Yrjola

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The RMOB is an independent initiative of some workers in the field of radio meteor scatter observations and data reduction. It started in August 1993 in order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

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Frederic Corominas 58, Torrelles de llobregat, E-08629 Barcelona
E-mail: EA3BTZ@mx3.redestb.es
http://www.redestb.es/personal/ea3btz (in Spanish)

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: kuneth@net4you.co.at

Kimio Maegawa
Fukui National College of Technology, Electro-Information Course
Geshi, Sabae Fukui 916 JAPAN

Call:JA9BOH,JA9YDB
E-mail: kmaegawa@fukui-nct.ac.jp
http://www.fukui-nct.ac.jp/~kmaegawa/hro

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

Sadao Okamoto
E-mail: okamoto@jim.sugiyama-u.ac.jp

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: DZB91458@biglobe.ne.jp

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
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Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
http://WWW.SCI.FI/~OH5IY/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

--
Christian Steyaert (RMOB9710) 7 November 1997
--

2735. Re: QSLing Sputnik

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <346437AD.114D@erols.com>
Source record: 17707
Cross-posted to: rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

The WEB Page at: http://www.oceanes.fr/~fr5fc/angspoutnik.html

indicates that you should send your report to FR5FC.
It gives the address and indicates you should include
an International Reply Coupon (IRC).

FR5KJ Radio Club
103 Rue de la Republique
97489 Saint Denis Cedex
Reunion Island

Although some stations do accept E-Mail QSLs, this appears
to be a low-budget operation and they are trying so save
on the postage from Reunion Island.

73 Dave 3W8PE1B

== = = = =

Eric F. Richards wrote:
>
> Greetings, all... Can you help a newbie tech-minus with a question?
>
> Now that I've received signals from the Sputnik replica, how do I send
> an international QSL? All I know is that I'm supposed to QSL through
> FR5FC, and that's all he says on his web page. Do I mail him directly?
> Is email is unacceptible for an official QSL?
>
> Thanks in advance for your help!
>
> (For those who haven't yet tried to pick it up, do so -- it was absurdly
> easy!)
>
> --
> Eric F. Richards
> efricha@alumni.cs.colorado.edu
> "The weird part is that I can feel productive even when I'm doomed."
> - Dilbert

2736. Help Logsat and KCT

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: n3qom@netusa1.net
Message-ID: <3463dfcf.0@208.212.139.3>
Source record: 17708

Hi Everyone
I'am new to Sat. and just join Amsat, I purchaced a KCT and
Yeaue 5400B. After loading the drivers and setting Logsat too
track FO-22 the rotor always points down???? Can anyone help me with this problem? Orcan
you tell me where to look for info.
I will pay someone in the Kokomo IN. area to help me setup my
station.

Phone 765-453-5239 home
Phone 317-0451-5284 work

CArl Walthall
n3qom@netusa1.net

2737. Re: SPUTNIK 1 is Easy (like Earth Girls :-)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Tom@astro.net
Message-ID: <641mie$p2c$2@news.mhv.net>
Source record: 17709

In article <3461bed3.22034931@news.shore.net>, Someone Else with Spam wrote:

>They're being posted in r.r.a.s. but you can pretty much use the MIR keps. I
>heard the Sputnik yesterday morning (Nov 5th), around 8:45, from the mobile on
>my way to work in Lexington, Mass. Running an FT-530 ht into a Cushcraft
> mobile
>antenna. Sigs were loud an clear...pretty good for a 16 degree pass.
>
>I kinda get the drift that the constant string of E's being sent in Morse code
>means that Elvis is on board. ;)

I'm hearing Sputnik as I type at 1238UTC. She's not DFQ but loud. She also
seems to be very slowly spinning. Anyone else seeing (hearing) this?

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2738. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EJBvyB.Gns@pe1chl>
Source record: 17710
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In <346415d7.540734706@news.atl.bellsouth.net> ke4zv@bellsouth.net (Gary Coffman) writes:

>AFAIK, P3D was *always* scheduled to go on 502, but 502 was delayed about
>a year due to the launch failure of 501.

I think in the really early days it was supposed to go on 501, but this
was changed to give the cluster sat builders an earlier launch and an
opportunity to lauch all 4 satellites in 1 launch. They are still thankful
for this preference :-) (I read some story by the Cluster guys about this
on WWW some time ago, a search on Ariane 5 and Cluster will probably find it)

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2739. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3464CE93.1825@trader.com>
Source record: 17711
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

> >AFAIK, P3D was *always* scheduled to go on 502, but 502 was delayed about
> >a year due to the launch failure of 501.

They were talking about Phase 3D at the AMSAT convention in 1986.
That one went into the Atlantic. What was the year, vehicle, flight #?
Anyone remember?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2740. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3464aa5b.578761337@news.atl.bellsouth.net>
Source record: 17712
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

On Sat, 08 Nov 1997 12:41:55 -0800, Dennis Erwin Thurlow <geosynq@trader.com>
wrote:
>> >AFAIK, P3D was *always* scheduled to go on 502, but 502 was delayed about
>> >a year due to the launch failure of 501.
>
>They were talking about Phase 3D at the AMSAT convention in 1986.
>That one went into the Atlantic. What was the year, vehicle, flight #?
>Anyone remember?

You're thinking of P3A. That was the satellite which would have
become Oscar 10 if the booster hadn't failed. Oscar 10 was thus
P3B. P3C was Oscar 13. P3D is the latest and greatest of the
series.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2741. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <3464BEDA.2B0DA25C@direct.ca>
Source record: 17713

Tuff Enuph wrote:

> Wow. So I misspelled Ariane as Arianne. BFD.
>
> So everyone that referenced the title to the posting is not
> credible now because they didn't fix the egregious spelling
> error? That's ad hominem horseshit. Mard in french.

It shows a lack of attention to detail. Somebody who hasn't done their homework, and whose other points may very well be suspect. Call me old-fashioned, if you must. But at least spell "la merde" (which does not refer to the excrement of any particular species, BTW) properly.

> ...The real test of ESA's reputation is what Lloyd's of London
> thinks about insuring a payload on the Ariane-V. I think they
> would tell you it has a pretty bad reputation...

I'd be surprised if they (or anybody else) would insure an Ariane 5 payload at all, since the rocket is still in development. It would be far more cost-effective to have parts available to build a replacement satellite. Do you have a source for this?

--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

2742. ARLK087 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk087.1997@arrl.org>
Source record: 17714
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK087
ARLK087 Keplerian data

ZCZC SK87
QST de W1AW
Keplerian Bulletin 87 ARLK087
From ARRL Headquarters
Newington, CT November 8, 1997
To all radio amateurs

SB KEP ARL ARLK087
ARLK087 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

Sputnik 40
1 24958U 97058C 97312.25371011 .00052518 00000-0 62900-3 0 115
2 24958 51.6596 81.6588 0006617 294.4475 65.6230 15.60401596 710
AO-10
1 14129U 83058B 97311.32287644 .00000065 00000-0 10000-3 0 5135
2 14129 26.3954 118.0760 6030688 166.1480 223.6470 2.05880778 80331
RS-10/11
1 18129U 87054A 97310.99610042 .00000063 00000-0 52614-4 0 04307
2 18129 82.9212 133.1848 0010941 178.9716 181.1463 13.72385199519826
UO-11
1 14781U 84021B 97310.88166178 .00000256 00000-0 51045-4 0 00275
2 14781 97.8504 286.5313 0010714 269.4981 90.5005 14.69610305732215
RS-12/13
1 21089U 91007A 97311.08491964 .00000024 00000-0 10026-4 0 00438
2 21089 82.9245 172.6752 0027639 260.6253 99.1771 13.74087705338788
UO-14
1 20437U 90005B 97311.19032153 .00000081 00000-0 47846-4 0 03205
2 20437 98.5087 29.6988 0011131 142.4759 217.7211 14.29980171406650
RS-15
1 23439U 94085A 97310.95874387 -.00000039 00000-0 10000-3 0 02853
2 23439 64.8157 281.9729 0146182 104.9387 256.7767 11.27528487118034
AO-16
1 20439U 90005D 97311.76007969 .00000096 00000-0 53854-4 0 1050
2 20439 98.5303 33.5189 0011447 143.2148 216.9820 14.30025975406753
```

```
RS-16
1 24744U 97010A 97311.22136387 .00006527 00000-0 21023-3 0 1028
2 24744 97.2629 213.5644 0006370 313.4011 46.6734 15.32516082 37982
DO-17
1 20440U 90005E 97311.17194837 .00000026 00000-0 26629-4 0 01196
2 20440 98.5343 33.9033 0011704 143.1269 217.0729 14.30168706406705
WO-18
1 20441U 90005F 97311.24308181 .00000068 00000-0 42849-4 0 1103
2 20441 98.5333 33.8543 0012118 144.0441 216.1554 14.30135626406714
LO-19
1 20442U 90005G 97311.47861737 .00000011 00000-0 20714-4 0 1082
2 20442 98.5377 34.8374 0012641 142.9162 217.2890 14.30252114406777
FO-20
1 20480U 90013C 97310.86709083 .00000021 00000-0 11376-3 0 00410
2 20480 99.0639 245.7234 0540816 54.4831 310.5485 12.83240375363001
AO-21
1 21087U 91006A 97311.08749269 .00000094 00000-0 82657-4 0 8680
2 21087 82.9397 305.8103 0033468 230.0926 129.7287 13.74589237339789
UO-22
1 21575U 91050B 97311.18751550 .00000085 00000-0 42824-4 0 08275
2 21575 98.2824 6.5541 0007266 177.0321 183.0909 14.37094326331026
KO-23
1 22077U 92052B 97311.81530262 -.00000037 00000-0 10000-3 0 7021
2 22077 66.0875 204.5136 0001246 167.1195 192.9854 12.86303952246229
KO-25
1 22828U 93061F 97311.75707966 .00000056 00000-0 39687-4 0 5735
2 22828 98.5295 23.0698 0010017 160.0573 200.1001 14.28198971182703
IO-26
1 22826U 93061D 97311.26682217 .00000038 00000-0 32869-4 0 5948
2 22826 98.5334 22.4980 0008730 178.5128 181.6082 14.27853103214501
AO-27
1 22825U 93061C 97311.16924446 .00000068 00000-0 44850-4 0 06047
2 22825 98.5309 22.1177 0008246 178.2450 181.8758 14.27742984214476
FO-29
1 24278U 96046B 97312.01110078 .00000009 00000-0 44202-4 0 1197
2 24278 98.5229 333.5164 0351616 173.3233 187.2774 13.52635286 60563
Mir
1 16609U 86017A 97312.12402433 .00008959 00000-0 11187-3 0 7524
2 16609 51.6556 82.2980 0006666 311.3605 48.6812 15.60685304669495

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
November 11, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2743. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Tom@astro.net
Message-ID: <642ijucfn2@news.mhv.net>
Source record: 17715
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <346415d7.540734706@news.atl.bellsouth.net>, ke4zv@bellsouth.net (Gary Coffman) wrote:

>Sputnik II was hand launched from MIR and is beeping away on 145.820.
>You can copy it with just a handheld, though of course a better setup works
>better. It is approx 2 km above and behind MIR at this time, so figure on
>hearing it just after MIR passes over. Doppler is about +/- 3 kHz.
>
>Gary

I copied Sputnik VERY easily this morning! She wasn't DFQ but was nice and loud! Copied her at 1238, 1406, 1543UTCs. Give a listen those who haven't yet!

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2744. Re: QSLing Sputnik

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Tom@astro.net
Message-ID: <642icdcfn1@news.mhv.net>
Source record: 17716
Cross-posted to: rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <346437AD.114D@erols.com>, willi6@erols.com wrote:
>The WEB Page at: http://www.oceanes.fr/~fr5fc/angspoutnik.html
>
>indicates that you should send your report to FR5FC.
>It gives the address and indicates you should include
>an International Reply Coupon (IRC).
>
> FR5KJ Radio Club
> 103 Rue de la Republique
> 97489 Saint Denis Cedex
> Reunion Island
>
>Although some stations do accept E-Mail QSLs, this appears
>to be a low-budget operation and they are trying so save
>on the postage from Reunion Island.
>
> 73 Dave 3W8PE1B
>

I heard you need to send a SASE and IRC to Sergi in Russia. Which one is
it???

73,

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

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2745. What are Sputnik-2's Beeps for?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: "Greg D." <gregd@jps.net>
Message-ID: <346532B1.5B38@jps.net>
Source record: 17717

Hi, folks,

I know that the *frequency* of the beeps from the Sputnik replica are an indication of the temperature inside the satellite, but the beeps seem to come in groups of various lengths. Sometimes there are 4 beeps, sometimes more, then a short space. It's not Morse code, but I assume it's for a reason (besides the obvious reason to generate lots of web postings).

What do the groups of beeps mean?

Greg.

p.s. Shouldn't it be named Sputnik-3? No's 1 and 2 were launched back in '57.

2746. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <346415d7.540734706@news.atl.bellsouth.net>
Source record: 17718
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

On Fri, 7 Nov 1997 14:44:11 +0000 (GMT), CBS5LD@leeds.ac.uk (L. DE BRUIJN)
wrote:
>In article <345db0e5.2017191@news.sprynet.com>,
> lar01@sprynet.com (larry) wrote:
>>Obviously I seem to be more out of touch than I thought I am. I was
>>reading about phase 3 serveral years ago. How come it is still not up
>>yet?
>>Perhaps someone could bring me up to date with my missing knowledge.
>>Larry ve3fxq
>>
>
>I don't know the whole story but initially P3D was supposed to go on Arianne
>501 but was replaced by more important payload (DOH! :-)), it missed 502
>because of a change in the P3D launching structure requirements... any news
>of then new Sputnik that was supposed to be up on Mon.?

AFAIK, P3D was *always* scheduled to go on 502, but 502 was delayed about
a year due to the launch failure of 501. Analysis showed the structural loads
on payloads riding the Ariane V satellite bus would be greater than AMSAT had
been told, so AMSAT had to re-engineer the structure to handle the higher loads.
That couldn't be done in time to meet ESA's launch schedule for 502, so P3D
didn't go. ESA recognized that this was partially their responsibility because
of the structural load parameter change, so they released AMSAT from their
launch contract. So the launch money is still in the bank, and negotiations for
a new launch opportunity are in progress.

This is not a bad thing. First, the next launch vehicle will benefit from
lessons learned from 501 and 502, so it is likely to be a much more
reliable vehicle. Second, this allows AMSAT to continue to refine the
payloads on P3D. Thus our chances of getting a good satellite in a
good orbit have improved considerably. The only cost is that we have
to be patient a bit longer.

Sputnik II was hand launched from MIR and is beeping away on 145.820.
You can copy it with just a handheld, though of course a better setup works
better. It is approx 2 km above and behind MIR at this time, so figure on
hearing it just after MIR passes over. Doppler is about +/- 3 kHz.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

2747. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: tuffenuph@aol.com
Message-ID: <19971108175401.MAA12873@ladder01.news.aol.com>
Source record: 17719

rob@pe1chl (Rob Janssen) said:

>Of course, most participants in discussions like this have a completely
>unrealistic view on launch possibilities and failure rates. I find it
>disturbing that people who don't even know how to spell Ariane think they
>can state that it has a bad reputation.

Wow. So I misspelled Ariane as Arianne. BFD.

So everyone that referenced the title to the posting is not credible now
because they didn't fix the egregious spelling error? That's ad hominem
horseshit. Mard in french.

When one smells a rotten egg, one does not need to be able to
properly spell sulphur dioxide to correctly assess that it stinks like hell.

The real test of ESA's reputation is what Lloyd's of London thinks about
insuring a payload on the Ariane-V. I think they would tell you it has a
pretty bad reputation...

2748. Mars Global Explorer Shirt

Newsgroup: rec.radio.amateur.space
Date: 1997-11-08 00:00:00 UTC
From: Noel Hendrickson <nhendric@sprytec.cncoffice.com>
Message-ID: <01bceca5$ee1a6f00$65a4adce@crc3.concentric.net>
Source record: 17720
Cross-posted to: rec.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.space

Anyone interested in the historic Mars Global Explorer Mission should check out this site before mars mania strikes again and the commemorative Global Explorer paraphernalia is all gone.
<http://www.sprytec.cncoffice.com/bandw>

2749. Re: Help Logsat and KCT

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: rob@pe1chl
Message-ID: <EJDoqu.nDu@pe1chl>
Source record: 17721

In <3463dfcf.0@208.212.139.3> n3qom@netusa1.net writes:

>Hi Everyone
>I'am new to Sat. and just join Amsat, I purchaced a KCT and
>Yeaue 5400B. After loading the drivers and setting Logsat too
>track FO-22 the rotor always points down????

The rotor points down????
My 5400 cannot point down. Did you fix the antennas in the right
orientation?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2750. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <D982B80C5B1116EB.0F624D558B68597C.4C883BF0A5A08CFB@library-proxy.airnews.net>
Source record: 17722
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

.....never mind...Jeeze, what a bunch of soreheads! Lets see...did I make a spelling error or a typo? Oh well, someone will tell me which it was (and what it means about my character or lack of knowledge.) ;>

Oh yeah,...to the woman who replys to all my posts: please send a picture of your Bass boat and pickup truck in order for our relationship to continue.

Ken

2751. Re: What are Sputnik-2's Beeps for?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: Tom@astro.net
Message-ID: <645296$3bp$2@news.mhv.net>
Source record: 17723

In article <3465f365.8351840@news.sky.net>, ephemera@sky.net (Kyle) wrote:

>Greg,
>
>I believe the irregular pattern of beeps is due to the satellite
>tumbling in space. It's interesting to compare the pattern of beeps
>on different passes (I've listened to 9 so far. number 10 is comming
>up in fifteen minutes!) Sometimes you get a simple pattern, sometimes
>a more complex one. You can usually hear the pattern change over the
>course of a single pass as the orientation between you and the
>satellite changes.

It is definately rotating, I too noticed this. I understand the different
tones indicate temperature. Is this correct?

>Fun stuff, huh?

ABSOLUTELY!!!

>Kyle

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2752. Re: What are Sputnik-2's Beeps for?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: "Jeffery A. Swan" <tjswan@netone.netonecom.net>
Message-ID: <34662989.2F9A@netone.netonecom.net>
Source record: 17724

-> Greg,
->
-> I believe the irregular pattern of beeps is due to the satellite
-> tumbling in space. It's interesting to compare the pattern of beeps
-> on different passes (I've listened to 9 so far. number 10 is comming
-> up in fifteen minutes!) Sometimes you get a simple pattern,
-sometimes
-> a more complex one. You can usually hear the pattern change over the
-> course of a single pass as the orientation between you and the
-> satellite changes.
->
-> As to the name, I've heard it called Sputnik 40--for the 40th
-> anniversary. I've also heard that it has yet to given an offical
-> satellite designation.
->
-> Fun stuff, huh?
->
-> Kyle

Would you tell me where I can get the Keps and a program to tell me when
Sputnik xx ;) will be over my area. TIA

P.S. What was the freq again? (somewhere in 2m?)

Jeff Swan
Embedded Electronics & Software Design Engineer
Spectrum Technologies

2753. Join the discussion, "no code JA hams in HF"

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: troublemaker@radiotelephone.net.ham
Message-ID: <3465c7ae.7290083@news.total.net>
Source record: 17725

Please join the discussion, "no code JA hams in HF" and "what
happens to code"

in rec.radio.amateur, rec.radio.amateur.misc and
rec.radio.amateur.policy.

Trouble Maker AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : troublemaker@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2754. Re: Join the discussion, "no code JA hams in HF"

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: Sandra <mednospamtek@dontdarespamme.ghgcorp.com>
Message-ID: <3465D18E.51C8@dontdarespamme.ghgcorp.com>
Source record: 17726

Trouble Maker wrote:
>
> Please join the discussion, "no code JA hams in HF" and "what
> happens to code"

Gee, I just added the discussion(s) to my killfile. Sorry. Oh wait, no
I'm not.

Seeya. I'm off to code practice and reading about amateur radio in
space and satellites and other interesting and intelligent subjects.

Sandra
KD5CMR

2755. Re: What are Sputnik-2's Beeps for?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: ephemera@sky.net
Message-ID: <3465f365.8351840@news.sky.net>
Source record: 17727

On Sat, 08 Nov 1997 19:49:05 -0800, "Greg D." <gregd@jps.net> wrote:

>Hi, folks,
>
>I know that the *frequency* of the beeps from the Sputnik replica
>are an indication of the temperature inside the satellite, but
>the beeps seem to come in groups of various lengths. Sometimes
>there are 4 beeps, sometimes more, then a short space. It's not
>Morse code, but I assume it's for a reason (besides the obvious
>reason to generate lots of web postings).
>
>What do the groups of beeps mean?
>
>Greg.
>
>p.s. Shouldn't it be named Sputnik-3? No's 1 and 2 were launched
>back in '57.

Greg,

I believe the irregular pattern of beeps is due to the satellite tumbling in space. It's interesting to compare the pattern of beeps on different passes (I've listened to 9 so far. number 10 is comming up in fifteen minutes!) Sometimes you get a simple pattern, sometimes a more complex one. You can usually hear the pattern change over the course of a single pass as the orientation between you and the satellite changes.

As to the name, I've heard it called Sputnik 40--for the 40th anniversary. I've also heard that it has yet to given an offical satellite designation.

Fun stuff, huh?

Kyle

2756. Sputnik's frequency

Newsgroup: rec.radio.amateur.space
Date: 1997-11-09 00:00:00 UTC
From: Neastrom <neastrom@arrakis.es>
Message-ID: <9711092102.AA00619@caladan.arrakis.es>
Source record: 17728
Cross-posted to: rec.radio.amateur.space,sci.space.history,sci.space.tech,sci.space.policy

ci.space.tech
Message-ID: <01bced52$189ee920$394f05c3@default>
X-Newsreader: Microsoft Internet News 4.70.1161
X-NNTP-Posting-Host: 195.5.79.57
Date: 9 Nov 97 21:02:40 GMT
Lines: 12

Hi everybody.

Last week I watched on TV that the Russians had released a copy of the
Sputnik I satellite from the MIR Space Station

I'd like to know if it's possible, the frequency of the famous "bip bip
bip".

Thanks.

Eduardo Perez
neastrom@arrakis.es

2757. Re: Spoutnik 1

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: Tom@astro.net
Message-ID: <647sri$2ad$1@news.mhv.net>
Source record: 17531

In article <Pine.OSF.3.96.971103144554.31018A-100000@internet.oit.edu>, Dan O'Connell <oconneld@OIT.EDU> wrote:
>
>
>> Well it sounds like Spoutnik 1 is alive and well.
>> an Icom IC-271H. Spoutniks signal was 5/5 on both
>> vert. and horiz. polarization with no fading.
>
> Interesting about the fading; I saw on the very early news a few
>seconds of
>film on the Mir EVA that also showed the satellite in the background, and
>it was
>tumbling like crazy. Havn't had a chance to hear it myself yet, can't
>wait! Dan WA7TDZ CN92 Oregon

She's spinning, you can hear it. Nice signal though!

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2758. Sputnik-40/RS-17 via HT and rubber duck

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: nungeste@sdd.hp.com
Message-ID: <64857o$7sg@news.sdd.hp.com>
Source record: 17532

I just heard Sputkik-40, or it's official name RS-17. It had a 40-degree elevation pass over San Diego and I could hear it fine on my Kenwood TR-2500 HT with a rubber duck antenna. Squelch was full-open but the beeps were easily discernible from the noise.

These are the keplerians I used:

RS-17
1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160

Also, I noticed several rec.radio.amateur.space messages saying the frequency is 145.820 MHz. The website at http://www.oceanes.fr/~fr5fc/angspoutnik.html says the correct frequency is 145.825 MHz, although I doubt it matters much.

2759. NORAD Two-Line Orbital Element Sets (TLE094)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <6486ug$2kf$1@blackbird.afit.af.mil>
Source record: 17533

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #094 -
Alouette 1
1 00424U 62049A 97313.91069322 .00000066 00000-0 67398-4 0 3304
2 00424 80.4628 139.8003 0022916 158.1947 202.0179 13.67907920752165
ATS 1
1 02608U 66110A 97301.35968989 .00000037 00000-0 10000-3 0 442
2 02608 14.4312 347.4596 0007509 121.6844 238.3842 1.00316362 29865
ATS 3
1 03029U 67111A 97313.33744421 -.00000117 00000-0 10000-3 0 7173
2 03029 14.8532 354.2885 0012749 275.7118 154.6974 1.00272689109885
Starlette
1 07646U 75010A 97312.25837653 -.00000151 00000-0 -44041-5 0 984
2 07646 49.8250 299.8250 0205258 111.5058 250.7779 13.82192986149371
LAGEOS
1 08820U 76039A 97314.18782638 -.00000002 00000-0 00000+0 0 3312
2 08820 109.8171 201.0520 0044133 18.2700 341.9611 6.38664728246467
GOES 2
1 10061U 77048A 97314.34080359 .00000044 00000-0 10000-3 0 9093
2 10061 12.9862 31.3626 0010677 147.5648 176.0904 1.00279684 19560
IUE
1 10637U 78012A 97309.11596766 .00000015 00000-0 10000-3 0 4157
2 10637 36.2646 75.4595 1373128 71.3096 303.2827 1.00088175 25004
GOES 3
1 10953U 78062A 97313.88019679 -.00000084 00000-0 10000-3 0 8617
2 10953 12.0182 34.4680 0004108 200.2803 21.9430 1.00275769 24177
SeaSat 1
1 10967U 78064A 97313.21812836 .00000013 00000-0 48742-4 0 6172
2 10967 108.0037 150.2247 0002557 256.6675 103.4179 14.38203537 14771

```
Nimbus 7
1 11080U 78098A 97310.89370716 -.00000065 00000-0 -21631-4 0 7092
2 11080 98.8831 152.7317 0009885 39.3278 320.8606 13.83676058961386
GOES 5
1 12472U 81049A 97311.21194066 -.00000255 00000-0 10000-3 0 288
2 12472 8.9814 45.3136 0004813 112.7580 247.1663 1.00317950 18194
Cosmos 1383
1 13301U 82066A 97312.93774199 .00000015 00000-0 89482-7 0 6251
2 13301 82.9299 120.0467 0026091 276.3307 83.4874 13.68087717767074
LandSat 4
1 13367U 82072A 97312.59718680 .00000129 00000-0 38240-4 0 1114
2 13367 98.0087 351.9463 0007448 4.1814 355.9447 14.57222594814726
DMSP B5D2-1
1 13736U 82118A 97312.20352152 .00000294 00000-0 14157-3 0 3486
2 13736 98.6179 138.3464 0008275 350.3570 9.7474 14.25871634773601
IRAS
1 13777U 83004A 97313.83593897 -.00000264 00000-0 -15179-3 0 8242
2 13777 98.9761 134.6953 0012453 124.3738 235.8612 13.99281570424788
Cosmos 1447
1 13916U 83021A 97311.16282636 .00000044 00000-0 30194-4 0 7187
2 13916 82.9447 175.3201 0037363 174.5107 185.6465 13.74361448733517
TDRS 1
1 13969U 83026B 97308.21033212 -.00000288 00000-0 10000-3 0 8046
2 13969 9.6822 38.8940 0002916 197.9310 193.8541 1.00270061 26452
GOES 6
1 14050U 83041A 97314.25978310 .00000038 00000-0 10000-3 0 7437
2 14050 7.8508 48.9501 0003260 125.8430 199.0761 1.00303662111312
AO-10
1 14129U 83058B 97312.29306154 .00000077 00000-0 10000-3 0 5144
2 14129 26.3940 117.9426 6029990 166.3756 222.7043 2.05880583 80357
LandSat 5
1 14780U 84021A 97312.55651600 .00000109 00000-0 34386-4 0 6596
2 14780 98.2688 14.3593 0002706 128.8388 231.3062 14.57086700728137
UO-11
1 14781U 84021B 97312.99233790 .00000285 00000-0 55913-4 0 140
2 14781 97.8507 288.5622 0010737 262.1549 97.8439 14.69611807732521
Cosmos 1574
1 15055U 84062A 97311.16529789 .00000018 00000-0 28783-5 0 9187
2 15055 82.9549 231.2809 0028987 10.0331 350.1398 13.73655463670726
Cosmos 1602
1 15331U 84105A 97310.62195836 .00000359 00000-0 39091-4 0 6014
2 15331 82.5364 357.5608 0022097 70.4245 289.9354 14.84974578708270
ERBS
1 15354U 84108B 97313.85710659 -.00000040 00000-0 18037-4 0 3164
2 15354 56.9947 137.1840 0008890 80.7121 279.4915 14.95096627713218
NOAA 9
1 15427U 84123A 97313.94718707 .00000127 00000-0 90559-4 0 3551
2 15427 98.8888 23.4431 0014419 309.3423 50.6469 14.13894697665807
Mir
1 16609U 86017A 97314.17301741 .00009324 00000-0 11599-3 0 7615
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2 16609 51.6583 71.9844 0006769 319.1732 40.8838 15.60725264669818
SPOT 1
1 16613U 86019A 97313.22393484 -.00000044 00000-0 00000+0 0 1326
2 16613 98.7847 24.6379 0000913 193.9579 166.1572 14.20008774292698
Cosmos 1766
1 16881U 86055A 97313.27181858 .00000515 00000-0 58839-4 0 5175
2 16881 82.5195 52.6077 0020892 92.5355 267.8251 14.83916887609486
EGP
1 16908U 86061A 97311.23519137 -.00000083 00000-0 10000-3 0 2211
2 16908 50.0124 235.0467 0011435 227.1338 132.8537 12.44417492179661
NOAA 10
1 16969U 86073A 97313.93801922 .00000348 00000-0 16685-3 0 2854
2 16969 98.5545 303.2420 0012522 307.8239 52.1815 14.25067617579346
MOS-1
1 17527U 87018A 97307.48669283 -.00000043 00000-0 00000+0 0 6015
2 17527 98.8720 2.6227 0019853 13.2386 346.9294 14.00453828545574
GOES 7
1 17561U 87022A 97314.22221228 -.00000145 00000-0 10000-3 0 4141
2 17561 4.0487 65.8748 0001922 208.5130 117.2987 1.00271708 22427
Kvant-1
1 17845U 87030A 97313.78882407 .00018071 00000-0 21873-3 0 1960
2 17845 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159603866
DMSP B5D2-3
1 18123U 87053A 97313.95347282 .00000025 00000-0 35366-4 0 1166
2 18123 98.7624 141.6665 0013433 235.9215 124.0685 14.15498361536757
RS-10/11
1 18129U 87054A 97313.54784243 .00000027 00000-0 13551-4 0 4224
2 18129 82.9213 131.2980 0011089 171.8376 188.2964 13.72385031520170
Meteor 2-16
1 18312U 87068A 97312.09875540 .00000040 00000-0 22571-4 0 6020
2 18312 82.5535 308.4188 0010976 229.3785 130.6421 13.84106725516574
Meteor 2-17
1 18820U 88005A 97313.23282451 .00000136 00000-0 10810-3 0 4077
2 18820 82.5426 1.3509 0015761 298.5265 61.4307 13.84785364494112
DMSP B5D2-4
1 18822U 88006A 97313.86915853 .00000064 00000-0 46530-4 0 6642
2 18822 98.3908 127.6739 0005781 321.2578 38.8191 14.23248600507219
Glonass 34
1 19163U 88043A 97304.69651683 -.00000010 00000-0 10000-3 0 2292
2 19163 65.4577 68.9340 0005454 235.1559 124.7834 2.13101961 72927
Glonass 36
1 19165U 88043C 97311.32426346 .00000009 00000-0 10000-3 0 6334
2 19165 65.4621 68.6705 0006812 265.2031 94.7539 2.13101855 73683
METEOSAT 3
1 19215U 88051A 97312.06949577 -.00000143 00000-0 10000-3 0 3480
2 19215 4.2642 65.0394 0007353 144.4745 215.4582 0.96948732 22113
OKEAN 1
1 19274U 88056A 97313.01831341 .00000660 00000-0 78684-4 0 2165
2 19274 82.5120 154.3177 0018469 244.7932 115.1368 14.82704102504913
Meteor 3-2
```

```
1 19336U 88064A 97313.00685424 .00000051 00000-0 10000-3 0 6144
2 19336 82.5428 165.6706 0018132 42.2852 317.9667 13.16984466446586
Glonass 39
1 19503U 88085C 97312.29377529 .00000019 00000-0 10000-3 0 5173
2 19503 65.3707 307.5022 0006029 162.6313 197.4115 2.13101803 71191
NOAA 11
1 19531U 88089A 97313.94497605 .00000023 00000-0 37240-4 0 1750
2 19531 99.1394 350.1345 0011028 246.3348 113.6668 14.13151694470589
TDRS 3
1 19548U 88091B 97312.61780876 -.00000192 00000-0 10000-3 0 3113
2 19548 3.4913 69.1548 0003527 116.3163 169.9692 1.00268583 20636
Glonass 40
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2 19749 65.4402 68.1117 0006173 253.5731 106.3527 2.13101227 68748
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1 19750U 89001B 97310.50865863 -.00000043 00000-0 10000-3 0 6394
2 19750 65.4487 68.3142 0007690 241.0328 118.9008 2.13100907 68682
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1 19802U 89013A 97311.69609952 .00000037 00000-0 00000+0 0 4891
2 19802 55.5854 90.3825 0018740 151.0888 209.0406 2.00553578 63917
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1 19822U 89016A 97314.17402487 .00018272 00000-0 97578-3 0 274
2 19822 75.0577 184.7060 3694036 77.1434 320.9482 8.01601284207375
Meteor 2-18
1 19851U 89018A 97312.80295929 .00000016 00000-0 10141-5 0 5991
2 19851 82.5207 234.7203 0013923 351.8579 8.2353 13.84442265439340
MOP-1
1 19876U 89020B 97313.20648666 -.00000115 00000-0 00000+0 0 2946
2 19876 3.0135 70.4607 0015528 282.7301 76.9783 0.97109941 11577
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1 19883U 89021B 97306.79074078 -.00000261 00000-0 10000-3 0 3679
2 19883 0.9054 85.8044 0004307 161.0972 38.8412 1.00267390204154
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1 20061U 89044A 97314.03046109 -.00000037 00000-0 10000-3 0 4744
2 20061 53.8866 265.2667 0179424 226.5631 131.9209 2.00563488 61708
Nadezhda 1
1 20103U 89050A 97311.91392300 -.00000002 00000-0 -18417-4 0 1650
2 20103 82.9568 93.4894 0039238 76.5194 284.0330 13.73883507418536
GPS BII-03
1 20185U 89064A 97308.24629961 .00000028 00000-0 10000-3 0 5001
2 20185 55.3758 90.8792 0023709 351.4950 8.3520 2.00570026 60167
GMS 4
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2 20217 2.8041 72.5766 0000745 261.6877 247.7876 1.00271095 30543
INTERCOSMOS 24
1 20261U 89080A 97310.63899329 .00000367 00000-0 11213-3 0 6304
2 20261 82.5907 306.5792 1241254 327.7329 25.3302 12.47466747369177
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2 20302 53.1946 204.8569 0139978 61.7451 298.0417 2.00559001 59076
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1 20322U 89089A 97313.54107763 .00000093 00000-0 87232-4 0 3496
2 20322 98.9254 325.6647 0009815 55.2951 304.9152 14.03466098408514
Kvant-2
1 20335U 89093A 97313.78882407 .00018071 00000-0 21873-3 0 687
2 20335 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159452877
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2 20361 56.2647 33.1571 0099818 148.1781 212.4593 2.00567553 48549
COSMOS 2054 (Altair-1)
1 20391U 89101A 97305.12387811 -.00000190 00000-0 10000-3 0 5585
2 20391 4.7665 60.3745 0003385 133.3393 226.5984 1.00246866 29037
SPOT 2
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UO-14
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2 20437 98.5084 32.2282 0011386 135.1994 225.0110 14.29980566407026
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1 20439U 90005D 97311.76007969 .00000096 00000-0 53854-4 0 1050
2 20439 98.5303 33.5189 0011447 143.2148 216.9820 14.30025975406753
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2 20441 98.5333 33.8543 0012118 144.0441 216.1554 14.30135626406714
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GPS BII-06
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2 20452 54.0831 146.0334 0072453 96.5584 264.3330 2.00573543 57018
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2 20478 99.0762 19.9683 0005445 305.3204 54.7447 13.93982767315473
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2 20546 94.1111 284.7739 0047349 176.2707 183.8883 15.55374990424145
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2 20580 28.4666 186.8617 0014705 268.6784 91.2120 14.86533015214776
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2 20619 64.9642 306.5444 0028075 209.1054 150.7618 2.13102531 58122
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2 20620 64.9602 306.4245 0009934 19.5890 340.4507 2.13102793 58228
Glonass 46
1 20621U 90045C 97313.35141499 .00000012 00000-0 10000-3 0 468
2 20621 64.9758 306.4984 0014949 203.9508 155.9997 2.13103467 58218
Kristall
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2 20635 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159423700
ROSAT
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Meteor 2-19
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2 20670 82.5424 302.5760 0014306 264.6309 95.3222 13.84134905372338
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2 20724 55.2338 88.1945 0140739 193.3701 166.2514 2.00563503 51663
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1 20788U 90081A 97313.94011844 .00000010 00000-0 34444-4 0 5469
2 20788 98.8234 308.1608 0017084 151.2635 208.9477 14.01397494367634
Meteor 2-20
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GPS BII-09
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2 20959 55.4106 90.3266 0119257 240.6535 118.1426 2.00563617 50912
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1 20978U 90105A 97313.88725784 .00000182 00000-0 79456-4 0 2880
2 20978 98.5455 25.3151 0080035 101.6093 259.4088 14.32798644362844
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1 21006U 90110A 97308.21399617 .00000009 00000-0 10000-3 0 9875
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2 21007 65.4542 67.6704 0031585 181.3233 178.7240 2.13101454 53807
Glonass 49
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RS-12/13
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MOP-2
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2 21140 1.5738 79.0806 0003443 137.5619 186.1435 1.00271078 26721
Nadezhda 3
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2 21216 64.7167 305.7873 0024197 199.7224 160.3249 2.13101310 51402
Glonass 51
1 21217U 91025B 97298.91957811 .00000003 00000-0 10000-3 0 501
2 21217 64.7046 306.3148 0010160 229.8787 130.0687 2.13101751 51077
Glonass 52
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2 21218 64.6928 305.8915 0008237 292.8099 67.1261 2.13103361 51325
GRO
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2 21225 28.4594 270.2925 0004572 33.2538 326.8362 15.19452732248491
Meteor 3-4
1 21232U 91030A 97312.57809627 .00000050 00000-0 10000-3 0 214
2 21232 82.5411 12.6563 0013157 336.0174 24.0335 13.16477903314564
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1 21263U 91032A 97313.93849511 .00000083 00000-0 55775-4 0 5891
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UO-22
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2 21575 98.2821 8.4974 0007320 170.8897 189.2423 14.37094747331312
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2 21576 98.2819 3.2813 0003196 189.7847 170.3273 14.36517350330802
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2 21578 98.3293 13.2127 0004490 182.1654 177.9515 14.39464537330848
TDRS 5
1 21639U 91054B 97312.59292625 .00000079 00000-0 10000-3 0 2355
2 21639 0.0185 262.5493 0002290 304.4873 239.9215 1.00274659 22964
Meteor 3-5
1 21655U 91056A 97313.48103662 .00000051 00000-0 10000-3 0 196
2 21655 82.5538 320.0601 0013195 340.0407 20.0187 13.16856956299830
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2 21701 56.9852 226.6518 0005576 103.8243 256.3413 14.96638761336683
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1 21798U 91082A 97313.91603863 .00000036 00000-0 42487-4 0 9455
2 21798 98.9118 336.6581 0012024 220.0402 139.9887 14.14085893307105
Glonass 53
1 21853U 92005A 97312.84960973 -.00000007 00000-0 10000-4 0 2270
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Glonass 54
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Glonass 55
1 21855U 92005C 97313.20405946 -.00000011 00000-0 00000+0 0 4504
2 21855 65.3726 67.1098 0007563 208.9878 150.9716 2.13101925 44962
JERS-1
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2 21930 55.5543 328.2236 0027695 187.7016 172.2847 2.00573295 40805
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2 22014 54.8981 148.5723 0102564 342.7573 16.9871 2.00552323 32453
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Glonass 57
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2 22057 64.5493 305.7836 0007677 313.4856 46.4687 2.13102327 41043
Glonass 58
1 22058U 92047C 97308.17411298 .00000008 00000-0 10000-3 0 2523
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1 22108U 92058A 97312.94994089 .00000003 00000-0 10000-3 0 9808
2 22108 53.9184 206.6275 0127114 171.9507 188.3274 2.00563450 37816
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2 22231 54.7387 149.3157 0011445 258.6047 101.3352 2.00574756 36395
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1 22275U 92089A 97309.20747538 .00000069 00000-0 10000-3 0 9900
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TDRS 6
1 22314U 93003B 97305.57514389 -.00000275 00000-0 10000-3 0 7350
2 22314 0.0625 66.4455 0004184 206.5736 288.0647 1.00273160 17613
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1 22446U 93007A 97312.84809597 -.00000025 00000-0 00000+0 0 9840
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Glonass 60
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2 22513 65.3773 67.1797 0006867 188.3194 171.6697 2.13102788 36620
Glonass 61
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Meteor 2-21
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2 22825 98.5312 21.2286 0008170 181.4134 178.7025 14.27742297214347
IO-26
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2 22826 98.5334 22.4980 0008730 178.5128 181.6082 14.27853103214501
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2 22829 98.5297 21.6890 0009830 165.8883 194.2575 14.28184461214403
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2 22912 0.4042 63.6410 0003083 122.3242 105.2126 1.00275444 12892
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2 22920 28.4662 8.9031 0004302 185.2894 174.7648 15.12265712216516
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2 22969 82.5590 261.5295 0016642 49.1947 311.0613 13.16748777182009
TUBSAT-B
1 22970U 94003B 97311.23608045 .00000051 00000-0 10000-3 0 3753
2 22970 82.5533 261.8664 0017586 47.8292 312.4319 13.16830444181928
CORONAS I
1 23019U 94014A 97313.03399507 .00003827 00000-0 16104-3 0 4329
2 23019 82.4907 333.9670 0026360 215.5384 144.4101 15.22750906203897
GPS BIIA-24
1 23027U 94016A 97310.31925979 .00000000 00000-0 10000-3 0 6158
2 23027 54.9281 329.2882 0070348 213.1105 146.4922 2.00565446 26877
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1 23043U 94021A 97312.22029326 .00000016 00000-0 00000+0 0 5796
2 23043 64.4267 306.0877 0007214 208.1294 151.8512 2.13103214 27856
Glonass 63
1 23044U 94021B 97313.51085904 .00000009 00000-0 00000+0 0 5415
2 23044 64.4167 306.0352 0033046 205.1486 154.7080 2.13102299 27883
Glonass 64
1 23045U 94021C 97312.28173050 .00000016 00000-0 00000+0 0 5473
2 23045 64.4101 306.0782 0010520 24.9703 335.1006 2.13102659 27850
GOES 8
1 23051U 94022A 97313.32678925 -.00000259 00000-0 10000-3 0 9152
2 23051 0.3162 93.1345 0004168 153.6776 204.4828 1.00279714 20487
MSTI 2
1 23101U 94028A 97312.58970783 .00022226 00000-0 26391-3 0 5432
2 23101 97.0572 147.7159 0007814 217.8847 142.1922 15.61154690198557
STRV-1A
1 23125U 94034B 97311.61600420 .00000630 00000-0 28163-3 0 5249
2 23125 7.5279 18.4092 7212993 133.6496 314.4086 2.35901199 28010
STRV-1B
1 23126U 94034C 97310.72396916 .00000807 00000-0 35172-3 0 4932
2 23126 7.5623 18.0948 7208805 134.1757 313.8442 2.36539030 28047
Nadezhda 4
1 23179U 94041A 97314.27227217 .00000059 00000-0 44640-4 0 3220
2 23179 82.9339 217.7937 0037204 133.3596 227.0667 13.75700397167062
Glonass 65
1 23203U 94050A 97311.01126410 .00000041 00000-0 00000+0 0 5040
2 23203 64.7533 187.0922 0007092 141.2461 218.8900 2.13102269 25221
Glonass 66
1 23204U 94050B 97313.12135655 .00000048 00000-0 00000+0 0 5245
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2 23204 64.7397 187.0413 0014763 351.9457 8.1144 2.13102394 25266
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2 23205 64.7438 187.0266 0000865 331.7669 28.3127 2.13103134 25277
DMSP B5D2-7
1 23233U 94057A 97313.91883455 .00000146 00000-0 10167-3 0 4448
2 23233 98.7599 9.3392 0012524 166.5295 193.6214 14.12852433164949
OKEAN 1-7
1 23317U 94066A 97312.00274100 .00000258 00000-0 35608-4 0 2812
2 23317 82.5417 310.9047 0024631 223.4034 136.5269 14.74150983165492
ELEKTRO (GOMS)
1 23327U 94069A 97313.75152946 -.00000105 00000-0 00000+0 0 3773
2 23327 1.0788 89.9249 0007424 164.5075 141.1073 1.00271396 11119
RESURS 1-3
1 23342U 94074A 97314.10090085 .00000397 00000-0 74153-4 0 8559
2 23342 97.8979 2.9083 0001577 97.0517 263.0884 14.69978130161867
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1 23396U 94076A 97313.78691213 -.00000017 00000-0 00000+0 0 4802
2 23396 65.3137 66.9593 0029360 189.9514 169.9896 2.13102433 23120
Glonass 69
1 23397U 94076B 97313.96448451 -.00000019 00000-0 00000+0 0 4865
2 23397 65.3032 66.9571 0011085 315.1563 44.7509 2.13101541 23123
Glonass 70
1 23398U 94076C 97311.03251678 .00000007 00000-0 00000+0 0 4861
2 23398 65.2897 67.0246 0002401 263.7581 96.2198 2.13101789 23077
LUCH (Altair-2)
1 23426U 94082A 97312.52392909 -.00000135 00000-0 00000+0 0 6122
2 23426 0.4271 242.1354 0002222 61.7749 276.1214 1.00275921 10603
RS-15
1 23439U 94085A 97306.96753271 -.00000039 00000-0 10000-3 0 2576
2 23439 64.8162 288.4260 0146234 105.8231 255.8869 11.27528475117587
NOAA 14
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2 23455 99.0085 265.6975 0008546 243.8354 116.1935 14.11709529147517
Glonass 71
1 23511U 95009A 97311.92467930 .00000017 00000-0 00000+0 0 4145
2 23511 64.4437 306.3785 0008517 225.4732 134.4790 2.13104657 20818
Glonass 72
1 23512U 95009B 97311.11139463 .00000017 00000-0 00000+0 0 4021
2 23512 64.4342 306.4091 0007182 302.6599 57.2894 2.13101058 20797
Glonass 73
1 23513U 95009C 97313.30413748 .00000011 00000-0 00000+0 0 4390
2 23513 64.4338 306.3589 0016221 200.0251 159.9308 2.13052342 20841
GMS 5
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2 23522 0.4334 342.1396 0003333 256.7985 100.8310 1.00269197 9728
DMSP B5D2-8
1 23533U 95015A 97313.92147761 .00000057 00000-0 54188-4 0 1912
2 23533 98.8512 316.1204 0008122 49.1522 311.0359 14.12816614135740
OSC 1
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1 23545U 95017A 97314.34313875 .00000814 00000-0 24681-3 0 2641
2 23545 69.9692 63.7155 0014006 198.7246 161.3409 14.45640300137526
OSC 2
1 23546U 95017B 97310.84585727 .00000572 00000-0 17860-3 0 2978
2 23546 69.9765 72.2140 0013495 195.0677 165.0054 14.45645631137020
Microlab 1
1 23547U 95017C 97313.79215401 .00000456 00000-0 14538-3 0 2357
2 23547 69.9765 64.9003 0013533 193.0813 166.9971 14.45789473137469
OFEQ 3
1 23549U 95018A 97314.32332385 .00057319 00000-0 11106-2 0 7140
2 23549 143.3594 136.9157 0167594 168.2042 192.2659 15.32218597144298
GFZ-1
1 23558U 86017JE 97312.58472044 .00011841 00000-0 11571-3 0 2975
2 23558 51.6502 56.4516 0006620 351.7557 8.3331 15.66642669669738
ERS-2
1 23560U 95021A 97313.26052781 .00000428 00000-0 17495-3 0 4546
2 23560 98.5458 25.9829 0001497 124.1207 236.0119 14.32247330133581
Spektr
1 23579U 95024A 97313.78882407 .00018071 00000-0 21873-3 0 8229
2 23579 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159141189
GOES 9
1 23581U 95025A 97313.35576890 .00000079 00000-0 00000+0 0 6572
2 23581 0.0969 269.9065 0002987 335.9948 156.0457 1.00259732 9049
Helios 1A
1 23605U 95033A 97313.82094638 .00000546 00000-0 11345-3 0 6381
2 23605 98.0935 248.2903 0001724 83.8591 276.2804 14.63859340125266
UPM SAT 1
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2 23606 98.1487 252.8811 0008337 15.4865 344.6595 14.67499585125678
CERISE
1 23607U 95033C 97311.25164825 .00000151 00000-0 35555-4 0 2168
2 23607 98.1503 249.4594 0006870 27.2804 332.8763 14.67070689125229
TDRS 7
1 23613U 95035B 97312.59224573 .00000094 00000-0 10000-3 0 4123
2 23613 1.7171 80.2813 0002541 162.1258 207.3638 1.00273072 8495
Glonass 74
1 23620U 95037A 97312.12182426 .00000043 00000-0 00000+0 0 3546
2 23620 64.8045 186.9548 0018341 166.4057 193.7265 2.13103213 17859
Glonass 75
1 23621U 95037B 97313.23917006 .00000049 00000-0 00000+0 0 3704
2 23621 64.8137 186.9293 0018149 176.9548 183.1403 2.13102393 17873
Glonass 76
1 23622U 95037C 97310.95044852 .00000041 00000-0 00000+0 0 3703
2 23622 64.8128 186.9954 0036142 164.9007 195.2929 2.13102715 17828
Prognoz-M2
1 23632U 95039A 97311.63944140 -.00001224 00000-0 00000+0 0 1704
2 23632 72.4090 246.1060 7094816 336.2790 353.7610 0.26365541 2148
SICH-1
1 23657U 95046A 97310.86179102 .00000390 00000-0 56179-4 0 2099
2 23657 82.5321 93.2379 0026860 199.4364 160.5852 14.73600843117593
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2 23710 98.5843 317.4032 0001158 93.2087 266.9228 14.29993879104951
Glonass 79
1 23734U 95068A 97312.00773818 .00000043 00000-0 00000+0 0 3566
2 23734 64.8145 186.8808 0016900 324.9299 35.0426 2.13102098 14812
Glonass 78
1 23735U 95068B 97313.10455719 .00000048 00000-0 00000+0 0 3370
2 23735 64.8146 186.8262 0007181 207.4513 152.5945 2.13124417 14835
Glonass 77
1 23736U 95068C 97312.24203462 .00000044 00000-0 00000+0 0 3344
2 23736 64.7989 186.8671 0007372 188.6406 171.4309 2.13102175 14816
XTE
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2 23757 22.9836 188.4776 0012941 29.3002 330.8203 14.97953350101827
Polar
1 23802U 96013A 97284.15558702 .00000117 00000-0 00000+0 0 1627
2 23802 86.3669 20.8151 6548915 262.7278 24.2312 1.35671210 8103
1996010E
1 23824U 96010E 97312.70295567 .00028151 00000-0 41738-1 0 3588
2 23824 47.9690 84.7304 6748504 184.1448 164.4761 2.89256783 15911
GPS BIIA-25
1 23833U 96019A 97307.45807535 -.00000038 00000-0 00000+0 0 2698
2 23833 54.5232 327.3779 0016061 142.1054 218.0506 2.00565429 11794
Priroda
1 23848U 96023A 97313.78882407 .00018071 00000-0 21873-3 0 5102
2 23848 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159 88278
MSX
1 23851U 96024A 97313.01538100 -.00000047 00000-0 00000+0 0 2849
2 23851 99.4265 310.2353 0006953 201.0963 158.9923 13.97397138 78707
SAX
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2 23857 3.9567 344.9504 0013761 222.3864 137.5129 14.92020054 83401
MSTI 3
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2 23868 97.1159 140.7596 0010286 96.6553 263.5867 15.47859911 83620
TOMS-EP
1 23940U 96037A 97313.25434290 .00009036 00000-0 37902-3 0 1742
2 23940 97.4101 218.4324 0012596 3.7628 356.3708 15.23644548 75225
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1 23953U 96041A 97311.36665136 .00000032 00000-0 00000+0 0 2154
2 23953 55.2432 87.8483 0025175 353.5876 6.3692 2.00570494 9668
ADEOS
1 24277U 96046A 97313.73717478 .00000073 00000-0 47636-4 0 2526
2 24277 98.5878 28.6810 0001706 124.1434 235.9908 14.27036406 64129
FO-29
1 24278U 96046B 97312.01110078 .00000009 00000-0 44202-4 0 1197
2 24278 98.5229 333.5164 0351616 173.3233 187.2774 13.52635286 60563
FAST
1 24285U 96049A 97311.93639200 .00002709 00000-0 26256-3 0 1457

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2 24285 82.9832 332.0899 2203826 99.3313 286.1734 10.82802781 47975
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2 24286 82.9973 332.7104 2202549 99.8949 285.5945 10.83380899 47899
Microsat
1 24291U 96050A 97314.23327392 .00048168 68442-5 43656-3 0 3293
2 24291 62.7897 10.9006 0449056 172.6854 188.1103 14.97293747 64708
MO-30
1 24305U 96052B 97311.19042684 .00000204 00000-0 20364-3 0 1582
2 24305 82.9369 248.8980 0030449 165.7412 194.4589 13.73098889 58681
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2 24320 54.4746 267.7398 0043628 113.0600 247.2285 2.00561773 8345
SAC-B/HETE
1 24645U 96061A 97312.59804853 .00001742 00000-0 94409-4 0 1106
2 24645 37.9729 79.1193 0048557 1.6177 358.4732 15.15317864 55970
ZEYA
1 24744U 97010A 97313.76778440 .00009366 00000-0 30002-3 0 1044
2 24744 97.2617 216.0662 0005594 304.8496 55.2220 15.32573022 38372
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1 24753U 97012A 97313.76442823 .00000053 00000-0 52424-4 0 2430
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MINISAT 01
1 24779U 97018A 97313.97694913 .00002701 00000-0 14711-3 0 566
2 24779 150.9675 352.5208 0013830 267.2737 92.6282 14.98576703 30404
CELESTIS
1 24780U 97018B 97313.27409061 .00002357 00000-0 11385-3 0 582
2 24780 150.9745 350.5566 0019637 262.3235 97.5128 14.99797994 30321
GOES 10
1 24786U 97019A 97307.36201771 -.00000092 00000-0 00000+0 0 1371
2 24786 0.1053 280.6525 0005578 353.3257 154.7518 1.00271798 1950
Feng Yun 2B
1 24834U 97029A 97313.68765046 -.00000337 00000-0 00000+0 0 863
2 24834 0.9269 260.3713 0000682 303.3235 196.9945 1.00268153 1523
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1 24876U 97035A 97310.88134514 .00000076 00000-0 00000+0 0 684
2 24876 54.9367 147.9130 0018846 255.3113 104.5449 2.00535826 2184
SeaStar
1 24883U 97037A 97314.27445190 .00000141 00000-0 42813-4 0 750
2 24883 98.2182 50.6690 0002908 55.3522 304.7948 14.55491842 14872
Soyuz TM-26
1 24886U 97038A 97313.78882407 .00018071 00000-0 21873-3 0 1029
2 24886 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159 15024
Meteosat 7
1 24932U 97049B 97313.22224537 -.00000095 00000-0 00000+0 0 635
2 24932 1.6903 290.2580 0003425 309.7596 238.1187 1.00272065 698
COSMOS 2346
1 24953U 97052A 97313.26704958 .00000069 00000-0 51720-4 0 254
2 24953 82.9192 247.0119 0039439 153.5428 206.7773 13.78972376 6412
FAISAT 2V
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1 24954U 97052B 97311.23294463 .00000016 00000-0 -28238-8 0 227
2 24954 82.9206 248.5240 0039960 158.3633 201.9225 13.79047331 6144
Sputnik 40
1 24958U 97058C 97313.79067353 .00048756 00000-0 58129-3 0 124
2 24958 51.6588 73.9264 0007077 296.2049 63.8216 15.60548742 959
Progress M-36
1 25002U 97058A 97313.78882407 .00018071 00000-0 21873-3 0 470
2 25002 51.6543 73.9191 0006991 316.4063 43.5868 15.60724159 5507
APSTAR 2R
1 25010U 97062A 97313.23607060 -.00000110 00000-0 10000-3 0 289
2 25010 0.1105 159.2370 0002055 65.2744 345.4276 1.00271134 240
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1 25011U 97062B 97313.68847908 .00013973 -39991-6 51636-3 0 150
2 25011 23.8088 305.6550 7836355 189.1941 134.4275 1.65221094 471
STEP-M4
1 25013U 97063A 97312.99698631 .00003879 00000-0 12522-3 0 240
2 25013 44.9657 291.4913 0050170 243.6132 115.9597 15.32855362 2684
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1 25014U 97063B 97312.33910692 .00008026 00000-0 24420-3 0 130
2 25014 44.9763 295.0322 0047585 239.5789 120.0392 15.33473552 2582
1997060C
1 25015U 97060C 97313.92459510 .00945228 34868-3 38979-2 0 376
2 25015 62.8069 119.3944 0053173 24.5452 335.8209 15.83329199 4934
1997060D
1 25016U 97060D 97308.62047814 .10148571 39758+0 15973-1 0 282
2 25016 62.7729 139.1654 0027284 357.2407 359.0515 16.10462110 1875
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2 25018 57.0084 88.3743 0173756 194.9193 164.6686 15.06151827 2522
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1 25020U 97065B 97312.87019212 .00044511 00000-0 37765-2 0 129
2 25020 26.3251 210.3599 7263922 186.8626 150.7329 2.32848587 337
1997065C
1 25021U 97065C 97314.16568647 -.00000179 00000-0 00000+0 0 59
2 25021 0.0097 322.9917 0007908 118.5399 278.5906 1.01067619 931
MAQSAT H
1 25023U 97066A 97312.82471813 .00000149 00000-0 14830-2 0 102
2 25023 7.8000 54.4110 6536985 185.1077 161.5726 3.07846606 283
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1 25024U 97066B 97309.25023488 -.00000065 00000-0 -27776-6 0 79
2 25024 7.7894 56.1907 6533177 181.3671 175.0139 3.08570100 175
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1 25025U 97066C 97312.50160280 -.00000009 00000-0 65592-3 0 76
2 25025 7.7900 54.5227 6531892 184.7871 162.7479 3.07788528 255
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1 25026U 97066D 97313.46916568 .00000090 00000-0 12257-2 0 147
2 25026 7.8050 53.9845 6537766 185.8848 158.7853 3.07933227 309
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2 25032 35.0008 204.1693 6058659 196.5364 128.7033 4.03994339 141
Iridium 43
1 25039U 97069A 97314.39257277 -.00042322 00000-0 -58561-2 0 113
2 25039 86.5846 133.2635 0010756 236.2961 123.7336 14.78382503 207
Iridium 41
1 25040U 97069B 97314.18951484 -.00051332 00000-0 -71030-2 0 97
2 25040 86.5801 133.3433 0010722 233.2149 126.9831 14.78432448 169
Iridium 40
1 25041U 97069C 97314.12222222 -.00046495 00000-0 -64183-2 0 87
2 25041 86.5823 133.3743 0010989 232.7585 129.7410 14.78504516 150
Iridium 39
1 25042U 97069D 97314.39257277 -.00049762 00000-0 -68570-2 0 90
2 25042 86.5836 133.2612 0011199 232.6808 128.3817 14.78597424 190
Iridium 38
1 25043U 97069E 97314.39257277 -.00053473 00000-0 -73581-2 0 71
2 25043 86.5839 133.2641 0011963 231.5434 129.8829 14.78670590 193
1997069F
1 25044U 97069F 97314.34101916 .00095073 94886-6 52786-3 0 82
2 25044 83.5586 133.0700 0274096 348.2731 11.2216 15.41870953 198
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
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2760. Howdy from North Dakota!

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <3467B42A.10A@amsat.org>
Source record: 17534

Hello Everyone:

I'm planning a trip to North Dakota this weekend and I'll be lighting up my old station. My satellite antennas are still there, ready for aiming. My hope is to operate AO-10, AO-27, FO-20 & FO-29 (if it's in JA mode, I haven't checked that yet)

My grid is DN98 if you're interested. I should be there Friday, Saturday & Sunday. Hope to hear you on the birds.

Mark Fossum - N0NSV

2761. Request for Help

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: Stephen Vinson <kd4wiw@ipass.net>
Message-ID: <3467E77F.3D82@ipass.net>
Source record: 17535

Hello All

I have just found and I am waiting for its arrival a Yaesu G-5400B Rotor to go along with my Yaesu FT-736R. I have a need for some assistance in finding a tracking program that is both user friendly and tracks several sats at the same time. I also would appreciate any help of the hardware needed to connect the radio with the rotor. Thanks for any help or suggestions in advance. Also if there is a good reflector for Sat related information I would appreciate that as well.

Steve
KD4WIW

e-mail: kd4wiw@ipass.net
home page: http://www.ipass.net/~kd4wiw
packet: kd4wiw@w4ral.#RTP.nc.usa.noam

2762. FS: Icom R7000 SYSTEM

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: tech radio <jg@izap.com>
Message-ID: <34680947.C8AE89E5@izap.com>
Source record: 17536

Have an excellent shape *ICOM IC-R7000* Professional grade Monitoring Reciever.
Includes Original Matching External SP3 Speaker.
Speech Synthesizer Option Built in.
Has Scan Speed Increase Mod, Extra 100 Channels Mod, Discriminator Tap & SCA Audio Mod.
Everything functions Perfectly, all knobs, buttons, display, audio, etc... is/are in perfect working order, no faded markings, letters, numbers - low mileage - never used outdoors.

Includes AC Power Cord, Phono-1/8" Cable, Manual, Original Boxes & Packaging.
Makes a super Software controlled reciever system for Monitoring/Logging/Surveillance/SETI use...

** SELL FOR $999.00 + $50.00 Shipping **

EMAIL; jg@izap.com if interested.

IC-R7000 SPECIFICATIONS
GENERAL

Frequency Coverage (U.S.A., Europe, Australia): 25.0000 MHz to 999.9999 MHz, 1025.0000~ 1999.9999 MHz Mode:
SSB (A3J) AM (A3), WFM, FM (F3) Tuning Step Increment: - 0.1, 1, 5, 10, 12.5, or 25 kHz.
Power Supply Requirement (U.S.A): 117 V AC +/-10%
Usable Temperature Range: -10C ~ +60C; +14F ~ +140F
Dimensions: 286(W) x 110(H) x 276(D) mm, 11.3(W) x 4.3(H) x 10.9(D) in
Weight: 8.0 kg; 17.6 lb.
Sensitivity: 25.0000 MHz~999.9999 MHz SSB - Less than 0.3 V for 10 dB S/N AM - Less than 1.0 V for 10 dB
S/N FM - 0.5 V for 12 dB S/N FM(Wide) - Less than 1.0 V for 12 dB S/N 1240.0000 MHz~1300.0000 MHz B -
Less than 0.3 V for 10 dB S/N AM - Less than 2.0 V for 10 dB S/N FM - 0.5 V for 12 dB S/N FM(Wide) -Less
than 2.0 V for 12 dB S/N
Selectivity: SSB - More than 2.8 kHz/-6 dB, Less than 11 kHz /-40 dB AM, FM - More than 15 kHz/-6 dB, Less than
40 kHz /-40 dB AM, FM(narrow) - More than 6 kHz/-6 dB, Less than 18 kHz /-50 dB FM(Wide): More than
150kHz/-6 dB, Less than 380 kHz /-20 dB
Audio Output Power: More than 2.5 W at 10% distortion with an 8 ohms load.
RF Connector: "N" type connector (female).

OPTIONS

EX-310 VOICE SYNTHESIZER UNIT: Provides audible, synthesized readings of frequencies in English. $ 129.00
SP-3 EXTERNAL SPEAKER: External speaker. Matching style and size with IC-R7000. $ 172.00

More detailed IC-R7000 specifications, comments and options at:

http://www.icomamerica.com/receivers/index.html#IC-R7000A
http://www.ici.net/cust_pages/bacchioc/radios/r7000/r7000.html
http://www.qsl.net/n2mca/MODEL.HTM
http://www.swssec.com/swsicom/receivers/R7000A.html

2763. Re: What are Sputnik-2's Beeps for?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: Tom@astro.net
Message-ID: <645s9qkpl3@news.mhv.net>
Source record: 17729

In article <34662989.2F9A@netone.netonecom.net>, tjswan@netone.netonecom.net wrote:

>Would you tell me where I can get the Keps and a program to tell me when
>Sputnik xx ;) will be over my area. TIA
>
>P.S. What was the freq again? (somewhere in 2m?)
>
>Jeff Swan

The freq is 145.820. There are links from my web site for sat tracking and
orbital data. Use Mir data for Sputnik. See my sig for the URL to my site.

Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2764. Re: Join the discussion, "no code JA hams in HF"

Newsgroup: rec.radio.amateur.space
Date: 1997-11-10 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bcede0$1f467660$7160b6cd@cbx-nt>
Source record: 17730

Sandra <mednospamtek@dontdarespamme.ghgcorp.com> wrote in article
<3465D18E.51C8@dontdarespamme.ghgcorp.com>...
> Trouble Maker wrote:
> >
> > Please join the discussion, "no code JA hams in HF" and "what
> > happens to code"
>
> Gee, I just added the discussion(s) to my killfile. Sorry. Oh wait, no
> I'm not.
>
> Seeya. I'm off to code practice and reading about amateur radio in
> space and satellites and other interesting and intelligent subjects.
>
> Sandra
> KD5CMR
>

Really ?! Just got back from the KSC... No code there.... Wonder why oh
intelligent one.
--

_____
########## Christopher Cox, KC8FRJ, TRA#4901 L2, NAR 70155 ##########
~~~~~~
~~~~~~

2765. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: tuffenuph@aol.com
Message-ID: <19971111003800.TAA18368@ladder02.news.aol.com>
Source record: 17537

Laura Halliday <ve7ldh@direct.ca> spewed forth:

>TuffEnuph@aol.com wrote:
>
>> Wow. So I misspelled Ariane as Arianne. BFD.
>>
>> So everyone that referenced the title to the posting is not
>> credible now because they didn't fix the egregious spelling
>> error? That's ad hominem horseshit. Mard in french.
>
>It shows a lack of attention to detail. Somebody who hasn't done
>their homework, and whose other points may very well be suspect.
>Call me old-fashioned, if you must. But at least spell "la merde"
>(which does not refer to the excrement of any particular species,
>BTW) properly.

No, it shows a lack of attention to the french language, which is
more out of disdain and contempt for the failed french empire
itself than any inferred lack of effort on "homework." The
misspelling of "la merde" was quite intentional, and appears to
have had the desired effect of drawing yet another spelling bee
queen into my sights for a nice load of hot, steaming, (and OK,
NON-SPECIES SPECIFIC) excrement in the face. s-p-l-a-t!!
Ad Hominem is as ad hominem does...

>--
>Laura Halliday "Les cigognes se sont envolees
>ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
>Grid: CN89mg Les tournesols se sont refermes
>(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

tuf

2766. Re: Sputnik-40/RS-17 via HT and rubber duck

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: Tom@astro.net
Message-ID: <648f8beca4@news.mhv.net>
Source record: 17538

In article <64857o$7sg@news.sdd.hp.com>, nungeste@sdd.hp.com (Rick Nungester) wrote:
>I just heard Sputkik-40, or it's official name RS-17. It had a 40-degree
>elevation pass over San Diego and I could hear it fine on my Kenwood
>TR-2500 HT with a rubber duck antenna. Squelch was full-open but the beeps
>were easily discernible from the noise.
>
>These are the keplerians I used:
>
>RS-17
>1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
>2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160
>
>Also, I noticed several rec.radio.amateur.space messages saying the
>frequency is 145.820 MHz. The website at
>http://www.oceanes.fr/~fr5fc/angspoutnik.html says the correct frequency is
>145.825 MHz, although I doubt it matters much.

Take doppler into account. At the start of the pass be on .825. At mid pass
820 and near the end .815. You'll copy it longer that way.

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2767. Re: Spoutnik Heard Near Atlantic City, NJ

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: Dale Ireland <direland@drdale.com>
Message-ID: <34687A8C.4525319A@drdale.com>
Source record: 17539

Mel.
Someone told me the original Sputnik also transmitted at 108Mhz is that
true?
Dale

PS, I have a recording of the Sputnik JR that I made a couple days ago
and a spectrogram for showing it's core temperature on my web site
http://www.drdale.com

Mel Markowitz wrote:
>
> The signal was received loud and clear today at about 0950 EST (1450 UTC) on
> 145.820 using cw, lsb and usb reception modes. It was also heard using FM
> reception mode, but was less readible. The signal peaked at about S2 at an
> elevation of about 7 degrees max..
>
> Doppler shift was about 2khz, starting above 145.820 and ending below as the
> satellite passed north of me from west to east.
>
> Having heard the original Sputnik on 20.000 mhz in 1957 it was great to
> again hear the beep-beep signal coming from space.
>
> Congratulations to all involved on a job very well done.
>
> Mel, K2JWD
> Linwood, NJ, USA
> melmark@ix.netcom.com

--
Dale Ireland 47.7N 122.7W
astronomy web site http://www.drdale.com
Comets, Eclipses, Satellites, Fabrications

2768. Re: Amsat needs donations for Phase 3D.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <64a4ml$924@lehi.kuentos.guam.net>
Source record: 17540
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

lar01@sprynet.com (larry) wrote:

>Obviously I seem to be more out of touch than I thought I am. I was
>reading about phase 3 serveral years ago. How come it is still not up
>yet?
>Perhaps someone could bring me up to date with my missing knowledge.
>Larry ve3fxq

$$$

73, Jim KH2D

2769. ARLK088 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk088.1997@arrl.org>
Source record: 17541
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK088
ARLK088 Keplerian data

ZCZC SK88
QST de W1AW
Keplerian Bulletin 88 ARLK088
From ARRL Headquarters
Newington, CT November 11, 1997
To all radio amateurs

SB KEP ARL ARLK088
ARLK088 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

Sputnik Jr
1 24958U 97058C 97313.79067353 .00048756 00000-0 58129-3 0 124
2 24958 51.6588 73.9264 0007077 296.2049 63.8216 15.60548742 959
AO-10
1 14129U 83058B 97312.29306154 .00000077 00000-0 10000-3 0 5144
2 14129 26.3940 117.9426 6029990 166.3756 222.7043 2.05880583 80357
RS-10/11
1 18129U 87054A 97314.56853947 .00000010 00000-0 -54680-5 0 4238
2 18129 82.9209 130.5421 0011255 168.7191 191.4217 13.72384872520317
UO-11
1 14781U 84021B 97313.94554522 .00000341 00000-0 65204-4 0 00232
2 14781 97.8508 289.4796 0010633 257.8065 102.1950 14.69612927732660
RS-12/13
1 21089U 91007A 97314.14321585 .00000039 00000-0 25759-4 0 00399
2 21089 82.9249 170.4093 0027606 251.7467 108.0683 13.74088023339202
UO-14
1 20437U 90005B 97314.19907996 .00000065 00000-0 41713-4 0 03168
2 20437 98.5085 32.6389 0011383 134.0467 226.1662 14.29980700407089
RS-15
1 23439U 94085A 97314.06301900 -.00000039 00000-0 10000-3 0 02732
2 23439 64.8151 276.9541 0146235 104.2746 257.4448 11.27528491118382
AO-16
1 20439U 90005D 97314.20899126 .00000048 00000-0 35308-4 0 01282
2 20439 98.5310 35.9205 0011650 136.2079 224.0036 14.30025954407103
```

```
RS-16
1 24744U 97010A 97315.59594710 .00008556 00000-0 27407-3 0 1059
2 24744 97.2620 217.8590 0005629 294.4764 65.5866 15.32601748 38654
DO-17
1 20440U 90005E 97314.25026942 .00000081 00000-0 48001-4 0 01222
2 20440 98.5337 36.9206 0011848 134.0802 226.1357 14.30169852407144
WO-18
1 20441U 90005F 97315.30096544 .00000034 00000-0 29632-4 0 1110
2 20441 98.5325 37.8309 0012499 132.6988 227.5249 14.30136081407297
LO-19
1 20442U 90005G 97314.20697068 .00000060 00000-0 39590-4 0 01345
2 20442 98.5372 37.5131 0013181 135.6280 224.5973 14.30253021407168
FO-20
1 20480U 90013C 97315.54488126 .00000082 00000-0 25176-3 0 96
2 20480 99.0651 249.5304 0540651 43.8768 320.3954 12.83241186363600
AO-21
1 21087U 91006A 97314.07189272 .00000094 00000-0 82657-4 0 09023
2 21087 82.9393 303.6002 0033534 221.6935 138.1665 13.74589410340193
UO-22
1 21575U 91050B 97314.18140120 .00000084 00000-0 42428-4 0 08238
2 21575 98.2816 9.4347 0007362 167.7928 192.3436 14.37095084331456
KO-23
1 22077U 92052B 97314.14780093 -.00000037 00000-0 10000-3 0 07298
2 22077 66.0867 199.6298 0001160 162.5438 197.5620 12.86303980246523
KO-25
1 22828U 93061F 97314.20911948 .00000077 00000-0 48169-4 0 05946
2 22828 98.5290 25.4636 0010317 152.6605 207.5115 14.28199789183056
IO-26
1 22826U 93061D 97314.20998270 .00000042 00000-0 34231-4 0 06091
2 22826 98.5331 25.3716 0008784 169.0726 191.0646 14.27853683214925
AO-27
1 22825U 93061C 97315.23392310 .00000089 00000-0 53611-4 0 5988
2 22825 98.5303 26.0855 0008698 164.8938 195.2503 14.27743807215056
FO-29
1 24278U 96046B 97314.08231569 -.00000012 00000-0 22459-4 0 01459
2 24278 98.5225 335.3014 0351742 167.9482 193.0351 13.52635178060845
MO-30
1 24305U 96052B 97315.19823850 .00000204 00000-0 20364-3 0 1599
2 24305 82.9387 245.9398 0030916 154.4635 205.7955 13.73098724 59236
Mir
1 16609U 86017A 97315.58167773 .00007426 00000-0 93602-4 0 7668
2 16609 51.6542 64.8927 0006943 324.6345 35.4203 15.60741538670035

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
November 15, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2770. *ANNOUNCING* New DX Reflector

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: "B.K." <k7on@qth.net>
Message-ID: <3468E835.7659@qth.net>
Source record: 17542

ANNOUNCING New DX Reflector

To better serve amateurs of the world, a *NEW* DX Reflector
has been created at QTH.NET for use by all.

Please refer to the details below and join today!!

--

>>>> info dx
DX is a mailing list (reflector) devoted to the
discussion of DX.

* Anything DX Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe dx

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe dx

To post information/questions to the list:

TO: dx@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

QTH.Net Digests and Archives (for subscribers)
k7on@qth.net

What about Digests and Archives?

A. Digests

All lists at QTH.Net have digests available.

You can subscribe to a digest and periodically receive the compiled
messages rather than individual messages.

All list digests are configured for a size limit of 40,000 bytes.
However, most of the files are around 16k to 30k. This is because
majordomo will NOT send a digest larger than the limit. If a new
message pushes beyond the limit, it sends the accumulated, putting

the new message in the NEXT digest.

If you are switching from non-digest to digest, you must unsubscribe
dx and subscribe dx-digest.

It is an entirely seperate subscription, but both digest and non-digest
subscribers are permitted to post to the non-digest list.

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe dx-digest
unsubscribe dx

B. Archives

All messages sent via reflector are archived and are available for
access through majordomo.

You can send a command to majordomo@qth.net and in the body type:

index dx-digest

and get a list of files that are available by request.

Here is an example:

>>>> index dx-digest
total 116
-rw-rw---- 1 majordom 45 14169 Sep 2 18:09 v01.n042
-rw-rw---- 1 majordom 45 18100 Sep 3 11:27 v01.n043
-rw-rw---- 1 majordom 45 15322 Sep 4 14:11 v01.n044
-rw-rw---- 1 majordom 45 13490 Sep 6 11:15 v01.n045
-rw-rw---- 1 majordom 45 16382 Sep 9 18:39 v01.n046
-rw-rw---- 1 majordom 45 14823 Sep 11 08:40 v01.n047
-rw-rw---- 1 majordom 45 16872 Sep 12 01:04 v01.n048

To retrieve one of these files, send an email to majordomo@qth.net.

In the body of the message, type:

get dx-digest v01.n048

The file will be emailed to you, automagically!

C. Archives on WWW

You may view the archives online.

Point your web browser to: http://www.qth.net/dx-digest.archive

-----

>>>>

2771. Re: Ham-Space Digest V97 #363

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: Geoffrey Hobson <geoffhobson@zetnet.co.uk>
Message-ID: <19971111112342178012@zetnet.co.uk>
Source record: 17543

The message <971107174838_-89471996@mrin86.mail.aol.com>
from RRRoss@aol.COM contains these words:

> I'm a 10 year old boy a don't want you to send me this shit ever again!

If you are ten years old you should get kicked for using language like this

2772. Re: Sputnik-40/RS-17 via HT and rubber duck

Newsgroup: rec.radio.amateur.space
Date: 1997-11-11 00:00:00 UTC
From: %AAEKE3S%@snds.com
Message-ID: <64ahpv$5s1@sunburn.snds.com>
Source record: 17544

I also heard the Sputnik several different times since the 5th. I
understand a QSL card is available. I've never requested a QSL from an
event such as this. Anyone know what I need or how I would get one?
73,
Roger Sellers KB9LBU
email: rsellers@snds.com

In article <648f8beca4@news.mhv.net>, Tom@astro.net says...
>
>In article <64857o$7sg@news.sdd.hp.com>, nungeste@sdd.hp.com (Rick
Nungester) wrote:
>>I just heard Sputkik-40, or it's official name RS-17. It had a
40-degree
>>elevation pass over San Diego and I could hear it fine on my Kenwood
>>TR-2500 HT with a rubber duck antenna. Squelch was full-open but the
beeps
>>were easily discernible from the noise.
>>
>>These are the keplerians I used:
>>
>>RS-17
>>1 24958U 97058C 97308.73090523 .00032204 00000-0 39449-3 0 76
>>2 24958 51.6583 99.3826 0006309 271.4809 88.5478 15.60040373 160
>>
>>Also, I noticed several rec.radio.amateur.space messages saying the
>>frequency is 145.820 MHz. The website at
>>http://www.oceanes.fr/~fr5fc/angspoutnik.html says the correct
frequency is
>>145.825 MHz, although I doubt it matters much.
>
> Take doppler into account. At the start of the pass be on .825. At mid
pass
>820 and near the end .815. You'll copy it longer that way.
>
>73,
>Tom
>
>
> Tom Randall Amateur Radio - KB2SMS
> trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
> Member: AAVSO Solar Division
> APRS on 145.790 - Dutchess county,N.Y.
>
> My Astronomy/Ham radio site:

http://www1.mhv.net/~trandall/welcome.html
>
>
> Opinions herein are mine and may not be that of MHV.NET!

2773. Re: Satellites (was Re: Amsat needs donations for Phase 3D.)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-1211970557220001@dhcp67_113.hst.nasa.gov>
Source record: 17545

In article <19971103092001.EAA01396@ladder02.news.aol.com>,
willcarney@aol.com (WillCarney) wrote:

> >AMSAT is a nonprofit corporation that designs and builds satellites.
> >
>
> This brings up a question I have had in mind for quite some
> time.
>
> Could the basic satellite made by them be used in other fields
> of exploration. For instance using the control/power module
> as a base for a photo/survey probe to be sent to other planets.
>
> I realize that the power is by solar cells so there is a limitation
> on that factor.
>
> But could you use the basic satellite in building relatively cheap
> exploration probes for the Moon, Mars or close asteroids where
> mission time would be rather short (no more than a few years)??
>

You are 100% correct. The same spacecraft design could be used for other purposes. Amsat-DL has a plan to send a Phase 3D semi-clone to Mars in 2001. Funding would come from the German government, not from Amsat member contributions. Amsat North America has not agreed to participate in the Mars mission, but some Amsat members have expressed interest in doing so as individuals.

There are some in Amsat who would like to keep the Orlando spacecraft facility open for business after Phase 3D is launched. If Amsat could work in partnership with a university or some commercial enterprise, that would allow the lab to stay open and the satellite team to stay intact, which would make it that much easier to build the next ham radio satellite when the time comes. It is possible that Amsat-NA could assemble the German Mars mission in Orlando as a subcontractor to Amsat-DL. It might also be possible to sell space for some scientific experiment package on a future ham satellite, which would help to finance the next hamsat. There are interesting and exciting possibilities ahead if these ideas work out.

Dan Schultz N8FGV

2774. Tracking Freeware.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: Steve Olson <steven@inil.com>
Message-ID: <34696eeb.0@news.inil.com>
Source record: 17546

I'm new to this whole computer/internet/newsgroup thing, so please
pardon my ignorance.
Can anyone recommend a good freeware satellite tracking program?
I'm looking for something that will allow me to bolt up to an AZ/EL rotator
in the future.
Can anyone recommend a source for plans/schematics for a relatively simple
interface, that I might build, to allow me to bolt up my PC to a rotator?

Thanks!

Steve KE9VY TRA# 5048

2775. THE CHRISTIAN BUSINESS OPPORTUNITY WEBSITE

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: graham@arlington.net
Message-ID: <64bj0r$9r9@lepton.startext.net>
Source record: 17547

Thank You,
The response has been so phenomenal that I cannot
handle my e-mail. I am posting the Christian Business
Opportunity Website for your direct viewing. You may
SIGN UP for FREE and GET A FREE WEBPAGE at the URL below
and you will receive a free info pack.
<http://get-it.net/cgi-bin/get-it/1/jgraha1015/scriptures>

Everything you need to make a logical decision is cover
in the info pack. You may call 1-800-585-5873 and give
ID. 6744 for a free sign up and info pack.

Please e-mail me if there is anyway I can be of service
to you and the group.

May God Bless All of You
and Your Families.

Joe Graham #6744
graham@arlington.net

P.S. If you have receive this by mistake, Please FORGIVE ME.

2776. Re: Spoutnik Heard Near Atlantic City, NJ

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: wday@cq.net
Message-ID: <64cdko$k68@news1.iamerica.net>
Source record: 17548

In article <34687A8C.4525319A@drdale.com>
Dale Ireland <direland@drdale.com> wrote:

> Mel.
> Someone told me the original Sputnik also transmitted at 108Mhz is that
> true?
> Dale
>

Nope. The original sputnik carried a 20MHz and 40Mhz transmitter.

Wayne Day N5WD wday@cq.net Fort Worth,Texas,USA |
CompuServe: 76703.376@CompuServe.Com n5wd@amsat.org | ,__o
EMT/Paramedic @ MedStar Fort Worth My work Phone? 9-1-1 |--_<,
Member: Bicycle Mobile Hams of America,LAB,LM-QCWA,ARRL(*)/'(*)

2777. Essay Question

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: "Edward, III Dickinson" <eddick@worldnet.att.net>
Message-ID: <64cgp0$od4@bgtnsc03.worldnet.att.net>
Source record: 17549

The following table is contained in an article in October 1997 QST, 'Official Journal of The American Radio Relay League'. The article, "What's New About the FCC's New RF-Exposure Regulations?", by Ed Hare, W1RFI, is on pages 51 and 52.

Table 1
Power Thresholds for Routine Evaluation of Amateur Radio Stations

Band (Wavelength)	Transmitter Power (W)
160m	500
75m	500
80m	500
40m	500
30m	425
20m	225
17m	125
15m	100
12m	75
10m	50
6 - 1.23m	50
70cm	70
33cm	150
23cm	200
13cm and up	250

ESSAY QUESTION

Compare the frequencies aligned with lower power thresholds with those which may be useful to Low Earth Orbit satellites. Include in your discussion the implications of non-structured communications verses a potential preponderance 'organizationally prepared' information. Discuss the ramifications of this with the potential dampening of freedom of communication throughout the world. Additionally, discuss the idea of vertically integrated information processing entities dominating the RF Spectrum. References to other recent restrictions on the airways, may be included.

As you see fit, please post this 'essay question' where it may be viewed by Radio Amateurs and interested others.

'Only the Paranoid Survive'
- Andrew Grove

'The price of freedom is eternal vigilance.'
- Thomas Jefferson

2778. ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <64dcc6$qbi@news.mcn.net>
Source record: 17550
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Enter the world of amateur satellite communications with AMSAT - Radio Amateur Satellite Corporation. Satellites are amateur radios highest frontier and you can be a part of it. Like working DX but hate poor HF band conditions? Work DX via satellite and leave all be qrm, qrn & qsb behind. Like Digital modes? Upload a message to a pacsat and in 45 minutes a ham on the other side of the world could read it and respond to it. You can leave a message with the cosmonauts on the Mir space station or talk to the astronauts on the space shuttle during SAREX missions. You can also play a part in helping AMSAT complete it latest project, the Phase 3D satellite. Phase 3D is ham radios largest and most complex satellite to date. Construction and testing of P3D will soon be complete. Ham radio satellites mainly operate above 144 mHz, so you won't need a fancy ham radio license to use them. A tech class license will work just fine.
Of course you don't need to be a member of AMSAT to enjoy all these things, But your membership will help keep present and future projects going. If you've decided you won't join Amsat at this time, but would like to donate to Phase 3D. You can send your contribution to:

AMSAT-NA
850 Sligo Ave. Suite 600
Silver Spring, MD. 20910-4703

or call Martha at Amsat: (301) 589-6062

For more info about AMSAT and Phase 3D see: http://www.amsat.org

73 de KB7ADL

2779. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: pwinter@best.com
Message-ID: <64dh0pbpt1@shell5.ba.best.com>
Source record: 17551
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I don't see why anyone would think that it's necessary to slam the
ARRL in order to encourage people to support AMSAT. I sure hope
this wasn't an offical AMSAT posting.

Patty

========================== patty@wintertime.com ==========================
"Yuri claimed on his INS application that he lived and
worked in San Diego. Do I look like Shamu to you?"
--David Caruso on "Michael Hayes"
============= N6BIS ====================== Sunnyvale, Calif. ==============

2780. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m90uth9th.fsf@spinner.ecofe.com>
Source record: 17552
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I don't see why anyone would think that it's necessary to slam the
ARRL in order to encourage people to support AMSAT. I sure hope
this wasn't an offical AMSAT posting.

Not to worry, it's definitely not official. I just think KB7ADL seems to
like to stir up trouble, at least, that's my opinion from reading AMSAT-BB.
I wonder if perhaps he's trying to make amends. *grin* AMSAT is a worthy
organization, but it does tend to attract, shall we say discreetly, some
spirited discussion from time to time... *Sigh*

-- KD6PAG (Networking Old-Timer, RF newbie)

2781. Re: Sputnik-40/RS-17 via HT and rubber duck

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: Dan O'Connell <oconneld@OIT.EDU>
Message-ID: <Pine.OSF.3.96.971112173019.25970A-100000@internet.oit.edu>
Source record: 17553

> >http://www.oceanes.fr/~fr5fc/angspoutnik.html says the correct frequency is
> >145.825 MHz, although I doubt it matters much.
>
> I have heard it on both but I also heard what I thought was Russian
> a few minutes later? Could this be MIR on the same frequency?
> Regards Clive

Starts on 145.825, and then due to Doppler, shifts down in freq. As I
was listening to it on a couple passes last night, I was able to check for
best recieve polarity, and horizontal was far better than vertical, using
a 3 el indoor quad. Fun to listen to it, but listening to the Cosmonauts
on 143.625 is more fun. The sig was so clear that I could hear the guy
breathing into the microphone while he was listening to a reply. All in
Russian language. Dan WA7TDZ Oregon

2782. Re: Ham-Space Digest V97 #370

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: Dan O'Connell <oconneld@OIT.EDU>
Message-ID: <Pine.OSF.3.96.971112180929.16810A-100000@internet.oit.edu>
Source record: 17554

On 12 Nov 1997 RRRoss@aol.COM wrote:

> I'm sorry about the language but please all I ask is for you to never send me
> Ham-Space Digest again and I will never bother you again.
>
> RRRoss

Why don't YOU stop bothering US. Ham-Space Digest is a great FREE
service, most of us are quite glad to get it. We are NOT glad to get your
whining. Try using the >DELETE< key, like I do on all your postings.
Dan
WA7TDZ

2783. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: Charles Tinney <ctinney@mail.msy.bellsouth.net>
Message-ID: <346A8A2F.E0638C39@mail.msy.bellsouth.net>
Source record: 17555
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

ham ref. library links:
http://members.tripod.com/~CharlesTinney/index.html

.
John Mock wrote:

> I don't see why anyone would think that it's necessary to slam the
> ARRL in order to encourage people to support AMSAT. I sure hope
> this wasn't an offical AMSAT posting.
>
> Not to worry, it's definitely not official. I just think KB7ADL seems to
> like to stir up trouble, at least, that's my opinion from reading AMSAT-BB.
> I wonder if perhaps he's trying to make amends. *grin* AMSAT is a worthy
> organization, but it does tend to attract, shall we say discreetly, some
> spirited discussion from time to time... *Sigh*
>
> -- KD6PAG (Networking Old-Timer, RF newbie)

2784. FS: Yaesu G-5400B az/el rotor reduced

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcef94$b0878140$e78d56cf@Kwiknet.ppp>
Source record: 17556

Hello All;
I'm selling a used Yaesu G-5400B az/el rotor and control box.
Everyting is in great cosmetic and working shape. For details
Please re: me via Email: n2rif@amsat.org Or
Packet: N2RIF@WM2F.#SNJ.NJ.USA.NOAM.
You can also try calling but my phone is usally busy.
My ph# is 609-386-9382..
I am Asking $400 + shipping obo.
All cash offers will be considered. Sorry No CODs
Thank you for reading my bulletin. Thomas J or just T.j. -73

2785. Check out the magazine FREE!

Newsgroup: rec.radio.amateur.space
Date: 1997-11-12 00:00:00 UTC
From: "Business PR Magazine"
Message-ID: <3469c243.0@genesis.thesouth.net>
Source record: 17557

Visit the leading Business Magazine in Puerto Rico & the Caribbean

BUSINESS PUERTO RICO MAGAZINE

at http://www.businessnetpr.com

Get the latest information on telecommunications, banking, high technology, laws and more.
You can also browse the latest issue online FREE!
Business Puerto Rico Magazine is a most have for anyone doing or thinking of doing business in Puerto Rico or the Caribbean.
No matter how big or small your company is the information will give you a competitive edge and understanding of the local market.
Get the information before your competition finds out!
For more information you can e-mail us or call us at (787)725-3155.

Find in our web site a special subscription offer just for Internet users.

http://www.businessnetpr.com
http://www.businessnetpr.com

The source for business information in Puerto Rico

2786. Re: Sputnik-40/RS-17 via HT and rubber duck

Newsgroup: rec.radio.amateur.space
Date: 1997-11-13 00:00:00 UTC
From: Tom@astro.net
Message-ID: <64eoft$3oc$2@news.mhv.net>
Source record: 17558

In article <64ahpv$5s1@sunburn.snds.com>, %AAEKE3S%@snds.com (%rsellers%) wrote:
>I also heard the Sputnik several different times since the 5th. I
>understand a QSL card is available. I've never requested a QSL from an
>event such as this. Anyone know what I need or how I would get one?
>73,
>Roger Sellers KB9LBU
>email: rsellers@snds.com

Here's what I was told: A QSL will be available for those who hear it! If
you DO hear it send an SASE AND an IRC coupon to: Sergej Samburov PO Box 73,
Kaliningrad-10 City Moscow Area, 14070, Russia. Dave Larsen is NOT handling
cards for this.

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2787. HAM RADIOS FOR SALE

Newsgroup: rec.radio.amateur.space
Date: 1997-11-13 00:00:00 UTC
From: WHAT A DOLL !!!! <restar@idir.net>
Message-ID: <01bcf060$52f759c0$6df3efcf@restar.idir.net>
Source record: 17559
Cross-posted to:
rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.swap

```
Amateur Radios
FOR SALE
FT 757GXI I= $900
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

2788. Re: tuning for doppler corrrection

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: vk3vw@iaccess.com.au
Message-ID: <64g7mr$84e@sleipnir.iaccess.com.au>
Source record: 17560

orion@xyznycap.rr.com wrote:

>On Wed, 5 Nov 97 21:57:37 GMT, Martyn Kinder <g0czd@clara.net> wrote:

>>I have a feeling that I am going to regret asking this 50/50 question but here
>>goes...
>>
>>When tuning and in QSO on say FO-20 - does one tune the TX to correct for
>>doppler, the Rx or (unlikely) both at the same time. I always believed it should
>>be Tx...however recent experiences have made me doubt this.................
>>
>>73, (and ducking)
>>
>>Martyn

>I believe you are supposed to tune whichever one is the higher
>frequency. That is if you are transmitting on 70 cm. and receiving on
>2 mtrs., you should tune the transmitter.

>--
>Larry Gamache N2YMJ

>To reply, delete the
>xyz from my address.
I have been on the digital satellites for a long time now.
I have always corrected both rx. and tx. for doppler shift.

My latest gear is computer driven and also corrects for both Tx. and
Rx.

Regards,

Michel vk3kvw.

2789. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <64g6mf$3ks_002@home.wtp.net>
Source record: 17561
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How
about you?

In article <64dh0pbpt1@shell5.ba.best.com>, pwinter@best.com (Patty Winter)
wrote:
>
>I don't see why anyone would think that it's necessary to slam the
>ARRL in order to encourage people to support AMSAT. I sure hope
>this wasn't an offical AMSAT posting.
>
>
>Patty
>
>========================== patty@wintertime.com ==========================
> "Yuri claimed on his INS application that he lived and
> worked in San Diego. Do I look like Shamu to you?"
> --David Caruso on "Michael Hayes"
>============= N6BIS ====================== Sunnyvale, Calif. ==============
>

2790. New Radio Communications mailing Lists

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: jpoulin@honk.orgNOSPAM
Message-ID: <346bac4f.122717959@news.on.rogers.wave.ca>
Source record: 17562

New HAM/Amateur Radio, Antenna, & Scanner mail lists !

I have created 3 new mailing lists for anyone who is
interested in radio communications. They are brand new.

If you are interested in joining any of the above mailing
lists, please visit http://www.honk.org/ham/lists

All lists are free for your enjoyment.

Thanks,

73's

James Poulin
VA3JPX

2791. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <64gec6$3so_002@home.wtp.net>
Source record: 17563
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

It doesn't need to be offical. It's just one person asking another to join an organization. You would be doing the same thing when you ask a new ham in your area to join your local radio club. Now, if you want an offical invitation to join AMSAT, I'll have one of the board of directors send you a special e-mail or if you would like, I can have Martha send you a AMSAT membership application by mail.

In article <346A8A2F.E0638C39@mail.msy.bellsouth.net>,
ctinney@mail.msy.bellsouth.net wrote:
>ham ref. library links:
>http://members.tripod.com/~CharlesTinney/index.html
>> this wasn't an offical AMSAT posting.
>>
>> Not to worry, it's definitely not official. I just think KB7ADL seems to
>> like to stir up trouble, at least, that's my opinion from reading AMSAT-BB.
>> I wonder if perhaps he's trying to make amends. *grin* AMSAT is a worthy
>> organization, but it does tend to attract, shall we say discreetly, some
>> spirited discussion from time to time... *Sigh*
>>
>> -- KD6PAG (Networking Old-Timer, RF newbie)
>
>
>

2792. Re: Essay Question

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <261CE308839031B0.0A2B160A03ED113A.125D4A588DDF3E76@library-proxy.airnews.net>
Source record: 17564

In article <64cgp0$od4@bgtnsc03.worldnet.att.net>, eddick@worldnet.att.net says...
>
Additionally, discuss the idea of
>vertically integrated information processing entities dominating the RF
>Spectrum.

I'm getting a headache.
Ken K5MBV

2793. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf0ad$777cb040$098a92d0@bitnet.bit-net.com>
Source record: 17565
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I think the clever play on words is confusing some folk.

"ARRL got you down", meaning that on the surface of the planet, the ARRL tends to care for ham things (at least that is their intent and purpose), and "Join AMSAT" suggests that if one wants to play a part in the organization that deals with things one sees when one looks "up", one needs to join AMSAT (perhaps in addition to the ARRL).

Cute, but probably needed a preface in the original post to help those of us who tend to be more literal (left brainers) catch up with the artistic license of the more literary (right brainers). Neither is better, just different!

I thought it was cute, but then I tend to float fairly readily between right and left brain approaches ... have to, I'm a counselor and pastor!

73, DavidC AA1FA

2794. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <01D597461A2CF392.D55D51BDD212B913.F2FA67020A229BE2@library-proxy.airnews.net>
Source record: 17566
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <01bcf0ad$777cb040$098a92d0@bitnet.bit-net.com>, davidc@bit-net.com says...
>
>I think the clever play on words is confusing some folk.

Good work David. Us Hams tend to be a little focused. (And a little quick to criticize.) ....Gee, I hope I spelled that right.

Ken K5MBV

2795. Re: Essay Question

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: 5mbv@airmail.net
Message-ID: <5022B28B241D0F9F.7945744A3BB0FCE2.1C462BD8AFBDB78C@library-proxy.airnews.net>
Source record: 17567

Try MENSA.

Ken K5MBV

2796. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: K0HB@JUNO.COM
Message-ID: <879523159.3159@dejanews.com>
Source record: 17568
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.space

Vince Fiscus, KB7ADL wrote:

> Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How
> about you?

Your "cute" subject line clearly suggests that AMSAT might be a substitute for ARRL if "ARRL got you down". Perhaps that was not your intent, but that is the "message" that many will draw from your unfortunate choice of words.

Given the historic support (including millions of $) that ARRL members have given to AMSAT, it seems unlikely that AMSAT would like to be viewed as a "substitute" for ARRL.

73, de Hans, K0HB

~~~
"Why are we hiding from the police dad?"
"They use CW, son. We use Tor".
~~~

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2797. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: lpdavies@bc.seflin.org
Message-ID: <64i3sd$35l@nntp.seflin.org>
Source record: 17569
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

DavidC (davidc@bit-net.com) wrote:
: I think the clever play on words is confusing some folk.

Right you are, OM. We be a very literal lot!

GL
--
Paul W2SYF/4 Ft Lauderdale
"Heisenberg may have slept here... "
Leslie Paul Davies
lpdavies@bc.seflin.org

OFF-TOPIC Material, in proof:

Why Engineers Don't Write Cookbooks

Chocolate Chip Cookies:

Ingredients:

* 1.) 532.35 cm3 gluten
* 2.) 4.9 cm3 NaHCO3
* 3.) 4.9 cm3 refined halite
* 4.) 236.6 cm3 partially hydrogenated tallow triglyceride
* 5.) 177.45 cm3 crystalline C12H22O11
* 6.) 177.45 cm3 unrefined C12H22O11
* 7.) 4.9 cm3 methyl ether of protocatechuic aldehyde
* 8.) Two calcium carbonate-encapsulated avian albumen-coated
protein
* 9.) 473.2 cm3 theobroma cacao
* 10.) 236.6 cm3 de-encapsulated legume meats (sieve size #10)

To a 2-L jacketed round reactor vessel (reactor #1) with an overall heat transfer coefficient of about 100 Btu/F-ft2-hr, add ingredients one, two and three with constant agitation. In a second 2-L reactor vessel with a radial flow impeller operating at 100 rpm, add ingredients four, five, six, and seven until the mixture is homogenous. To reactor #2, add ingredient eight, followed by three equal volumes of the homogenous mixture in reactor #1.

Additionally, add ingredients nine and ten slowly, with constant agitation. Care must be taken at this point in the reaction to control any temperature rise that may be the result of an exothermic reaction.

Using a screw extrude attached to a #4 nodulizer, place the mixture piece-meal on a 316SS sheet (300 x 600 mm). Heat in a 460K oven for a period of time that is in agreement with Frank & Johnston's first order rate expression (see JACOS, 21, 55), or until golden brown. Once the reaction is complete, place the sheet on a 25C heat-transfer table, allowing the product to come to equilibrium.

2798. WTB: Kenwood TS-790A Service Manual

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: Bill & Chris Shell <shell@callamer.com>
Message-ID: <64ivp8lo1@zinger.callamer.com>
Source record: 17570
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.swap

Hello,

I would like to buy a Service Manual for the Kenwood TS-790A. Does anyone
have one they aren't using???

Please contact me by email at:
shell@callamer.com

73, Bill
N6WS
shell@callamer.com

2799. FS: IC-275H 100w 2 meter.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: KD9KC@WHC.NET
Message-ID: <879567649.21752@dejanews.com>
Source record: 17571

FOR SALE.

Icom IC-275H Multimode 100 watt 2 meter tranceiver.
With IC-PS 55 power supply, handheld mic, and manual.
Late model unit, Serial number above 02500, unit has
the DATA LEVEL CONTROL. This radio has been used only
6 months, on low power FM. It is as close to a NEW
radio as you will find this side of ICOM. Perfect
condition, very clean, no mods or problems, non smoker.
Original cost: IC-275H=$1679.00 IC-PS55=$259.00

IC-275H now $950.00 IC-PS55 now $150.00

I will ship UPS ground to lower 48.

For further info contact: kd9kc@whc.net

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2800. Re: Sputnik's frequency

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: Oleg Zabluda <zabluda@math.psu.edu>
Message-ID: <64j3ac$anh@marianna.psu.edu>
Source record: 17572
Cross-posted to: rec.radio.amateur.space,sci.space.history,sci.space.tech,sci.space.policy

Neastrom <neastrom@arrakis.es> wrote:
: ci.space.tech
: Message-ID: <01bced52$189ee920$394f05c3@default>
: X-Newsreader: Microsoft Internet News 4.70.1161
: X-NNTP-Posting-Host: 195.5.79.57
: Date: 9 Nov 97 21:02:40 GMT
: Lines: 12

: Hi everybody.

: Last week I watched on TV that the Russians had released a copy of the
: Sputnik I satellite from the MIR Space Station

: I'd like to know if it's possible, the frequency of the famous "bip bip
: bip".

145.825 Mhz, with the usual Doppler shift.

That's what Don Horton posted to the Hearsat mailing list:

-=-=-=-=

The frequency of the beacon indicates the satellite's internal temperature.
The scale runs from 1361 Hz at 50 degrees C to 541 Hz at minus 40 degrees C.
Here's the scale:

Degs (C) Freq (Hz)

50 1361
30 1290
25 1261
10 1208
0 1131
-10 1040
-20 891
-30 724
-40 541

--from ARRL Space Bulletin 34

-=-=-=-

Various amatures monitor the Sputnik Jr and report temperature of around
25C.

Oleg.
--

Life is a sexually transmitted, 100% lethal disease.

2801. Satellite operators in Atlanta.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-14 00:00:00 UTC
From: "J. T. Montgomery" <jtm@XspamX.databasics.com>
Message-ID: <64hqjh$agn@camel21.mindspring.com>
Source record: 17573

Are any of you out there satellite operators in Atlanta? I am interested in getting into satellites but not so interested in dealing with the local ARC's...

-J.T.

2802. Re: AO-27 On/Off Schedule

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mvhxuo8hh.fsf@spinner.ecofe.com>
Source record: 17574

I tried listening to a pass of AO-27 a few nights ago at about 9pm but I heard nothing. I heard that they may turn the sattelite off at times to extend its life but I do not know when. Could someone please clear this up for me.

AO-27 shares resources with Eyesat-1, and there is not enough power for the amateur part to operate at all times. So it is programmed to be on during daylight hours in the middle latitudes of the Northern hemisphere. So, on the passes when it's off in the U.S., then, for example, Russian operators can use it, as it's daytime for them. Addition information from collected from AMSAT news and other sources follows.

-- KD6PAG (Networking Old-Timer, RF newbie)

P.S. I'm interested in skeds: QRV in CM87, other nearby grids upon request.

Excerpts from http://qsl.net/kd6pag/AO-27.html

When can AO-27 operate?

The Satellite contains batteries and solar panels and is could run the transmitters during ANY portion of a pass. Due to power budget limits, the AO-27 Transmitter can not run all the time. If it did, the batteries would run down in a week's time. Therefore the AO-27 TX is on only for 17 Minutes a pass. This is a difference in the Amateur and Commercial sides. The Eyesat-1 commercial Transmitter could be left on all the time at different power levels.

- -

The TEPR States are defined as follows:

Tepr 1, Started when the satellite Enters the Eclipse
Tepr 2, Started at (tepr 1 time) after the satellite enters the eclipse
Tepr 3, Started at (tepr 1 time) + (tepr 2 time) ...

Tepr 4, Started when the satellite enters the Sun
Tepr 5, Started at (tepr 4 time) after the satellite enters the Sun
Tepr 6, Started at (tepr 4) + (tepr 5) ...

TEPR states 1,2 and 3 happen during the Nighttime passes and TEPR states 4,5 and 6 happen during the Daytime passes. These occur during EVERY pass, not just over the U.S.A.

The times assigned to the TEPR states are chosen for the health of the satellite over operation convenience. Therefore, during parts of the year the satellite will turn on late or turn off early as seen by ground

stations.

Users are asked not to transmit on 145.85 MHz if they do not hear the
satellite's downlink so as to avoid possible interference to other
satellite uplinks and downlinks on adjacent frequencies.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update.]

- -

As of 9/21/97 the TEPR State are set to:

Tepr 4 - 12.5 Minutes
Tepr 5 - 18.0 Minutes

Current Infomation about AO-27 can be found at: http://www.umbra.com

- Michael
N4USI
==========

2803. Re: Sputnik's frequency

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: John DeMar <jsdemar@syr.edu>
Message-ID: <346D2DCF.7F50@syr.edu>
Source record: 17575
Cross-posted to: rec.radio.amateur.space,sci.space.history

Neastrom wrote:
> Last week I watched on TV that the Russians had released a copy of the
> Sputnik I satellite from the MIR Space Station
>
> I'd like to know if it's possible, the frequency of the famous "bip bip
> bip".

Online sound recordings from Sputnik and other early satellites
may be found at:
http://www.amsat.org/amsat/features/sounds/firstsat.html

Sputnik 1 transmitted at 20.005 and 40.002 MHz.

The replica 'launched' from MIR on Nov. 3, 1997 transmits at 145.82
MHz.

-John DeMar

2804. *** Attention Amateurs + Scanner Listeners ***

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: troublemaker@radiotelephone.net.ham
Message-ID: <346dbaf0.8056691@news.total.net>
Source record: 17576

Hi. My name is TRouBLe MakEr. I have a web page that has:

- Montreal Area Repeater Directory, including hidden illegal
repeaters in the area.
- Study Guide for Canadian Amateur Basic Qualification
- General Information for Amateurs
- Frequency bands to be used + Countries concerned
- Calling Freqs
- Ham + British Columbia Freqs
- Ham License Structure in Canada, US, Japan, Australia, Fiji,
New Zealand
- RCMP 10 codes + international Q code detabase
- International morse code database
- CB Information desk
- International HF air & marine freqs
- Space Station MIR web page
- Proprgation Information Centre
- Radio Shack Scanners
- ADI AT-600 dualband info
- Cellular band info
- Radio Modification centre
- VE7JPN & VA2QRU (my station) equipments
- Link to Industry Canada Spectrum Management

See you there !! There is something for everyone !!

Trouble Maker AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : troublemaker@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2805. Re: *** Attention Amateurs + Scanner Listeners ***

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: troublemaker@radiotelephone.net.ham
Message-ID: <346dbdf0.8825324@news.total.net>
Source record: 17577

On Sat, 15 Nov 1997 15:08:39 GMT, troublemaker@radiotelephone.net.ham
(Trouble Maker) wrote:

>Hi. My name is TRouBLe MakEr. I have a web page that has:

Sorry !! I am following up my own.

The site is http://www.radiotelephone.net/amateur/

See you there !!

Trouble Maker AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : troublemaker@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2806. Re: tuning for doppler corrrection

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <346DC0FB.8893DDF6@muenster.de>
Source record: 17578

Hi,

> >>When tuning and in QSO on say FO-20 - does one tune the TX to correct for
> >>doppler, the Rx or (unlikely) both at the same time. I always believed it should
> >>be Tx...however recent experiences have made me doubt this.....
> >>
> >>73, (and ducking)
> >>
> >>Martyn
>
> >I believe you are supposed to tune whichever one is the higher
> >frequency. That is if you are transmitting on 70 cm. and receiving on
> >2 mtrs., you should tune the transmitter.

Hm... never heard of that rule...

> I have been on the digital satellites for a long time now.
> I have always corrected both rx. and tx. for doppler shift.

The general rule is IMHO that you tune the TX freq. However, there some
exceptions:

1. On Mode K, you won't tune the TX freq since you don't want to bump
into a non-satellite QSO.

2. On the Fuji Birds, you'll stay on your uplink freq and only
compensate the downlink. If you change the uplink, maybe your QSO
partner won't find your TX sigs because of the high doppler shift - and
maybe the doppler is running to the opposite direction for him...

Practice shows that both doppler shift corrections are in use (which
doesn't make it easier...)

> My latest gear is computer driven and also corrects for both Tx. and
> Rx.

If you have such a TRX, there is a program for use with the analog birds
made by AMSAT-BDA (Bermudas) - "The Station Program". To be found on
their web page
http://www.amsat.bm/

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/sb.htm

Tel./Fax: +49-2533-7312]

2807. ARLK089 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk089.1997@arrl.org>
Source record: 17579
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK089
ARLK089 Keplerian data

ZCZC SK89
QST de W1AW
Keplerian Bulletin 89 ARLK089
From ARRL Headquarters
Newington, CT November 15, 1997
To all radio amateurs

SB KEP ARL ARLK089
ARLK089 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

Sputnik Jr
1 24958U 97058C 97318.46495282 .00032356 00000-0 38411-3 0 164
2 24958 51.6589 50.4052 0006482 308.5057 51.5273 15.60859624 1682
AO-10
1 14129U 83058B 97312.29306154 .00000077 00000-0 10000-3 0 5144
2 14129 26.3940 117.9426 6029990 166.3756 222.7043 2.05880583 80357
RS-10/11
1 18129U 87054A 97318.50551111 .00000055 00000-0 43803-4 0 4269
2 18129 82.9210 127.6299 0011578 157.7509 202.4152 13.72385406520852
UO-11
1 14781U 84021B 97317.96263146 .00000325 00000-0 62531-4 0 00194
2 14781 97.8511 293.3433 0010641 243.6725 116.3382 14.69615937733257
RS-12/13
1 21089U 91007A 97318.07531362 .00000032 00000-0 18552-4 0 00331
2 21089 82.9254 167.4961 0027666 239.9264 119.9149 13.74087998339744
UO-14
1 20437U 90005B 97318.18743170 .00000055 00000-0 38128-4 0 3113
2 20437 98.5088 36.5381 0011404 122.3277 237.9012 14.29981362407657
RS-15
1 23439U 94085A 97317.96553538 -.00000039 00000-0 10000-3 0 02718
2 23439 64.8140 270.6428 0145991 103.3598 258.3632 11.27528565118824
AO-16
1 20439U 90005D 97318.19721498 .00000060 00000-0 39991-4 0 01242
2 20439 98.5302 39.8261 0011726 124.4452 235.7840 14.30026923407678
```

```
RS-16
1 24744U 97010A 97318.59930878 .00005764 00000-0 18531-3 0 1080
2 24744 97.2643 220.8057 0005548 286.3471 73.7104 15.32630936 39115
DO-17
1 20440U 90005E 97318.16813140 .00000052 00000-0 36652-4 0 01137
2 20440 98.5336 40.7617 0012026 123.2301 237.0037 14.30170387407708
WO-18
1 20441U 90005F 97318.16946752 .00000018 00000-0 23430-4 0 01316
2 20441 98.5323 40.6427 0012493 124.6561 235.5801 14.30136440407708
LO-19
1 20442U 90005G 97318.19456101 .00000090 00000-0 51485-4 0 01281
2 20442 98.5344 41.4229 0013292 125.0804 235.1632 14.30254212407733
FO-20
1 20480U 90013C 97318.03969076 .00000048 00000-0 17594-3 0 00267
2 20480 99.0652 251.5597 0540611 38.2317 325.5854 12.83241400363922
AO-21
1 21087U 91006A 97318.00256692 .00000094 00000-0 82657-4 0 08716
2 21087 82.9387 300.6882 0033600 210.7414 149.1774 13.74589679340734
UO-22
1 21575U 91050B 97318.21966378 .00000059 00000-0 33957-4 0 08191
2 21575 98.2818 13.3220 0007546 155.1850 204.9701 14.37095759332030
KO-23
1 22077U 92052B 97318.11304744 -.00000037 00000-0 10000-3 0 07159
2 22077 66.0861 191.3291 0001017 153.9722 206.1348 12.86304121247039
KO-25
1 22828U 93061F 97318.20244155 .00000024 00000-0 27033-4 0 05869
2 22828 98.5291 29.3645 0010634 141.3144 218.8800 14.28200047183624
IO-26
1 22826U 93061D 97318.20426963 .00000058 00000-0 40776-4 0 06054
2 22826 98.5328 29.2730 0009385 157.9820 202.1769 14.27854478215495
AO-27
1 22825U 93061C 97318.17731007 .00000028 00000-0 28778-4 0 06232
2 22825 98.5305 28.9593 0008554 157.1801 202.9762 14.27743885215478
FO-29
1 24278U 96046B 97318.07679564 -.00000052 00000-0 -19220-4 0 01348
2 24278 98.5224 338.7444 0351790 157.6194 204.0728 13.52634880061387
Mir
1 16609U 86017A 97318.20684750 .00007708 00000-0 96762-4 0 07796
2 16609 51.6549 51.6776 0006758 333.3327 26.7315 15.60785962670440

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
November 18, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2808. Re: tuning for doppler corrrection

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m7maaszov.fsf@spinner.ecofe.com>
Source record: 17580

The general rule is IMHO that you tune the TX freq. However, there some exceptions: [Oliver Welp <welp@muenster.de>]

Here's two more:

1. AO-27 has a wide and very sensitive receiver, so no doppler correction is needed on TX, only RX.

2. On MIR/SAFEX repeater, you must correct for doppler on both TX and RX. Usually this involves using multiple memory channels to store the odd splits. (See http://qsl.net.kd6pag/MIR.html)

Hope to hear some of you out there.

-- KD6PAG (CM87, other nearby grids by request)

2809. Gary Morris' web site

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: Tom@astro.net
Message-ID: <64kv50$87k$1@news.mhv.net>
Source record: 17631

Does anyone know what happened to Gary Morris' satellite web site?
I get a 404 not found. Did he move? If so what the URL please!

Thank you,
73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2810. Re: Spoutnik Heard Near Atlantic City, NJ

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971115141158.26197I-100000@oso.slonet.org>
Source record: 17632

Some of the original AMERICAN satellites were on 108 MHz for a very short
time. Cliff K7RR

On 12 Nov 1997, Wayne Day N5WD wrote:

> In article <34687A8C.4525319A@drdale.com>
> Dale Ireland <direland@drdale.com> wrote:
>
> > Mel.
> > Someone told me the original Sputnik also transmitted at 108Mhz is that
> > true?
> > Dale
> >
>
> Nope. The original sputnik carried a 20MHz and 40Mhz transmitter.
>
> ---
> Wayne Day N5WD wday@cq.net Fort Worth,Texas,USA |
> CompuServe: 76703.376@CompuServe.Com n5wd@amsat.org | ,__o
> EMT/Paramedic @ MedStar Fort Worth My work Phone? 9-1-1 |--_<,
> Member: Bicycle Mobile Hams of America,LAB,LM-QCWA,ARRL(*)/'(*)
> ---
>
>
>

2811. Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-15 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <64lb7k$g9@news.mcn.net>
Source record: 17633
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Enter the world of amateur satellite communications with AMSAT - Radio Amateur Satellite Corporation. Satellites are amateur radios highest frontier and you can be a part of it. Like working DX but hate poor HF band conditions? Work DX via satellite and leave all be qrm, qrn & qsb behind. Like Digital modes? Upload a message to a pacsat and in 45 minutes a ham on the other side of the world could read it and respond to it. You can leave a message with the cosmonauts on the Mir space station or talk to the astronauts on the space shuttle during SAREX missions. You can also play a part in helping AMSAT complete it latest project, the Phase 3D satellite. Phase 3D is ham radios largest and most complex satellite to date. Construction and testing of P3D will soon be complete. Ham radio satellites mainly operate above 144 mHz, so you won't need a fancy ham radio license to use them. A tech class license will work just fine.
Of course you don't need to be a member of AMSAT to enjoy all these things, But your membership will help keep present and future projects going.If you've decided you won't join Amsat at this time, but would like to donate to Phase 3D. You can send your contribution to:

AMSAT-NA
850 Sligo Ave. Suite 600
Silver Spring, MD. 20910-4703

or call Martha at Amsat: (301) 589-6062

For more info about AMSAT
and Phase 3D see: http://www.amsat.org

73 de KB7ADL

2812. Satellite Image Processing Site

Newsgroup: rec.radio.amateur.space
Date: 1997-11-16 00:00:00 UTC
From: dighal@aol.com
Message-ID: <19971116010600.UAA01527@ladder02.news.aol.com>
Source record: 17634

I have updated my Satellite Imaging Web Site to include more information on 3D rendering Landsat scenes and colorizing GOES satellite images. There are also new links to free software and images. The URL is:

http://members.aol.com/landsatcd

Enjoy the view!

2813. Sputnik beeps?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-16 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <346f5e58.11686611@news.erols.com>
Source record: 17635

I listened to the Sputnik replica again ths morning (from near WASH DC). Very strong on my Drake 2-B (with converter) using a vertical half wave dipole. I was also able to hear it through the static on my Radio shck 2 meter FM hand held with rubber duck antenna.

This is really a fascinating and admirable project. I checked out the Web page and learned that the transmitter was built by a bunch of school kids on Reunion Island (get out your globes - its in the Indian Ocean.) Kids in Russia built the spacecraft.

I'm still trying to find out the significance of the number of beeps. I know that the tone of the beeps indicates core temperature, but what about the number of beeps. There was no info on this on the Web page.

Three cheers for the kids on Reunion Island and for their colleagues in Russia!

73 de Bill N2CQR

2814. 10 Meter Beacon List

Newsgroup: rec.radio.amateur.space
Date: 1997-11-17 00:00:00 UTC
From: Stanley <so@bigfoot.com>
Message-ID: <347006AA.1562@bigfoot.com>
Source record: 17636

Sorry for the extra mail. I made a mistake in the address in my
first dispatch. The Latest KC4DPC 10 Meter Beacon List Is now available
at: http://localsonly.wilmington.net/~stanley/bcn.htm
--
Sincerely, Stanley
Website: http://localsonly.wilmington.net/~stanley/
Nature's Vineyard: http://www.freeyellow.com/members/dixie/index.html

Unsolicited commercial e-mail is deleted by SMartMail.

2815. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-17 00:00:00 UTC
From: JON <w4abc@gte.net>
Message-ID: <64orko$kl0$1@gte2.gte.net>
Source record: 17637
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Well maybe I don't know too much about Amateur Radio, but the first thing I thought of when i saw this posting, was this is a slam on the ARRL and what have the two got to do with each other! Something more time appropriate might have been... "Low solar activity got you down... join AMSAT we're always up. But what do I know about radio. de W4ABC

Vince Fiscus, KB7ADL <fiscus@mcn.net> wrote in article <64g6mf$3ks_002@home.wtp.net>...
> Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How

> about you?
>
>
>
>
> In article <64dh0pbpt1@shell5.ba.best.com>, pwinter@best.com (Patty Winter)
> wrote:
> >
> >I don't see why anyone would think that it's necessary to slam the
> >ARRL in order to encourage people to support AMSAT. I sure hope
> >this wasn't an offical AMSAT posting.
> >
> >
> >Patty
> >
> >========================== patty@wintertime.com ==========================
> > "Yuri claimed on his INS application that he lived and
> > worked in San Diego. Do I look like Shamu to you?"
> > --David Caruso on "Michael Hayes"
> >============= N6BIS ====================== Sunnyvale, Calif. ==============
> >
>

2816. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-17 00:00:00 UTC
From: "Dr. Bellows" <no@spam.com>
Message-ID: <3470191D.1C05@spam.com>
Source record: 17638
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

JON wrote:
>
> Well maybe I don't know too much about Amateur Radio, but the first thing I
> thought of when i saw this posting, was this is a slam on the ARRL and what
> have the two got to do with each other! Something more time appropriate
> might have been... "Low solar activity got you down... join AMSAT we're
> always up. But what do I know about radio. de W4ABC
>
> Vince Fiscus, KB7ADL <fiscus@mcn.net> wrote in article
> <64g6mf$3ks_002@home.wtp.net>...
> > Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How
>
> > about you?

I am also a member of the ARRL, although I do not like their viewpoints
lately, and WELCOME a message such as the one posted giving me an
alternative group to join that may have issues more in the direction of
myself. I don't think wording it any other way would have got the point
accross that I indeed understood.

2817. sputnik 2 report

Newsgroup: rec.radio.amateur.space
Date: 1997-11-17 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <3470AE1A.7990@inreach.com>
Source record: 17639

hi all,
I aquired sputnik 2 late sunday night, actually early monday morning 11/17/97 at 12:30 am pst the beep-beep was heard on 145.82 until 12:34 am pst. I was listening with an Icom IC 25a 2-meter transciever, had a 1/4 wave vertical antenna about 20 feet off the roof of a 1-story house in Chico, California.
The beep pattern was a little less than 1 second apart, with 7 beeps in row, the eight beep faded out, followed by another 7 beeps. I heard this for approx 4 minutes, then lost the signal. I think the pass was from south to north and somewhat east of my location.
I use the Where Is the Mir? website from NASA to track the "thing"
http://liftoff.msfc.nasa.gov/temp/Mir_loc.html

enjoy all.
I will try to record it tonight.
William F. Hagen
kc6ufe

2818. NORAD Two-Line Orbital Element Sets (TLE097)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <64qro5$7eh$1@blackbird.afit.af.mil>
Source record: 17640

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #097 -
Alouette 1
1 00424U 62049A 97318.00668371 .00000077 00000-0 79704-4 0 3315
2 00424 80.4624 135.7568 0023205 147.6239 212.6335 13.67908496752723
ATS 1
1 02608U 66110A 97314.31786353 .00000044 00000-0 10000-3 0 465
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2 10967 107.9948 158.8622 0002663 256.6619 103.4226 14.38205198 15372

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2 18820 82.5434 355.0321 0015381 274.6746 85.2658 13.84785674495218
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Meteor 3-2
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NOAA 11
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TDRS 3
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2 19548 3.5045 69.1279 0005506 83.5446 210.3461 1.00267093 20700
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1 19883U 89021B 97317.67160264 -.00000274 00000-0 10000-3 0 3697
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2 20185 55.3657 90.5987 0023548 355.2450 4.7168 2.00570153 60301
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2 20322 98.9242 332.8657 0009587 36.6246 323.5573 14.03473492409542
Kvant-2
1 20335U 89093A 97320.19169602 .00014551 00000-0 17681-3 0 732
2 20335 51.6566 41.6932 0007188 342.0151 18.0466 15.60812392453878
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SPOT 2
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DO-17
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2 20442 98.5347 43.4135 0013490 119.4861 240.7684 14.30254273408023
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Feng Yun1-2
1 20788U 90081A 97321.22259732 .00000108 00000-0 10000-3 0 5637
2 20788 98.8233 315.2008 0017167 130.9572 229.2939 14.01288206368654
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Meteor 3-4
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2 21232 82.5405 6.5308 0012642 313.2685 46.7382 13.16477904315709
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2 21577 98.2796 13.1231 0006403 153.3824 206.7681 14.36568372332211
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TDRS 5
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Meteor 3-5
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UARS
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Glonass 53
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Glonass 54
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2 21930 55.5541 328.1016 0029827 191.4803 168.4863 2.00574037 40869
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2 22108 53.9164 206.3827 0126857 173.3121 186.9682 2.00563619 37932
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2 22195 52.6751 25.4694 0137579 302.6371 56.0978 6.47293547119688
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2 22275 54.6992 146.5114 0056272 248.8643 110.5774 2.00593531 35926
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Glonass 61
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2 22779 54.0501 265.9839 0010360 299.9763 59.9185 2.00548910 30875
Meteor 2-21
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2 22782 82.5476 297.6427 0022037 333.7288 26.2756 13.83085496212550
UFO F2
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SPOT 3
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STELLA
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AO-27
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IO-26
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METEOSAT 6
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HST Array
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CORONAS I
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STRV-1B
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Nadezhda 4
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GPS BIIR-02
1 24876U 97035A 97320.85424639 .00000036 00000-0 00000+0 0 699
2 24876 54.9405 147.5154 0021093 255.9924 103.8916 2.00535931 2383
SeaStar
1 24883U 97037A 97318.53669520 .00000093 00000-0 31578-4 0 761
2 24883 98.2183 54.8627 0002782 47.0521 313.0911 14.55492752 15499
Soyuz TM-26
1 24886U 97038A 97320.19169602 .00014551 00000-0 17681-3 0 1073
2 24886 51.6566 41.6932 0007188 342.0151 18.0466 15.60812392 16025
Meteosat 7
1 24932U 97049B 97319.16503472 -.00000097 00000-0 00000+0 0 656
2 24932 1.6769 290.2349 0003447 311.9611 221.1932 1.00272017 752
COSMOS 2346
1 24953U 97052A 97317.33035646 .00000078 00000-0 60369-4 0 267
2 24953 82.9193 243.9729 0039850 142.0699 218.3278 13.78972946 6978
FAISAT 2V
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1 24954U 97052B 97320.30233576 .00000004 00000-0 -11171-4 0 235
2 24954 82.9241 241.7429 0040995 133.3459 227.1219 13.79047546 7395
Sputnik 40
1 24958U 97058C 97321.21784026 .00037923 00000-0 44504-3 0 196
2 24958 51.6585 36.5419 0008113 330.2576 29.8061 15.61066969 2116
Progress M-36
1 25002U 97058A 97320.19169602 .00014551 00000-0 17681-3 0 525
2 25002 51.6566 41.6932 0007188 342.0151 18.0466 15.60812392 6508
APSTAR 2R
1 25010U 97062A 97321.00421296 -.00000113 00000-0 10000-3 0 337
2 25010 0.1002 155.0233 0002498 56.9720 282.0961 1.00270837 325
STEP-M4
1 25013U 97063A 97319.18794528 .00001446 00000-0 53044-4 0 276
2 25013 44.9681 257.3849 0050436 279.9877 79.5318 15.32883261 3634
1997063B
1 25014U 97063B 97320.93759869 .00005445 00000-0 16833-3 0 177
2 25014 44.9807 247.6471 0048069 287.9636 71.6026 15.33575106 3905
1997060C
1 25015U 97060C 97321.38241440 .27552144 89334-5 51457-2 0 844
2 25015 62.7909 90.2787 0012336 6.6760 353.8300 16.31438487 6127
1997060D
1 25016U 97060D 97308.62047814 .10148571 39758+0 15973-1 0 282
2 25016 62.7729 139.1654 0027284 357.2407 359.0515 16.10462110 1875
1997064B
1 25018U 97064B 97317.79202635 .00001692 00000-0 98236-4 0 129
2 25018 57.0118 72.1777 0173455 202.2022 157.1441 15.06169268 3129
1997065B
1 25020U 97065B 97316.72050433 .00046814 00000-0 44176-2 0 163
2 25020 26.2960 208.8679 7259395 189.3158 140.7892 2.33215228 426
1997065C
1 25021U 97065C 97319.11276512 -.00000245 00000-0 00000+0 0 83
2 25021 0.0212 349.0304 0007920 92.5405 278.5347 1.01067205 988
MAQSAT H
1 25023U 97066A 97318.32746330 .00000028 00000-0 86877-3 0 132
2 25023 7.8162 51.2480 6538285 191.2818 139.9730 3.07849180 456
MAQSAT B
1 25024U 97066B 97318.29292582 -.00000218 00000-0 -38985-3 0 123
2 25024 7.8112 51.2179 6533772 191.2690 140.0848 3.08570412 454
YES
1 25025U 97066C 97317.35828722 -.00000163 00000-0 -80607-4 0 107
2 25025 7.8001 51.8492 6531940 190.0862 144.1253 3.07788630 401
1997066D
1 25026U 97066D 97320.26555996 -.00000343 00000-0 -11960-2 0 173
2 25026 7.8211 50.1645 6538904 193.4144 132.8956 3.07929505 518
GPS BIIA-28
1 25030U 97067A 97317.13201160 .00000024 00000-0 10000-3 0 160
2 25030 54.8900 209.2514 0134501 99.4995 262.0938 1.99569522 200
1997067B
1 25031U 97067B 97318.54455419 .00003141 00000-0 13975-3 0 61
2 25031 35.1963 132.5553 0074846 233.3113 126.0839 15.18547737 1298
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1997067C
1 25032U 97067C 97320.99678042 .00075935 -17159-6 21062-2 0 136
2 25032 34.9936 199.2446 6046663 203.5202 109.9606 4.05023925 425
Iridium 43
1 25039U 97069A 97321.24718872 -.03649175 00000-0 -77953+0 0 360
2 25039 86.5532 130.3406 0002937 267.2425 92.7635 14.63891820 1214
Iridium 41
1 25040U 97069B 97320.90438716 -.00053116 00000-0 -92165-2 0 287
2 25040 86.5758 130.5023 0002582 169.8305 190.2963 14.68685594 1158
Iridium 40
1 25041U 97069C 97320.55291462 -.00052365 00000-0 -73529-2 0 215
2 25041 86.5780 130.6402 0011120 208.8660 151.1946 14.77813557 1106
Iridium 39
1 25042U 97069D 97321.10648144 -.00055872 00000-0 -96542-2 0 262
2 25042 86.5777 130.4145 0003070 167.9044 192.2297 14.68886790 1183
Iridium 38
1 25043U 97069E 97320.07804522 -.00046301 00000-0 -64516-2 0 232
2 25043 86.5809 130.8404 0012695 209.5939 150.4567 14.78092017 1033
1997069F
1 25044U 97069F 97320.24483536 .00089597 80076-6 49174-3 0 143
2 25044 83.5544 127.8369 0270350 326.3835 32.0605 15.42826840 1107
Kupon
1 25045U 97070A 97320.26175926 .00000022 00000-0 00000+0 0 37
2 25045 0.0305 26.4334 0007286 116.6690 85.3621 0.99323693 09
1997070B
1 25046U 97070B 97317.37349553 .65689875 12556-4 15941-2 0 109
2 25046 51.6160 312.6725 0002858 115.2641 244.8685 16.46147752 119
1997070C
1 25047U 97070C 97319.14177011 .15418202 12931-4 98767-4 0 212
2 25047 51.6306 302.7054 0011413 329.7985 30.1827 16.53074858 407
1997070D
1 25048U 97070D 97317.60711574 -.00000087 00000-0 00000+0 0 31
2 25048 0.0734 308.5325 0015298 0.6460 50.7132 0.99607482 16
Sirius 2
1 25049U 97071A 97320.85048891 .00063994 00000-0 71791-2 0 111
2 25049 6.9743 195.2618 7295654 181.2445 347.4677 2.28331389 92
Cakrawarta 1
1 25050U 97071B 97321.16277238 -.00000352 00000-0 00000+0 0 63
2 25050 0.3403 94.0001 0010546 135.2566 356.2172 1.00137014 83
1997071C
1 25051U 97071C 97320.74641118 .00076353 -62430-6 34557-2 0 83
2 25051 6.9463 195.5264 7358079 181.3737 174.3328 2.22056295 94
1997071D
1 25052U 97071D 97320.85048891 .00063616 00000-0 71791-2 0 59
2 25052 6.9786 195.2158 7295562 181.2922 347.4684 2.28331379 97
1997070E
1 25053U 97070E 97321.19460293 .00000033 00000-0 10651-3 0 76
2 25053 47.5845 314.9512 7278654 1.0398 359.8134 2.25561619 94
1997070F
1 25054U 97070F 97317.64698372 .00000000 00000-0 00000+0 0 14
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2 25054 47.4562 316.0195 7303574 359.9850 0.0240 2.25946347 18
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2819. Meaning of Sputnik beeps

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3471c7cf.809814@news.erols.com>
Source record: 17641

I got an e-mail yesterday from FR5CY on Reunion Island. I believe he is the teacher for the group of schoolkids who built the transmitter in the Sputnik replica.

I asked him about the meaning of the number of beeps being transmitted by the satellite. He told me that - as with the original Sputnik - the number of beeps has no signiificance. However, as has been indicated here earlier, the modulation (tone) on the beeps does correspond to satellite temperature.

73 de Bill N2CQR

2820. Re: Meaning of Sputnik beeps

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: cite.espace@wanadoo.fr
Message-ID: <64s4co$at3$1@peuplier.wanadoo.fr>
Source record: 17642

Bill Meara a ?crit dans le message <3471c7cf.809814@news.erols.com>...
>I got an e-mail yesterday from FR5CY on Reunion Island. I believe he
>is the teacher for the group of schoolkids who built the transmitter
>in the Sputnik replica.
>
>I asked him about the meaning of the number of beeps being transmitted
>by the satellite. He told me that - as with the original Sputnik -
>the number of beeps has no signiificance. However, as has been
>indicated here earlier, the modulation (tone) on the beeps does
>correspond to satellite temperature.
It's the exac maening, but sputnik 40, don't give us any information on the
temperature.
>73 de Bill N2CQR

2821. RE: RS 10, 12, 13, 15 and FO-29????

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue@amsat.org>
Message-ID: <19971118.144041.wb5rue@amsat.org>
Source record: 17643

John Charles <jaycee@midmarsh.demon.co.uk> writes:

-In article <01bcf2a5$41a52980$777ba3ce@glabelle>, George & Jeanine
-LaBelle <glabelle@teleport.com> writes
->Are the RS sats operational? I've been unable to hear them recently.
->
->FO-20 seems to work fine, but FO-29 seems gone too. Is there an
->informational website for the FO's?
-
-FO-29 was certainly working over Europe today (17 Nov) and I could hear
-my downlink OK. Not as strong as FO-20 though.
-
-I seem to remember reading that if power resources get low then the
-Amateur section is shut down so the commercial section can keep working.
-
-73 John M1BTR

-John Charles jaycee@midmarsh.demon.co.uk

I don't know about the FO sats but RS-12 is alive and well.
I had four great chats on its pass last evening here in
south Texas. I was actually able to hit it with my
HT and a 3 element yagi and talk to a guy accross town! Kind
of the long way around but it was fun. This was at about
11/18/97 00:55 UTC last night. I've never had any real luck
with RS-15. My receiver isn't sensitive enough but that little
article in QST with the MMIC chip has promise. I do know that
when the RS birds are out of the sunlight the ham portion
shuts down for the night. You should have a good pass tonight
at around 23:30 UTC for RS-12.

Kevin, WB5RUE
wb5rue@amsat.org

2822. SALE Standard CCR708A, AX 700, SALE SALE MONEY NEEDED

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: ptsai <ptsai@mail.pittstate.edu>
Message-ID: <01bcf3d2$752a00e0$0db4fcce@ping-yet>
Source record: 17644
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FOR SALE

CCR708A in US, or AX 700 in JAPAN

VHF-UHF wide-band receiver
* Spectral display scope
* 100 memories
* Receive 50-904.995 MHz
* Receiving modes, AM, NFM and WFM
* High precision PLL synthesizer
* Microprocessor controlled
* Operates on 13.8 VDC
* 120 volt 60 Hz wall transformer included
* Ideal for the service bench
* Equipped with LCD display
* Supplied with a telescoping antenna
* Audio output 1.8 Watts
* LCD window display 1 MHz, 250 kHz and 100 kHz
* Extremely well built to industry standards
* Dimensions: 2.95" (H) x 7.09" (W) x 7.09" (D)
* Weight 4.63 lbs

this is one years old unit with little usage
if you are interestd in this unit feel free to send me e-mail
for more information
http://www.stdradio.com/rcvr.html
http://www.martin-lynch.co.uk/ax700.htm

Standard CCR708A 50-905MHz Scanner / Spectrum Disp $799<----(above is
what I found from some site
they sale this used unit still $799, But I won't asking for this much,
"$550" including SHIPing UPS and INSURED)

2823. SALE Standard CCR708A, AX 700, SALE SALE MONEY NEEDED

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: ptsai <ptsai@mail.pittstate.edu>
Message-ID: <01bcf3d3$1f0372e0$0db4fcce@ping-yet>
Source record: 17645
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FOR SALE

CCR708A in US, or AX 700 in JAPAN

VHF-UHF wide-band receiver
* Spectral display scope
* 100 memories
* Receive 50-904.995 MHz
* Receiving modes, AM, NFM and WFM
* High precision PLL synthesizer
* Microprocessor controlled
* Operates on 13.8 VDC
* 120 volt 60 Hz wall transformer included
* Ideal for the service bench
* Equipped with LCD display
* Supplied with a telescoping antenna
* Audio output 1.8 Watts
* LCD window display 1 MHz, 250 kHz and 100 kHz
* Extremely well built to industry standards
* Dimensions: 2.95" (H) x 7.09" (W) x 7.09" (D)
* Weight 4.63 lbs

this is one years old unit with little usage
if you are interestd in this unit feel free to send me e-mail
for more information
http://www.stdradio.com/rcvr.html
http://www.martin-lynch.co.uk/ax700.htm

Standard CCR708A 50-905MHz Scanner / Spectrum Disp $799<----(above is
what I found from some site
they sale this used unit still $799, But I won't asking for this much,
"$550" including SHIPing UPS and INSURED)

2824. SALE Standard CCR708A, AX 700, SALE SALE MONEY NEEDED

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: ptsai <ptsai@mail.pittstate.edu>
Message-ID: <01bcf3d3$47824520$0db4fcce@ping-yet>
Source record: 17646
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FOR SALE

CCR708A in US, or AX 700 in JAPAN

VHF-UHF wide-band receiver
* Spectral display scope
* 100 memories
* Receive 50-904.995 MHz
* Receiving modes, AM, NFM and WFM
* High precision PLL synthesizer
* Microprocessor controlled
* Operates on 13.8 VDC
* 120 volt 60 Hz wall transformer included
* Ideal for the service bench
* Equipped with LCD display
* Supplied with a telescoping antenna
* Audio output 1.8 Watts
* LCD window display 1 MHz, 250 kHz and 100 kHz
* Extremely well built to industry standards
* Dimensions: 2.95" (H) x 7.09" (W) x 7.09" (D)
* Weight 4.63 lbs

this is one years old unit with little usage
if you are interestd in this unit feel free to send me e-mail
for more information
http://www.stdradio.com/rcvr.html
http://www.martin-lynch.co.uk/ax700.htm

Standard CCR708A 50-905MHz Scanner / Spectrum Disp $799<----(above is
what I found from some site
they sale this used unit still $799, But I won't asking for this much,
"$550" including SHIPing UPS and INSURED)

2825. For Trade? 1st Shuttle memoribila

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: sdoyle@mail1.sas.upenn.edu
Message-ID: <64t3m7$r8g$3@netnews.upenn.edu>
Source record: 17647

I have a bunch of newspaper & magazine clippings & articles from the first space shuttle launch. Also several 8x10 B&Ws and color slides from NASA. There may also be some original color 8x10s of the launch, I'll have to check. I might even be able to dig up some folders and stickers. (I was a news photographer on the base during the 1st launch. Such wonderful memories!)

Anyway, I don't want to keep them anymore, I need to clean out my life and living space. I don't know anyone who would want these, so I'm asking around.

I thought perhaps someone might like to either trade me for something, or just give me some cash outright. I don't know what this would be worth to a collector, but I'm not trying to get rich on it. I just want to give it to someone who will appreciate it before I just go and trash it all.

Something that I'd like to trade for would be postage stamps, either from around the world or some older US stamps, mint or used. I am trying to introduce some girls to the hobby and need a good supply of stamps for them.

If anyone is interested, I am willing to pay the shipping of this stuff. Please e me or call. I live in Phila, PA. Thanks.

Sandra
sdoyle@sas.upenn.edu
215-898-8106

2826. ARLK090 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk090.1997@arrl.org>
Source record: 17648
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK090
ARLK090 Keplerian data

ZCZC SK90
QST de W1AW
Keplerian Bulletin 90 ARLK090
From ARRL Headquarters
Newington, CT November 18, 1997
To all radio amateurs

SB KEP ARL ARLK090
ARLK090 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

Sputnik Jr
1 24958U 97058C 97322.24206762 .00039460 00000-0 46131-3 0 00237
2 24958 51.6573 31.3847 0007616 334.7656 25.3063 15.61152298002277
AO-10
1 14129U 83058B 97312.29306154 .00000077 00000-0 10000-3 0 5144
2 14129 26.3940 117.9426 6029990 166.3756 222.7043 2.05880583 80357
RS-10/11
1 18129U 87054A 97322.00503945 .00000087 00000-0 78737-4 0 04619
2 18129 82.9213 125.0426 0011769 147.8564 212.3309 13.72386158521335
UO-11
1 14781U 84021B 97322.11588796 .00000157 00000-0 34248-4 0 00229
2 14781 97.8522 297.3406 0010619 228.5046 131.5227 14.69616816733867
RS-12/13
1 21089U 91007A 97322.08022845 .00000060 00000-0 48128-4 0 00386
2 21089 82.9252 164.5275 0027872 227.8244 132.0544 13.74088482340297
UO-14
1 20437U 90005B 97322.24575146 .00000056 00000-0 38253-4 0 3122
2 20437 98.5088 40.5056 0011525 110.9095 249.3321 14.29982112408235
RS-15
1 23439U 94085A 97321.95674699 -.00000039 00000-0 10000-3 0 02747
2 23439 64.8138 264.1888 0146069 102.5401 259.1903 11.27528536119278
AO-16
1 20439U 90005D 97322.18543687 .00000028 00000-0 27511-4 0 01214
2 20439 98.5297 43.7325 0011951 113.5840 246.6601 14.30027294408248
```

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RS-16
1 24744U 97010A 97322.19019571 .00006438 00000-0 20641-3 0 01162
2 24744 97.2632 224.3310 0004986 262.5836 97.4858 15.32673567039666
DO-17
1 20440U 90005E 97322.22591514 .00000017 00000-0 23140-4 0 01170
2 20440 98.5333 44.7394 0012082 112.2809 247.9661 14.30170657408281
WO-18
1 20441U 90005F 97322.22734708 .00000014 00000-0 22168-4 0 01351
2 20441 98.5298 44.6194 0012677 113.7937 246.4579 14.30136895408285
LO-19
1 20442U 90005G 97322.18214935 .00000063 00000-0 40883-4 0 01305
2 20442 98.5333 45.3339 0013452 114.4445 245.8147 14.30254827408302
FO-20
1 20480U 90013C 97321.85985461 -.00000004 00000-0 61721-4 0 00295
2 20480 99.0653 254.6668 0540699 29.5518 333.5014 12.83241228364418
AO-21
1 21087U 91006A 97322.00603370 .00000094 00000-0 82657-4 0 08800
2 21087 82.9383 297.7234 0033951 198.4775 161.5151 13.74589758341284
UO-22
1 21575U 91050B 97322.18829855 .00000050 00000-0 30992-4 0 08197
2 21575 98.2804 17.1391 0007798 143.1342 217.0382 14.37096553332604
KO-23
1 22077U 92052B 97322.07829297 -.00000037 00000-0 10000-3 0 07176
2 22077 66.0850 183.0273 0000954 145.7560 214.3521 12.86304261247548
KO-25
1 22828U 93061F 97322.19576048 .00000037 00000-0 32067-4 0 05879
2 22828 98.5286 33.2634 0010761 130.1275 230.0851 14.28200835184192
IO-26
1 22826U 93061D 97322.19855619 .00000034 00000-0 31156-4 0 06057
2 22826 98.5322 33.1724 0009577 146.6925 213.4873 14.27854880216062
AO-27
1 22825U 93061C 97322.24198563 .00000044 00000-0 35186-4 0 06238
2 22825 98.5305 32.9280 0008944 144.5951 215.5825 14.27744423216059
FO-29
1 24278U 96046B 97322.07126550 -.00000074 00000-0 -41643-4 0 01376
2 24278 98.5212 342.1853 0352131 147.2645 215.0857 13.52634578061922
MO-30
1 24305U 96052B 97322.19368867 .00000204 00000-0 20364-3 0 01779
2 24305 82.9346 240.7636 0030421 134.8237 225.5390 13.73099921060190
Mir
1 16609U 86017A 97322.24053318 .00009078 00000-0 11257-3 0 07860
2 16609 51.6549 31.3787 0007352 351.8358 8.2514 15.60846005671079

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
November 22, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX
```

2827. Sputnik 40

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: jmt@rfci.NET
Message-ID: <199711182308.SAA06152@rfci.net>
Source record: 17649

Sputnik 40 was heard loud and clear in Rutherfordton, NC 11-18-97, 04:28 UTC time and date. I have been monitoring it for the past 3 days and every contact is about a RST 549 when at it's nearest point to my location. Guess the MIR's packet message system is still off-line due to time to check and empty all the mail before they put it back on line.
Good to hear the Dove Oscar back on line... I know it's been back on for a while now, just wanted to say Cheers to the hard work to get it back on. It gives me like 10 over when it is directly overhead!... not bad on 2 meters for 800 miles... heh. RST 599

Anyone needing a good site for Mir information check out:
http://members.aol.com/k5wx/index.html

I use Logsat for tracking and a Yaesu FT-290RII 2 meter all mode with a Ringo Ranger and RG 8 mini coax.

73's
KF4TUZ, Spindale, NC

2828. Re: Seminar on the possibility of an ancient civilization on Mars

Newsgroup: rec.radio.amateur.space
Date: 1997-11-18 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34727E12.55C2@inreach.com>
Source record: 17650

lurus@seas.upenn.edu wrote:
>
> The MARTIAN ENIGMAS -- Presented by Dr. Mark J. Carlotto
>
> WHEN: Thursday, November 20, 1997
> 4:00 PM - 6:00 PM
> WHERE: Meyerson Hall B1
> University of Pennsylvania
> Philadelphia, PA 19104
>
> Abstract- Opinions about the possibility of life on Mars have changed over
> the years
> - from Percival Lowell's canals, to the dead planet imaged by the early
> Mariner missions to Mars, to the enormous volcanoes, great canyon systems,
> and channels carved by water seen by Mariner 9 and Viking. Among Viking's
> lesser-known discoveries was the "Face on Mars" - a mile-long formation
> resembling a humanoid head staring straight up into space.
>
> Although NASA has not apparently taken the time to study the Face in any
> depth, it has been the focus of serious investigation outside of the
> planetary science community for almost twenty years. Scientists and
> engineers from a variety of fields have examined the Viking imagery and
> conclude that certain objects including the Face may be artificial in
> origin and deserve further study.
>
> With NASA's recent announcement concerning the possible discovery of
> fossilized micro-organisms, opinions about life on Mars are changing once
> again. If microbes are now considered within the realm of possibility, why not
> intelligent life? Could the Face and other nearby objects have been built by
> an ancient technological civilization that vanished long ago, seemingly
> without a trace?
>
> Our latest probe, the Mars Global Surveyor, which is now in orbit around
> the Red Planet contains a camera with a resolution almost 50 times better
> Viking's. A camera that can shed new light on these mysteries.
>
> This presentation looks at both sides of the question, and presents
> compelling evidence in support of the claim that these objects may be
> precisely what many scientists have sought for decades: the first hard
> evidence that we are not alone.
>
> Brief Biography
>
> Mark Carlotto was born in New Haven, Connecticut in 1954. He attended

> Carnegie-Mellon University, receiving his Ph. D. degree in Electrical
> Engineering in 1981. Dr. Carlotto has over twenty years of experience in
> digital image processing and satellite remote sensing and has held a
> variety of positions in academia and industry. He has published over sixty
> technical and scientific papers in his field of expertise. His book, "The
> Martian Enigmas," describes in detail his analysis of imagery of the Face
> and other unusual objects on the surface of Mars imaged by a Viking Orbiter
> spacecraft in 1976.

Another piece of junk for the foolhardy to waste their time and money
on.

I have a flower arrangement in the living room, that when the light and
viewing angle are just right, the face of King Neptune is unmistakable.

So, what am I to conclude from this. The guy is a peeper?

2829. Seminar on the possibility of an ancient civilization on Mars

Newsgroup: rec.radio.amateur.space
Date: 1997-11-19 00:00:00 UTC
From: lurus@seas.upenn.edu
Message-ID: <64tcsddni8@netnews.upenn.edu>
Source record: 17651

The MARTIAN ENIGMAS -- Presented by Dr. Mark J. Carlotto

WHEN: Thursday, November 20, 1997
4:00 PM - 6:00 PM
WHERE: Meyerson Hall B1
University of Pennsylvania
Philadelphia, PA 19104

Abstract- Opinions about the possibility of life on Mars have changed over the years
- from Percival Lowell's canals, to the dead planet imaged by the early Mariner missions to Mars, to the enormous volcanoes, great canyon systems, and channels carved by water seen by Mariner 9 and Viking. Among Viking's lesser-known discoveries was the "Face on Mars" - a mile-long formation resembling a humanoid head staring straight up into space.

Although NASA has not apparently taken the time to study the Face in any depth, it has been the focus of serious investigation outside of the planetary science community for almost twenty years. Scientists and engineers from a variety of fields have examined the Viking imagery and conclude that certain objects including the Face may be artificial in origin and deserve further study.

With NASA's recent announcement concerning the possible discovery of fossilized micro-organisms, opinions about life on Mars are changing once again. If microbes are now considered within the realm of possibility, why not intelligent life? Could the Face and other nearby objects have been built by an ancient technological civilization that vanished long ago, seemingly without a trace?

Our latest probe, the Mars Global Surveyor, which is now in orbit around the Red Planet contains a camera with a resolution almost 50 times better Viking's. A camera that can shed new light on these mysteries.

This presentation looks at both sides of the question, and presents compelling evidence in support of the claim that these objects may be precisely what many scientists have sought for decades: the first hard evidence that we are not alone.

Brief Biography

Mark Carlotto was born in New Haven, Connecticut in 1954. He attended Carnegie-Mellon University, receiving his Ph. D. degree in Electrical Engineering in 1981. Dr. Carlotto has over twenty years of experience in digital image processing and satellite remote sensing and has held a variety of positions in academia and industry. He has published over sixty technical and scientific papers in his field of expertise. His book, "The

Martian Enigmas," describes in detail his analysis of imagery of the Face and other unusual objects on the surface of Mars imaged by a Viking Orbiter spacecraft in 1976.

2830. WTB 70 CTM Pre-amp and @ meter Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-11-19 00:00:00 UTC
From: <>
Message-ID: <6504jqopd1@news.netusa1.net>
Source record: 17652

Hi everyone

I'am new to Satilite and need a 453MHZ pre-amp and
2 meter amp about 35 watts in and 150 or so watts out.
I talk to some people from AMSAT an they told me this is what I needed. If
not please let me know, I hate to spend money on things
I dodnt need and that would clause problems.

Thanks Carl Walthall

2831. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-19 00:00:00 UTC
From: John <John.brown@mailexcite.com>
Message-ID: <3473E991.1FDA@mailexcite.com>
Source record: 17653
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Dr. Bellows wrote:
>
> JON wrote:
> >
> > Well maybe I don't know too much about Amateur Radio, but the first thing I
> > thought of when i saw this posting, was this is a slam on the ARRL and what
> > have the two got to do with each other! Something more time appropriate
> > might have been... "Low solar activity got you down... join AMSAT we're
> > always up. But what do I know about radio. de W4ABC
> >
> > Vince Fiscus, KB7ADL <fiscus@mcn.net> wrote in article
> > <64g6mf$3ks_002@home.wtp.net>...
> > > Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How
> >
> > > about you?
>
> I am also a member of the ARRL, although I do not like their viewpoints
> lately, and WELCOME a message such as the one posted giving me an
> alternative group to join that may have issues more in the direction of
> myself. I don't think wording it any other way would have got the point
> accross that I indeed understood.

Comments of an obvious tech lite!
John

2832. Re: ARRL got you down? Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: "Dr. Bellows" <no@spam.com>
Message-ID: <34741E2D.749F@spam.com>
Source record: 17654
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

John wrote:
>
> Dr. Bellows wrote:
> >
> > JON wrote:
> > >
> > > Well maybe I don't know too much about Amateur Radio, but the first thing I
> > > thought of when i saw this posting, was this is a slam on the ARRL and what
> > > have the two got to do with each other! Something more time appropriate
> > > might have been... "Low solar activity got you down... join AMSAT we're
> > > always up. But what do I know about radio. de W4ABC
> > >
> > > Vince Fiscus, KB7ADL <fiscus@mcn.net> wrote in article
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> > > > Where was the slam Patty? I'm a member of the ARRL as well as AMSAT. How
> > >
> > > > about you?
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> > I am also a member of the ARRL, although I do not like their viewpoints
> > lately, and WELCOME a message such as the one posted giving me an
> > alternative group to join that may have issues more in the direction of
> > myself. I don't think wording it any other way would have got the point
> > accross that I indeed understood.
>
> Comments of an obvious tech lite!
> John

Comments of an obvious Troll!

2833. Sat Tracking Keps Alorithm?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: DJROUND@globalnet.co.uk
Message-ID: <6517cm$o7j$1@heliodor.xara.net>
Source record: 17655

Ive got to write some C++ source code to control a real time geostationary and low Earth orbit sat tracking system for marine vehicles.
Does anyone know where I can get a copy of some working C++ source code to calculate simple AZ / EL parameters using the standard TLE keps. Or even, some information on how to calculate the position of an orbitting sat?
And what the hell-since Im asking..... Does anyone know a formular for taking current pitch / roll / az parameters from a ship in a rough sea and converting them to AZ / EL for effectively stablising the platform and controlling the dish?

As you can see Im going to be a bit busy over the next few months. When its all down you can all be asured Ill be posting it into the group with code for everyone to play with.. (not much use unless you have a boat with a dish and need to track sats really :-))

Thanks for reading...
Darren

djround@globalnet.co.uk

2834. Sorry.. I mean Algorithm

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: DJROUND@globalnet.co.uk
Message-ID: <6517rd$o7j$2@heliodor.xara.net>
Source record: 17656

I never was any good at English.... :-)

2835. December Massachusetts 2 meter balloon launch

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <651p31$65u$1@news.ysu.edu>
Source record: 17657

This is a request for volunteers to serve as official tracking
stations.

A general notice will be posted here soon that will describe
the use of the more common FM equipment to listen to the beacon,
as well as a refined beacon frequency.

DECEMBER MASSACHUSETTS BALLOON LAUNCH
2 Meter Tracking Stations sought to follow beacon

A 2 meter CW beacon transmitter will be launched by balloon from
Plymouth, Massachusetts on Tuesday, December 2, at about 3:00 PM as
part of a middle school earth science project; the launch date is
subject to change in case of adverse weather conditions.

I'm looking for volunteer radio trackers to assist in tracking the
2 meter signal from fixed or mobile locations. The aim will not be
recovery (the electronics are expendable), but determination of
approximate balloon position by antenna headings.

Of course I welcome participation at any level, even if you simply
report that you heard the signals, but ideally I'm seeking a few
well-equipped fixed stations to serve as primary tracking sites in
widely spaced locations in eastern Massachusetts. Especially
desirable are stations located far out on Cape Cod (Provincetown
to Chatham) and also coastal locations north of Boston (Gloucester
and vicinity), but anything in the eastern section of the state will
be fine.

Remember that this beacon may well be received for *100 miles*
or more away from its position if it continues to transmit at
high altitude, so the area of coverage may far exceed the optimum
tracking region.

You should have some kind of rotatable yagi (vertical polarization
strongly preferred) and a radio equipped to receive 2 meter CW
(all mode VHF or receiving converter plus HF sideband). AMSAT
stations fit this description perfectly, so please let any satellite
ham friends know of this opportunity.

If this interests you, please email me a short description of your
station equipment and location. Although I may not be able to respond
directly to all your email, you may ask to be put on a special email
list that will issue further notices on this event.

There will also be up-to-the-minute information (including complete technical information as it becomes available) for this event on the High Altitude Balloon Launch Information Center (HABLIC) website.

Hank Riley, N1LTV
h1riley@umassd.edu
Plymouth Balloon Launch Technical Director

http://www.geocities.com/CapeCanaveral/3161/hablic.htm

2836. December Massachusetts Balloon Launch

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: h1riley@umassd.edu
Message-ID: <3473eac3.0@gatekeeper.umassd.edu>
Source record: 17658

This is a request for volunteers to serve as official tracking
stations.

A general notice will be posted here soon that will describe
the use of the more common FM equipment to listen to the beacon,
as well as a refined beacon frequency.

DECEMBER MASSACHUSETTS BALLOON LAUNCH
2 Meter Tracking Stations sought to follow beacon

A 2 meter CW beacon transmitter will be launched by balloon from
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be fine.

Remember that this beacon may well be received for *100 miles*
or more away from its position if it continues to transmit at
high altitude, so the area of coverage may far exceed the optimum
tracking region.

You should have some kind of rotatable yagi (vertical polarization
strongly preferred) and a radio equipped to receive 2 meter CW
(all mode VHF or receiving converter plus HF sideband). AMSAT
stations fit this description perfectly, so please let any satellite
ham friends know of this opportunity.

If this interests you, please email me a short description of your
station equipment and location. Although I may not be able to respond
directly to all your email, you may ask to be put on a special email
list that will issue further notices on this event.

There will also be up-to-the-minute information (including complete technical information as it becomes available) for this event on the High Altitude Balloon Launch Information Center (HABLIC) website.

Hank Riley, N1LTV
h1riley@umassd.edu
Plymouth Balloon Launch Technical Director

http://www.geocities.com/CapeCanaveral/3161/hablic.htm

2837. TS-790A Service Manual????

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: Bill & Chris Shell <shell@callamer.com>
Message-ID: <652mnc$g1l$1@zinger.callamer.com>
Source record: 17659
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap

Hello,

I am looking for anyone that has or knows of anyone with a Service Manual
for a Kenwood TS-790A.

Kenwood has said they are no longer available.

If anyone know of one please send me an email.

TU es 73, Bill
N6WS
shell@callamer.com

2838. help with FO-29

Newsgroup: rec.radio.amateur.space
Date: 1997-11-20 00:00:00 UTC
From: kd4cga@tallassee.net
Message-ID: <880075048.4227@dejanews.com>
Source record: 17660

Anyone know of a web site where
I can get current info on fo-29?
The jas-2 site is not working.
Need current status info etc.
Thanks
de Larry

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2839. FS: 2mtr & 70cm Sat-Crossed X-Yagis

Newsgroup: rec.radio.amateur.space
Date: 1997-11-21 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcf684$83dac5c0$f28d56cf@Kwiknet.ppp>
Source record: 17661

Hello All;
I'm selling used 2mtr 2x11 Element Crossed satellite X-yagi and
70cm 2x19 Element Crossed satellite X-Yagi.
Both are in good cosmetic & working shape. For details Please re:
email: n2rif@amsat.org You can also try calling but my phone is
usually busy... My ph# is 609-386-9382.. I am Asking $155.00 OBO
for both. No CODs All cash offers will be considered
Also since both of these antennas are too large to probably ship.
It is better for anyone within driving distance of my qth to come,
look and consider buying these beams. My qth is Burlington, NJ
about 8 miles N-E of Phila, Pa and 12 miles S-E of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2840. Two Line Elements and Outlook Express!!

Newsgroup: rec.radio.amateur.space
Date: 1997-11-21 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <199711211435.PAA19058@basement.replay.com>
Source record: 17662

Hello!

Is anyone having any luck getting tles sent from David Ransom, David Cottle, or Ken Ernandes to work properly in STSPLUS, if those tles were received with Microsoft Outlook Express?

It seems that the mailer somehow changes the critical spacing of the tles, which renders them useless. It is a known fact that Outlook Express removes a blank line from messages sent using PGP and that line is necessary to decode the message.

The "preview" version of Express showed the tles as an "attachment" and they worked fine, now that they appear in the body of the message they are corrupt!

I cannot believe that I am the only person in the world using Outlook Express and STSORBIT PLUS! And yet I have not seen any other messages regarding this behavior by the program.

The Outlook Express newsgroup is no help at all since none of them have a clue what a two line element is, and they are not concerned anyway because they do not do satellite tracking!

The "work around" I have found is this:

1/ In OE highlight the name of the message which has the tle info.
2/ Under FILE, choose PROPERTIES
3/ Choose DETAILS from the pop up window
4/ then choose MESSAGE SOURCE
5/ Find the two line information.
6/ Highlight the information and COPY it into Notepad then into
STSPLUS and it will work fine.

This shows that somewhere in the translation from the MESSAGE SOURCE to the actual display of the message the format is somehow changed and the data is corrupted.

All my other mailers receive the tles just fine, it is not the source but Outlook Express!

Please post any comments to the group.

2841. NORAD Two-Line Orbital Element Set: Space Shuttle (97325.25000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-21 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <6554lr$15c$1@blackbird.afit.af.mil>
Source record: 17663

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 87
1 25061U 97073A 97325.25000000 .00005476 -70751-5 71124-5 0 82
2 25061 28.4671 175.1452 0003853 302.9205 64.5076 15.96892121 225
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2842. WTB No Frills 440 mobile

Newsgroup: rec.radio.amateur.space
Date: 1997-11-21 00:00:00 UTC
From: Mike Kulyk <mkulyk@worldnet.att.net>
Message-ID: <654an3$nn4@mtinsc05.worldnet.att.net>
Source record: 17664

I am looking for a older, or non working amateur grade 440 mobile to listen to MIR, need not be complete, need not be working

Mike WB2GLW

2843. Re: boy scouts want to talk to shuttle.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-21 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34767E60.7A5B@inreach.com>
Source record: 17665

Brett Sutherland wrote:
>
> My troop would like to talk to space. I am a fairly new ham and am not
> quite sure how to go about it. I suppose other satellite work would be nice
> too. We generally take a 2m handheld with us on our outings. thank you all
> very much.

http://www.arrl.org/sarex/sarexfaq.html

Frequently Asked Questions
About SAREX
Page author:
sarex@arrl.org
Page last
revised 10:57 ET 09/03/97

SHUTTLE AMATEUR RADIO EXPERIMENT (SAREX)
BULLETIN: Summer 1997

This information is provided by:
THE AMERICAN RADIO RELAY LEAGUE (ARRL)
Educational Activities Department (EAD)
225 Main Street Newington CT 06111-1494 USA
Telephone: (860) 594-0301 FAX: (860) 594-0259
Internet: sarex@arrl.org ARRL BBS: (860) 594-0306
World Wide Web: http://www.arrl.org/

FREQUENTLY ASKED QUESTIONS

WHAT IS SAREX?
With the help of Amateur Radio clubs and ham radio operators, US
astronauts
can speak over the ham airwaves while in orbit. They talk directly with
students, showing teachers, students, parents and communities how
Amateur
Radio energizes youngsters about science, technology, and learning.
The
program is called SAREX, the Shuttle Amateur Radio EXperiment.

NASA's intent in having astronauts take part in SAREX is to involve the
largest possible numbers of people, particularly youths, in technology
and
the US space program with the help of Amateur Radio.

During a SAREX mission, the astronauts make scheduled and unscheduled
Amateur Radio contacts with schools, random contacts with Amateur Radio
operators and contact with the astronauts' families.

A few schools are selected from around the world for scheduled contacts with
the shuttle during SAREX missions. These contacts give the schools a 95-
percent chance at a successful contact. Six or more students at each school
ask the astronauts questions, and the nature of these contacts embodies the
primary goal of SAREX--to excite student interest in learning.

WHO SPONSORS SAREX?
The American Radio Relay League (ARRL), the Radio Amateur Satellite
Corporation (AMSAT) and NASA sponsor these exciting experiments.
AMSAT volunteers support technical operations, and mentor school
groups.
ARRL provides SAREX information. ARRL and NASA HQ create and
distribute SAREX lesson plans and resources for teachers. SAREX is
supported by the Federal Communications Commission.

Hundreds of Amateur Radio operators, including those from NASA Amateur
Radio clubs at Johnson Space Center, Goddard Space Flight Center, and
Marshall Space Flight Center, work behind the scenes.

HOW CAN I -- A TEACHER -- GET STARTED IN SAREX?
Schools wanting a scheduled SAREX contact with the astronauts are
required
to submit a proposal and a SAREX school application to ARRL.

While only a few schools get scheduled contacts per mission, all schools
can
participate by eavesdropping, or by trying to make a random contact with
the
astronauts. SAREX lesson plans are available from ARRL for all schools
who
participate. Imagine listening in on the astronauts from your classroom!
If you
are a school teacher, but are unfamiliar with ham radio, you can still
take part
in SAREX. Contact ARRL EAD to get a list of your local Amateur Radio
clubs
to assist you.

If you are a parent, grandparent and/or a ham radio operator, contact
ARRL
EAD and a local school. EAD will send materials, including ways to
convince
teachers and school administrators that Amateur Radio is an important
discipline the school should take advantage of on a full-time basis.
This is a
tremendous opportunity for you to showcase SAREX and Amateur Radio to
students of all ages.

Note: Future Shuttle missions will mainly be dedicated to bringing parts
of the

International Space Station into space. Therefore, we anticipate that there will
most likely be one SAREX mission in 1998, and one in 1999. Details on any
possible SAREX missions in those years will be posted on the ARRLWeb as soon as they become available.

HOW DO I APPLY FOR A SCHOOL RADIO CONTACT?
If your school is interested in SAREX, you must complete a SAREX school application and write an educational proposal. ARRL collects these for the
SAREX Working Group who makes the final selection with the astronauts. All
grade levels and type of schools (rural, suburban and particularly urban) are
encouraged to apply.

Note: This program also encompasses "MirEX," which involves the Russian Space Station, Mir. (The word "Mir" means "peace" in Russian.) Those submitting SAREX applications can choose a preference at the top of the SAREX application form: simply check the "SAREX" or "MirEX" box. If you want to apply for an opportunity for a contact with either spacecraft,
then check the "no preference" box at the top of the SAREX school application.

For a SAREX school application send a business-sized self-addressed stamped
envelope to ARRL, or email your request for an electronic version to: sarex@arrl.org

A proposal must accompany all completed applications.
The SAREX Working Group and NASA want to know-
1) How will you:
a) integrate this activity into the school curriculum and
b) involve as many grade levels as you can, participating through essay contests, poster drawing,
letter writing, etc.?
2) Do you have an experienced group of hams to assist in setting up all necessary Amateur Radio
equipment and antennas
3) How will you get as much media coverage as possible?

HOW WILL I KNOW IF MY SCHOOL IS SELECTED FOR A CONTACT?
Schools that have been selected for SAREX scheduled contacts are called by a
SAREX coordinator. NASA requires selections to be made about six months prior to launch. If a school is not chosen, its application is recycled for future
missions. Note: Schools typically wait one year or longer.

I AM A HAM. HOW CAN I INTRODUCE SAREX TO MY CHILD?
Bring a shortwave receiver to school and let students eavesdrop on Amateur
Radio retransmissions of NASA shuttle-to-Mission-Control audio. Then set
up a 2-meter satellite ground station in class, and try a random SAREX contact.
(Or, a Mir contact.) The teacher can apply for a future school contact, almost
guaranteeing that students will have an opportunity to communicate with the
crew during a SAREX mission.

ARE THERE VIDEOS ON SAREX?
You and your class will enjoy watching students talk to astronauts via ham
radio. ARRL has a video all about space, of over 1.5 hours of programming,
at the cost of (your and our) duplication, shipping (in the US) and handling for
$12.00. Call Jean, WB3IOS, at 860-594-0219, 9:00 AM to 4:30 PM (Eastern),
using a credit card. Or send a check to ARRL EAD, 225 Main St, Newington
CT 06111. Volume 2 Shuttle Amateur Radio EXperiment includes--
-- "Ham Radio In Space:" An overview of Amateur Radio in space--from satellites to the space shuttles, and beyond. (30 min)
-- "SAREX Space Shuttle Mission STS-51F:" Astronaut Tony England, W0ORE, recounts SAREX aboard Space Shuttle Challenger, as the 2nd astronaut in history to operate ham radio in space. (18 min)
-- "SAREX Space Shuttle Mission STS-58:" Highlights of the volunteer and
student prep, and actual SAREX contact made by Cheatham County Schools, TN. (45 min)

CAN HAMS MAKE AN UNSCHEDULED SAREX CONTACT?
Yes. The astronauts have not lost sight of why SAREX has been so successful.
It is the Amateur Radio community that has brought astronaut's voices into
schools. During SAREX missions, crew members make random contacts with
earth-bound hams. They make contacts during their breaks, pre-sleep time and
before and after meal-time. Astronauts have contacted thousands of hams
around the world. On many missions, they have taken a 2-meter packet radio
station. Computer software allows the crew to operate the packet gear in
unattended mode, and hams can make contacts when the astronauts are working.

WHAT TYPE RADIO DO I NEED?
A typical SAREX ground station includes a 2-meter FM transceiver and 25-100
watts of output power. A circularly polarized crossed-Yagi antenna capable of
being pointed in both azimuth (N-S-E-W) and elevation (degrees above the
horizon) is desirable. But successful contacts have even been made with
verticals and groundplane antennas. Commercial and public domain software
is available to help track when the shuttle will be in range of your station, and
where to point your antenna. For more details on assembling your
satellite/SAREX station, get the "Satellite Experimenter's Handbook" from
ARRL (see last section of this document).

HOW DO I TALK TO ASTRONAUTS?
You may communicate with the astronauts using voice, packet (computer) radio
or television. It all depends on what equipment the astronauts take into space.
Astronauts aboard the Space Shuttle Columbia in 1996 made hundreds of
random voice contacts with ham radio operators. When the astronauts were
busy with other activities, a computer ham station aboard the orbiting shuttle
automatically made contact with thousands more hams. On other missions,
Amateur Radio Slow Scan Television (SSTV) and Fast Scan Television (FSTV)
were onboard allowing hams a glimpse at life in space.

WHAT ARE SAREX RADIO FREQUENCIES?
The following VHF frequencies are used for some SAREX missions. These
frequencies were chosen after much deliberation, to minimize problems
between SAREX and other 2-meter users. If you have comments, please direct
them to AMSAT via Frank Bauer, KA3HDO, at his address in the Radio
Amateur Callbook or email ka3hdo@amsat.org or ARRL EAD. We appreciate
the cooperation of all amateurs in making SAREX successful.

VHF Frequencies used for SAREX:

FM Voice Downlink: (Worldwide) 145.55 MHz
FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHz
FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHz
FM Packet Downlink: 145.55 MHz
FM Packet Uplink: 144.49 MHz

IMPORTANT: During shuttle missions to the Russian Mir Space Station, a
different set of frequencies are used for SAREX. This is done so that

SAREX
will not interfere with the Amateur Radio station aboard Mir, which uses
145.55 MHz for most of its activities. The SAREX Working Group has decided
to use the following frequencies during shuttle/Mir docking missions:

VHF Frequencies use for SAREX during Shuttle/Mir Docking Missions:

FM Voice Downlink: 145.84 MHz
FM Voice Uplink: 144.45, 144.47 MHz

Most SAREX operations are split-frequency (everyone uses separate receive
and transmit frequencies).
Note: Please do not transmit on the shuttle's Downlink frequency. The downlink is your receiving frequency. The uplink is your transmitting frequency. Earth stations should listen to the downlink frequency and transmit
on the uplink frequency only when the shuttle is in range and the astronauts
are on the air.

ARE ALL OF THE CONTACTS MADE BY THE ASTRONAUTS
RANDOM?
During SAREX missions, astronauts' work schedules dictate when they can operate the radios. So most of the general contacts they make are random.

WHAT ARE MY CHANCES OF MAKING A RANDOM CONTACT?
The SAREX Working Group recognizes the long-standing commitment of the ham radio community in supporting SAREX, and asks the crew to do as many
general ham contacts as possible during flights.

CAN I USE MY SHORTWAVE RADIO TO EAVESDROP ON THE CREW?
When a shuttle mission carries the SAREX payload, members of Goddard Amateur Radio Club (MD) re-transmit live, shuttle air-to-ground audio over
Amateur Radio frequencies from their club station, call sign
WA3NAN. This station, and some VHF and UHF repeater groups, provide this
service so amateurs and students can hear the educational communications.
You will hear the astronauts and Mission Control, and bulletins about SAREX
activities. WA3NAN operates on the high frequency (HF) bands at 3.86, 7.185,
14.295, 21.395, and 28.65 MHz and--in the Greenbelt, MD area--on VHF at 147.45 MHz (FM).

CAN I RE-TRANSMIT COMMUNICA-TIONS ON THE HAM
FREQUENCIES
FCC rules, Part 97.113 (e) , state that hams are permitted to retransmit
shuttle
air-to-ground communications, provided that approval has been obtained
from
NASA. In 1990, ARRL sought NASA's permission, on behalf of radio
amateurs, to retransmit communications. NASA Public Affairs Office
encouraged such retransmissions, indicating that the communications are
public domain.

Please follow these guidelines if you plan to rebroadcast NASA shuttle
communications,
1) In keeping with good amateur practice and FCC rules, shuttle
retransmissions should be limited to educational missions, such as
those
carrying the SAREX payload.
2) Retransmissions should be done manually (with a control operator
present).
3) NASA audio contains crew "wake-up music." Amateurs should avoid, if
at
all possible, retransmitting music or other prohibited transmissions
listed by the
FCC rules (Part 97.113).

HOW CAN I TRACK THE SHUTTLE WITH A COMPUTER?
Software is available for tracking the shuttle on a personal computer.
Here are some options (ARRL in no way warrants these products or
services):

AMSAT TRACKING PROGRAMS:
The Radio Amateur Satellite Corporation (AMSAT-NA) has computer
programs for IBM, Macintosh, Apple, Commodore, and other computers.
Contact AMSAT-NA at 850 Sligo Avenue, Suite 600, Silver Spring MD
20910, Phone (301) 589-6062, FAX (301) 608-3410,
email martha@amsat.org
AMSAT also has a collection of free software for download:
World Wide Web: http://www.amsat.org
Anonymous FTP: ftp.amsat.org

STSPLUS (Shareware for IBM):
This software, designed by David Ransom Jr., has excellent graphics and
maps
to help create a mock Mission Control Center. STSPLUS and other
tracking
software is posted on Spacelink, NASA's electronic information
system;
Spacelink:
Modem: (205) 895-0028 Terminal emulation VT-100, Data format 8-N-1
World Wide Web: http://spacelink.msfc.nasa.gov
Satellite tracking software may be found in the following Spacelink
directory:

Instructional.Materials/Software

OrbiTrack (MacIntosh):
BEK Developers, PO Box 47114,
St. Petersburg, FL 33743-7114
e-mail (Bill Bard): 75366.2557@compuserve.com

SatTrack (MacIntosh):
Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306
FTP sumex.stanford.edu
SatTrack can be found in the following directory:
/info-mac/application

World Wide Web sites offer ways to predict shuttle and satellite passes via the
Internet. Check the following WWW sites:
Lou Williams, KE4ARM: http://www.acs.ncsu.edu/HamRadio/
Terry Jones, NZ8C: http://www.datasync.com/~nz8c

WHAT ARE "KEPS?"
Shuttle-tracking software uses "Keps," or Klerian elements (also known as
"orbital" or "tracking" elements) to pinpoint the location of a shuttle. Keps
provide the software with a shuttle's orbital track, which the computer uses to
calculate its location. Using a tracking program tells an observer when a
satellite will appear above his or her horizon.

WHERE CAN I FIND KEPS?
During shuttle missions carrying SAREX, Keplerian elements are available
from:

AMSAT News Service publishes weekly nformation bulletins iincluding Keps
for the shuttle and satellites. These bulletins are distributed electronically
through amateur packet radio networks, landline networks and the World
Wide Web: http://www.amsat.org

AMSAT also has email mailing lists to deliver Keps. To subscribe, send a
message with your request to listserv@amsat.org
Include your call sign (if any), your email address, and the names
(shown below) of the mailing lists you wish to receive:
SAREX - mailing list
ANS - AMSAT News Service
AMSAT-BB - AMSAT Bulletin Board
KEPS - Keplerian Elements mailing list

Goddard Amateur Radio Club, WA3NAN, maintains a BBS which carries
Keps updated daily, SAREX bulletins and shuttle mission information.
Modem lines: 301-805-3251 and 301-805-3154
Internet: wa3nan.gsfc.nasa.gov
TCP/IP address: 128.183.105.17
Packet radio: WA3NAN, on 145.090 MHz, in the Maryland/DC area.

NASA Spacelink, NASA's electronic information system, carries current
shuttle mission status reports and Keps. (See address in section titled
"How Can I Track the Shuttle with a Computer?") Keps are in this
Spacelink directory:
Spacelink.Hot.Topics/Current.Shuttle.Mission/Keplerian.Elements

Johnson Space Center Amateur Radio Club maintains a service with the
latest
element sets available during a shuttle flight. Modem line:
281-244-5625
World Wide Web: http://www.phoenix.net/~mbordel/index.html

The NASA/GSFC ORBITAL DATA BULLETIN BOARD offers Keps at:
http://oigsysop.atsc.allied.com/index.htm

Each month, ARRL publishes an Orbital Calendar, which includes equator
crossings for amateur satellites and the Mir Space Station. This data is
helpful
for people who manually (without a computer) track satellites. To
receive a
copy, send a 4x9-inch self-addressed envelope with 2 units of
first-class postage
each month to: ARRL Technical Department (ORBITS), 225 Main Street,
Newington CT 06111-1494

NASA EDUCATIONAL RESOURCES
How do you find information on shuttle schedules, payloads, space
science and
mission lesson plans? NASA has materials and resources for educators:

Specific mission and payload information can be obtained directly from
NASA,
via the shuttle mission Home Page: World Wide Web
http://shuttle.nasa.gov

Teacher Resource Centers (TRC) have free-loan publications, slides,
audio
cassettes, videocassettes, computer programs and lesson plans. For
information, contact the NASA TRC that serves your region of North
America:

AK, AL, CA, HI, ID, MT, NV, OR, UT, WA, WY:
NASA Ames Research Center
Teacher Resource Center
Mail Stop 253-2
Moffett Field, CA 94035-1000
tel: (415) 604-3574

CA cities near Dryden Research Center:
NASA Teacher Resource Center
for Dryden Flight Research Center
45108 N. 3rd. Street East
Lancaster, CA 93535
tel: (805) 948-7347

Inquiries on the solar system and planetary exploration:
NASA Jet Propulsion Laboratory
Teacher Resource Center
Mail Code CS-530
4800 Oak Grove Drive
Pasadena, CA 91109-8099
tel: (818) 354-6916

CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI:
NASA Goddard Space Flight Center
Teacher Resource Laboratory
Mail Code 130.3
Greenbelt, MD 20771-0001
tel: (301) 286-8570

VA's & MD's Eastern Shores:
NASA Goddard Space Flight Center
Wallops Flight Facility
Education Complex-Teacher Resource Lab
Bldg. J-17
Wallops Island, VA 23337-5099
tel: (804) 824-2297/2298
World Wide Web: http://pao.gsfc.nasa.gov

FL, GA, PR, VI:
NASA John F. Kennedy Space Center
Educators Resources Laboratory
Mail Code ERL
Kennedy Space Center, FL 32899-0001
tel: (407) 867-4090

CO, KS, NE, NM, ND, OK, SD, TX:
NASA Johnson Space Center
Teacher Resource Center
Mail Code AP 2
2101 NASA Road One
Houston, TX 77058-3696
tel: (713) 483-8696

KY, NC, SC, VA, WV:
NASA Teacher Resource Center for Langley Research Center
at the Virginia Air and Space Center
600 Settler's Landing Road
Hampton, VA 23669-4033
tel: (804) 727-0900 x757
World Wide Web: http://seastar.vasc.mus.va.us

IL, IN, MI, MN, OH, WI:
NASA Lewis Research Center
Teacher Resource Center
Mail Stop 8-1
21000 Brookpark Road
Cleveland, OH 44135-3191
tel: (216) 433-2017

MS:
NASA Stennis Space Center
Teacher Resource Center
Building 1200
Stennis Space Center, MS 39529-6000
tel: (601) 688-3338

AL, AR, IA, LA, MO, TN:
NASA Teacher Resource Center
for Marshall Space Flight Center
U.S. Space & Rocket Center
P.O. Box 070015
Huntsville, AL 35807-7015
tel: (205) 544-5812

NASA Spacelink, a computer information service, contains lesson plans, classroom activities, astronaut data, entire publications and details about
current and historical programs. It is primarily for teachers, but anyone
with a personal computer, modem or Internet access can use it.
(See address in section titled "Can I Track the Shuttle with a Computer?").
For more information, contact: Spacelink Administrator, Mail Code CL01, Marshall Space Flight Center, AL 35812-0001.
For help with technical problems call the Spacelink Hot Line: 205-961-1225.

NASA Television offers a front-row seat at launches and during a mission's
space activities, the latest in space science, plus educational and historical
programs. They sometimes air live coverage of SAREX. NASA-TV is received by satellite dish, or may be on your local cable tv network.

Tuning-In NASA TV:
Effective March 15, 1997 NTV is available on GE-2, Transponder 9C at 85
degrees West longitude, vertical polarization, with a frequency of 3880 MHz,
and audio of 6.8 MHz.

For details, contact: Technology and Evaluation Branch, Education Division,
Code FET, NASA HQ, Washington D.C. 20546; Phone: 202-358-1540.

HOW DO I GET A SAREX QSL?
QSL cards are similar to postcards. Hams exchange QSLs to confirm their radio contacts with other stations. Participating in SAREX is an exhilarating
experience. But waiting for that coveted QSL card requires patience. Designing
a card for the ultimate DXpedition is a lengthy process.

After a SAREX mission, ARRL and the SAREX Working Group work with crew members to select photos from that mission, and design and layout the
QSL card. This may take a few months because of the astronauts' busy schedules. Once the card are printed, ARRL forwards them to the Amateur Radio club managing the QSLs.

Send your QSL cards or reports to ARRL. Include on your QSL or report: shuttle flight number (STS-xx), date, time in UTC, frequency and mode (voice, packet or sstv). If you wish to receive a card, you must include a large,
self-addressed, stamped envelope with proper postage or sufficient IRCs included.

These clubs have graciously volunteered to handle QSLs for the following
missions:

STS-74: Greater Norwalk Amateur Radio Club, Connecticut
STS-76: Nashoba Valley Amateur Radio Club, Massachusetts
STS-78: "The Net", Washington
STS-79: Bergen Amateur Radio Association, New Jersey

SAREX PATCHES
SAREX patches are available from AMSAT. These embroidered patches depict
the cooperative effort between NASA, AMSAT and ARRL. They are available for a $6 (US) donation, $8 elsewhere. Donations support SAREX activities
provided by AMSAT. Mail your order to: AMSAT-NA, 850 Sligo Avenue, Suite 600, Silver Spring, MD 20910-4703;
Phone: 301-589-6062; Fax: 301-608-3410; e-mail: martha@amsat.org

ARRL's SAREX RESOURCE LIST:
EDUCATIONAL SUPPORT & INFORMATION is available from the American Radio Relay League 's (ARRL) Educational Activities Department (EAD), 225 Main St, Newington CT 06111 USA
Phone 860-594-0301, Fax 860-594-0259; CompuServe ID: 70007,3373;
America Online: HQARRL1;
Internet: sarex@arrl.org; World Wide Web: http://www.arrl.org/

ARRL INFORMATION SERVER:
ARRL maintains an information email server. To receive an index of files on
the server, send a message to info@arrl.org. Leave the subject line

blank. On
the first line of your message, type SEND INDEX. On the second line,
type
QUIT. A list of all files on the ARRL infoserver will be emailed to
you.

ARRL BBS:
ARRL maintains a telephone bulletin board system; modem line is (860)
594-
0306. You need a computer, modem, communications software, and a long-
distance telephone line to access the BBS (the data word format is 8
bits, no
parity, and 1 stop bit).

ARRL FTP:
Amateur Radio software, distributed by ARRL is listed at a FTP site
maintained
by the Boston Amateur Radio Club. It is a public service of Oakland
University's Office of Computer and Information Services.
FTP: oak.oakland.edu/pub/hamradio/arrl/
World Wide Web: http://oak.oakland.edu/pub/hamradio/arrl/

SAREX ON THE WORLD WIDE WEB:
ARRL Web site: http://www.arrl.org/sarex/

AMSAT Web site: http://www.amsat.org

NASA's SAREX Web site: http://www.nasa.gov/sarex/sarex_mainpage.html

Goddard Amateur Radio Club Web Site:
http://garc.gsfc.nasa.gov/www/garc-home-page.html

Johnson Space Center Amateur Radio Club:
http://www.phoenix.net/~mbordel/index.html

W1AW BULLETINS:
ARRL's Amateur Radio station (call sign W1AW) transmits news bulletins
(9:45 PM, 12:45 AM EST) on the HF bands at 1.855, 3.99, 7.29, 14.29,
18.16,
21.39, 28.59 MHz and--in the Hartford, CT area--on VHF at 147.555 MHz.
Bulletins are also on Amateur packet radio.

AMSAT NET:
The AMSAT International Satellite Net on Tuesdays, 3.840 MHz, 0130Z to
0300Z, and on Sundays, 14.282 MHz, 1800Z to 2100Z, +/- QRM.

CAN I BECOME A HAM?
Amateur Radio operators, or "hams," are people from all walks of
life--no
matter your age, gender or physical ability. Getting started in Amateur
Radio
has never been easier! Contact ARRL to request a free Getting Started
package.

It contains details on your local Amateur Radio clubs, instructors, exam sites
and popular study guides.
Call ARRL's toll-free hotline: 1-800-32-NEW HAM (800-326-3942)
Why not get started, today!

ARRL BOOKSHELF
Call ARRL (860-594-0301) for book orders.

"Now You're Talking!" book (2nd ed) contains everything you need to pass
your Novice or Technician ham radio written exam.

"ARRL Technician Class Video Course" Learn the "ropes" with the "pros." You won't find a better course or a better deal anywhere. Five hours of excitement.

"ARRL "Tech Q & A,"in "question and answer" format for the code-free Technician exam. Brief explanations of the correct answers reinforce learning.

"The Satellite Experimenter's Handbook" has the information you need to communicate through, or receive signals from orbiting satellites and the
shuttle! Whether your interest is in ham satellites, weather satellites,or other
spacecraft, you'll find everything from setting up a ground station to antennas.

"ARRL Satellite Anthology" contains the best recent QST articles on amateur
satellites and spacecraft from OSCAR 10 to OSCAR 27, including: how to work DX via OSCAR 10 and 13, and how to get on the Pacsats and Russian "Easysats." There's even info about the planned "Phase 3D" Amateur satellite.

"Your Packet Companion" is perfect for the packet (computer) radio newcomer,
covers everything--from assembling a station to sending mail, from packet
satellites and spacecraft to the latest networking systems. Straightforward
writing and clear drawings get you on the cutting edge of digital ham radio.

"Practical Packet Radio" can make your life easier, whether you're setting up
your first packet station or exploring TCP/IP or another more-advanced technique. This book covers everything the active ham needs to know: setting
up a station, getting on the DX packet cluster, exploring bulletin boards and
satellites, and much more. A series of Appendices includes sources of

packet-
related hardware and software, a Glossary of Terms and the AX.25
protocol.

The American Radio Relay League
Newington CT USA

sarexfaq.txt aug 97 gs

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renew your membership
Email ARRL HQ
Email ARRLWeb webmaster
Page
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2844. rs-10

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: pflautt@freenet.columbus.oh.us
Message-ID: <6570vg$c1g@login.freenet.columbus.oh.us>
Source record: 17666

Is rs-10 still on the air.
Paul

--
pflautt@freenet.columbus.oh.us
paul.j.flautt@ameritech.com
KB8CMW @ W8CQK.CMH.USA.NOAM

2845. Re: help with FO-29

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: Oliver Welp <welp@muenster.de>
Message-ID: <34763A79.7BAD21@muenster.de>
Source record: 17667

Hi,

kd4cga@tallassee.net wrote:
>
> Anyone know of a web site where
> I can get current info on fo-29?

Try
http://www.kt.rim.or.jp/~jr1nvu/index.html

73 de Oliver
(DL9QJ, N3NSF)

--
[Oliver Welp - welp@muenster.de
welp@uni-muenster.de
http://www.muenster.de/~welp/
Tel./Fax: +49-2533-7312]

2846. FS: KC Tuner/Tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: "Mark E. Zaleski" <mezaleski@att.net>
Message-ID: <6560dl$i2u@mtinsc05.worldnet.att.net>
Source record: 17668
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space,rec.radio.swap

Won as a door prize at Dayton this year. Not into satellite operation.

- KC Tuner interface card (in factory sealed anti-static bag)
- Cable (8 pin DIN to DB25)
- KC Tracker software (Ver 2.43A)
- Manual

Asking $275. I will pay shipping ($$ COD) via Fedex. Please reply e-mail.

--
73 (Best Wishes),

Mark (WE8L)

2847. Satellite Ham Station

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: Jim Hong <jim@futurevision.net>
Message-ID: <6561s3$bk5$1@usenet88.supernews.com>
Source record: 17669

Hello,

I am new to ham sat and a looking for the BEST hardware & for this aspect of our hobby. Cost is not an issue, only QUALITY.

Any recommendations on rigs, antennas, rotors, control software, satellite tracking software, books, etc... would greatly be appreciated.

Thanks in advance,

Jim Hong - KA8ZGP

2848. * SpaceNews 24-Nov-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1124.1997@ampr.org>
Source record: 17670
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

```
SB NEWS @ AMSAT $SPC1124
* SpaceNews 24-Nov-97 *

BID: $SPC1124

=========
SpaceNews
=========

MONDAY NOVEMBER 24, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* AMSAT-OSCAR-16 NEWS *
======================
AMSAT-OSCAR-16 continues to perform well in "pacsat" duty. The kernel is
reporting an uptime of over 1160 days. The following status message is
being carried by the beacon on 437.051 MHz:

PACSAT-1>AMSAT <UI>:
November 1997
PACSAT AO-16
Owned and Operated by AMSAT-NA
Command Team WJ9F, WD0E, VK7ZBX, KB5MU
AO16 Command Team <WJ9F>

* ITAMSAT-OSCAR-26 NEWS *
========================
ITAMSAT-OSCAR-26 was copied on its secondary downlink frequency of
435.822 MHz by KD2BD in New Jersey on 16-Nov-97 at 02:32 UTC. The
spacecraft reported a kernel uptime of over 56 days, and the beacon
carried the following status message:

IY2SAT-1>AMSAT <UI>:
*** 12th November 1997 ***
All sub-systems are OK.
Loading in progress.....
Please don't tx on uplink. Stay tuned for further news!
Best wishes from the ITAMSAT team.

* UoSAT-OSCAR-11 NEWS *
======================
During the period 14-Oct-97 to 16-Nov-97, UoSAT-OSCAR-11 continued to
provide good downlink signals on its 145.826 MHz beacon. Telemetry has
been nominal. The battery voltage has been steady at around 14.0 volts
```

for most of the time, although occasional values of 13.8 and 14.2 have been observed.

The spacecraft's internal temperatures continued to increase, reaching maximum values around 21-Oct-97 of 18C and 15C, for battery and telemetry electronics respectively. The temperatures have now started to fall, and at the present time are 13.6C and 10.6C. This change in temperature is due to variations in solar eclipse times, which have now started to increase.

Two WOD (Whole Orbit Data) surveys have been transmitted during the period. Channels 17, 18, 27, 28 (+X, +Y, -X, -Y facet temperatures), dated 16-Sep-97 and channels 10, 20, 30, 40 (-Y, +Y, -X, +X array currents) dated 29-Oct-97 were included in the surveys. These surveys have shown the effect of solar eclipses on array currents and external temperatures.

Followers of OSCAR-11 have noticed that the news bulletin has not been changed recently. Richard, G3RWL, has received very little feedback from his regular bulletin service, and at a recent AMSAT-UK committee meeting it was decided to discontinue the weekly postings and replace them by a static bulletin. This may be changed at monthly intervals and will contain items such as Keplerian elements and satellite frequencies. Many thanks Richard for providing this service for so many years -- well over a hundred bulletins. Your efforts are much appreciated.

UoSAT-OSCAR-11's operating schedule remains unchanged:

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

Additional status blocks are also transmitted after each bulletin and between ASCII TLM and WOD.

The Mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and is delivering only half power. This beacon is a useful test source for those testing Mode-S converters in preparation for the Phase 3D satellite. It is considerably weaker than DOVE-OSCAR-17, which should be used for initial testing. Any reports of reception of the 2401 MHz beacon would be most welcome, and should be directed to Clive Wallis at: g3cwv@amsat.org.

The 435.025 MHz (UHF) beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control (ie. within range of Guildford, UK). When the 435 MHz beacon is transmitting, the 145 MHz beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit Web site sponsored by Clive Wallis, G3CWV. The site contains some software for capturing OSCAR-11 data, and

decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded as new data is captured. The URL is:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV g3cwv@amsat.org]

* SPUTNIK-40/RS-17 NEWS *
==========
Gerard Auvray, F6FAO, provided the following chart that can be used to determine the internal temperature of the Sputnik-40/RS-17 satellite based on the audio frequency of the "beeps" sent by its 145.820 MHz FM beacon transmitter:

50 deg C ----> 1361 Hz
30 deg C ----> 1290 Hz
25 deg C ----> 1261 Hz
10 deg C ----> 1208 Hz
0 deg C ----> 1131 Hz
-10 deg C ----> 1040 Hz
-20 deg C ----> 891 Hz
-30 deg C ----> 724 Hz
-40 deg C ----> 541 Hz

Reports can be sent to: Gerard.Auvray@bsf.alcatel.fr.

[Info via F6FAO]

* RS-17 TELEMETRY SURVEY *
==========
AMSAT France would like Radio Amateurs over the world to help them in collecting telemetry from RS-17 Saturday and Sunday November 22 and 23. This will help in verifying the parameters of the thermal model of the microsat that was computed before the launch. In turn, the program can then be used for the design of their next microsat, "Maelle".

The internal temperature of the microsphere can be evaluated from the tone of the "bip-bip" sound transmitted for 160 ms twice per second. In order to get a set of precise measurements, the frequency of the tone should be measured with a precision of 1 Hz. This can be achieved using direct digital audio recording of the beacon using a PC with a sound card connected to the audio output of the VHF receiver set in FM mode on 145.820 MHz +/-3 kHz (Doppler effect changes the frequency of the satellite RF carrier up to 3 kHz when the satellite is approaching your station and lower by -3 kHz when the satellite is receding). The receiver audio must be unsquelched. In order to keep the recorded files small, numeric samples can be performed at 8 kHz with 8 bit precision mono. One or two seconds of beacon recording in good receiving condition are needed. Save captured audio to .WAV file format and note the date and precise UTC time of reception. If you have a program than can accurately measure the audio frequency, send the value of the bip tone in Hz. If you cannot perform it, just send the WAV file ZIPped. The size should not be more than 16 Kb (1 or 2 seconds at 8 kHz, 8 bit samples,

mono). Up to now, reports of the frequency tone ranging from 1255 to 1300 Hz (corresponding to temperatures between 23 and 33 degrees Celsius) have been received.

Send your reports via packet radio to f6bvp@f6bvp.frpa.fra.eu or via Internet to f6bvp@amsat.org.

[Info via Bernard, F6BVP]

* SAFEX FREQUENCY CORRECTION *
==========
The table of SAFEX II frequencies listed in last week's issue of SpaceNews were accidentially printed in reverse order. The correct frequencies are listed below:

Repeater channel configurations for 2.0 kHz channel step transceivers:

Channel Downlink Uplink Doppler Offset
1 437.960 MHz 435.740 MHz +10 kHz 2.180 kHz
2 437.958 MHz 435.742 MHz + 8 kHz 2.184 kHz
3 437.956 MHz 435.744 MHz + 6 kHz 2.188 kHz
4 437.954 MHz 435.746 MHz + 4 kHz 2.192 kHz
5 437.952 MHz 435.748 MHz + 2 kHz 2.196 kHz
6 437.950 MHz 435.750 MHz 0 kHz 2.200 kHz
7 437.948 MHz 435.752 MHz - 2 kHz 2.204 kHz
8 437.946 MHz 435.754 MHz - 4 kHz 2.208 kHz
9 437.944 MHz 435.756 MHz - 6 kHz 2.212 kHz
10 437.942 MHz 435.758 MHz - 8 kHz 2.216 kHz
11 437.940 MHz 435.760 MHz -10 kHz 2.220 kHz

Repeater channel configurations for 5.0 kHz channel step transceivers:

Channel Downlink Uplink
1 437.960 MHz 435.740 MHz
2 437.955 MHz 435.745 MHz
3 437.950 MHz 435.750 MHz
4 437.945 MHz 435.755 MHz
5 437.940 MHz 435.760 MHz

A subaudiable (CTCSS) tone 141.3 Hz is required to access the SAFEX repeater. The channels are listed in order. When Mir first comes over the horizon, use the first channel in the list. When Mir is overhead, use the middle channel. When Mir is just about to go out of range, use the highest numbered channel in the list.

MIREX has created an Internet Web page containing information regarding Mir and the various Amateur Radio experiments taking place from the space station. The pages are still "under construction", but some good information can be gathered from what has been put together so far. URLs include the following:

http://www.ik1sld.org/mirex.htm OR
http://www.ik1sld.org/mirex

http://www.geocities.com/~ik1sld/mirex.htm OR
http://www.geocities.com/~ik1sld/mirex

[Info via Miles Mann, WF1F]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

2849. ARLK091 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk091.1997@arrl.org>
Source record: 17671
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK091
ARLK091 Keplerian data

ZCZC SK91
QST de W1AW
Keplerian Bulletin 91 ARLK091
From ARRL Headquarters
Newington, CT November 22, 1997
To all radio amateurs

SB KEP ARL ARLK091
ARLK091 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-87
1 25061U 97073A 97325.58333333 .00005550 -70745-5 72591-5 0 92
2 25061 28.4680 172.6342 0004062 303.5502 184.2953 15.96925885 278
Sputnik Jr
1 24958U 97058C 97325.18644546 .00036232 00000-0 42073-3 0 223
2 24958 51.6614 16.5544 0007692 346.1390 13.9315 15.61368070 2739
AO-10
1 14129U 83058B 97325.39309067 -.00000086 00000-0 10000-3 0 5157
2 14129 26.4300 115.8052 6028550 169.9093 212.0191 2.05881602 80623
RS-10/11
1 18129U 87054A 97324.92131535 .00000006 00000-0 -10048-4 0 04404
2 18129 82.9223 122.8878 0011930 139.9465 220.2577 13.72385494521735
UO-11
1 14781U 84021B 97325.45210511 .00000240 00000-0 48217-4 0 174
2 14781 97.8525 300.5509 0010585 217.1713 142.8756 14.69619197734350
RS-12/13
1 21089U 91007A 97325.06571148 .00000064 00000-0 51974-4 0 00255
2 21089 82.9252 162.3145 0027944 219.2855 140.6273 13.74088780340703
UO-14
1 20437U 90005B 97325.18453257 .00000070 00000-0 43845-4 0 03338
2 20437 98.5084 43.3769 0011673 102.9136 257.3353 14.29982866408650
RS-15
1 23439U 94085A 97325.14971462 -.00000039 00000-0 10000-3 0 02627
2 23439 64.8134 259.0258 0145977 101.8176 259.9140 11.27528496119632
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AO-16
1 20439U 90005D 97325.19409325 .00000051 00000-0 36534-4 0 1084
2 20439 98.5290 46.6784 0012024 104.6676 255.5842 14.30028028408671
RS-16
1 24744U 97010A 97325.19339331 .00006493 00000-0 20790-3 0 01216
2 24744 97.2632 227.2791 0005081 251.9985 108.0703 15.32713633040125
DO-17
1 20440U 90005E 97325.23426910 .00000042 00000-0 32742-4 0 1065
2 20440 98.5333 47.6890 0012077 103.4454 256.8078 14.30171421408715
WO-18
1 20441U 90005F 97325.16580907 .00000039 00000-0 31744-4 0 01185
2 20441 98.5304 47.5002 0012640 105.0008 255.2580 14.30137594408700
LO-19
1 20442U 90005G 97325.19032882 .00000052 00000-0 36484-4 0 01151
2 20442 98.5334 48.2840 0013540 106.0198 254.2486 14.30255149408737
FO-20
1 20480U 90013C 97324.90038477 -.00000081 00000-0 -11052-3 0 00141
2 20480 99.0657 257.1399 0540631 22.6754 339.7264 12.83240406364808
AO-21
1 21087U 91006A 97324.99043619 .00000094 00000-0 82657-4 0 08769
2 21087 82.9380 295.5125 0033805 190.2644 169.7825 13.74589970341698
UO-22
1 21575U 91050B 97325.18217900 .00000065 00000-0 36068-4 0 08378
2 21575 98.2808 20.0217 0007685 134.1977 225.9842 14.37097199333031
KO-23
1 22077U 92052B 97325.11053654 -.00000037 00000-0 10000-3 0 07114
2 22077 66.0861 176.6790 0000476 179.3979 180.7040 12.86304630247933
KO-25
1 22828U 93061F 97325.20826229 .00000040 00000-0 33209-4 0 5764
2 22828 98.5283 36.2050 0010851 121.7532 238.4706 14.28201430184627
IO-26
1 22826U 93061D 97325.21178932 -.00000019 00000-0 97636-5 0 05991
2 22826 98.5319 36.1163 0010517 139.5855 220.6124 14.27854564216492
AO-27
1 22825U 93061C 97325.18537036 .00000022 00000-0 26275-4 0 06073
2 22825 98.5304 35.8016 0009134 135.9960 224.1957 14.27744683216479
FO-29
1 24278U 96046B 97325.10409316 -.00000054 00000-0 -21898-4 0 01241
2 24278 98.5209 344.7984 0352225 139.4111 223.3867 13.52634587062335
MO-30
1 24305U 96052B 97325.18132482 .00000204 00000-0 20364-3 0 01694
2 24305 82.9344 238.5560 0030479 126.2519 234.1444 13.73100546060608
Mir
1 16609U 86017A 97325.76187038 .00006203 00000-0 78778-4 0 7945
2 16609 51.6545 13.6518 0007201 4.6037 355.4963 15.60891454671624

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Tuesday,
November 25, 1997, at 2330z on Baudot and AMTOR.
NNNN
```

/EX

2850. Re: Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-22 00:00:00 UTC
From: Tim Tyler <ttyler@mich.com>
Message-ID: <34776183.90E1F3E5@mich.com>
Source record: 17672
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I thought you AMSAT guys were rocket scientists & stuff (i.e. intelligent, decent people), not white-trash that spam Usenet newsgroups with commercials! Perhaps Vinnie is the exception, but anyway, these frequent AMSAT spams (in particular, to groups like rec.radio.swap/shortwave & scanner) tend to reflect poorly on AMSAT, not just Vinnie...

Vincent Fiscus, KB7ADL wrote:

> Enter the world of amateur satellite communications with AMSAT - Radio Amateur
> Satellite Corporation. Satellites are amateur radios highest frontier and you
> can be a part of it. Like working DX but hate poor HF band conditions? Work
> DX via satellite and leave all be qrm, qrn & qsb behind. Like Digital modes?
> Upload a message to a pacsat and in 45 minutes a ham on the other side of the
> world could read it and respond to it. You can leave a message with the
> cosmonauts on the Mir space station or talk to the astronauts on the space
> shuttle during SAREX missions. You can also play a part in helping AMSAT
> complete it latest project, the Phase 3D satellite. Phase 3D is ham radios
> largest and most complex satellite to date. Construction and testing of P3D
> will soon be complete. Ham radio satellites mainly operate above 144 mHz, so
> you won't need a fancy ham radio license to use them. A tech class license
> will work just fine.
> Of course you don't need to be a member of AMSAT to enjoy all these
> things, But your membership will help keep present and future projects
> going.If you've decided you won't join Amsat at this time, but would like to
> donate to Phase 3D. You can send your contribution to:
>
> AMSAT-NA
> 850 Sligo Ave. Suite 600
> Silver Spring, MD. 20910-4703
>
> or call Martha at Amsat: (301) 589-6062
>
> For more info about AMSAT
> and Phase 3D see: http://www.amsat.org
>
> 73 de KB7ADL

--
Tim Tyler
ttyler@mich.com
http://www.mich.com/~ttyler/

2851. THE SPACE EXPERIENCE

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: J&#65533;rg Uebelhart <uebelhart@bluewin.ch>
Message-ID: <uxPDLI698GA.352@nih2naac.prod2.compuserve.com>
Source record: 17673

http://www.geocities.com/~uebelhart

2852. 10-m antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: Steven Alva <salva@pop3.concentric.net>
Message-ID: <347863D8.1B85768B@pop3.concentric.net>
Source record: 17674

I need some assistance in determining which type of antenna is best for 10-m reception
downlink. I have used in the past a simple longwire and a pre-amp, but I have never uplinked before and wondered if this is the best approach. I plan on using a "Eggbeater",
for uplink. Any help would be appreciated.

73's

Steve, KD6HHH

2853. Re: 10-m antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: Rod Adkins <rodadkins@earthlink.net>
Message-ID: <34788E76.5ABC@earthlink.net>
Source record: 17675

I have had best success with a horizontal full-wave loop.
I have used this at various heights from 10 to 20 feet, and used a
wooden support for wire in a square configuration.
I used a coax balun to adjust the impedance from the nominal 100 ohm
loop to 50 ohms, but not convinced it made much difference!

I found the loop out-performed crossed dipoles, & much quieter than a
vertical. Used it successfully on RS-15 for transatlantic SSB contacts
when I was in Ontario, Canada.

Rod, VE3INE/W6

2854. Is there a VHF newsgroup?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: "J. Young" <jtyoung@u.washington.edu>
Message-ID: <Pine.A41.3.95b.971123140430.18522A-100000@homer38.u.washington.edu>
Source record: 17676

Anyone know the address for a VHF newsgroup? I'm interested in setting up skeds for meteor scatter qsos and discussing propagation, etc. Many thanks. de John, K7JY.

.....

2855. Re: Is there a VHF newsgroup?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: Rayspy
Message-ID: <3478b06b.0@news1.ibm.net>
Source record: 17677

Try alt.ham-radio.vhf-uhf

2856. ANS-327 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <65aififdu1@news3.mr.net>
Source record: 17678

SB SAT @ AMSAT $ANS-327.01
MIR FREQUENCY EXPERIMENTS
HR AMSAT NEWS SERVICE BULLETIN 327.01 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.01
As part of ongoing frequency experiments to improve Amateur Radio operations on board Mir, and to better understand how these frequencies will be effective on the International Space Station, Mir will begin a 2 phase frequency experiment beginning December 1, 1997 and ending on May 31, 1997.
For phase 1, a 70cm/2m crosslink experiment will operate for a 3 month period from December 1, 1997 up to March 1, 1998.
On December 1 the Mir operating frequencies will change to:
Uplink: 437.850 MHz Downlink: 145.800 MHz
Phase 2 of this experiment will use a 2 meter-only set of uplink and downlink frequencies. This phase of the experiment will begin on March 1, 1998 and will also be of 3 months duration.
This experiment was developed by the international partners in Manned Space discussions at the recent Toronto AMSAT-NA Space Symposium. It has been endorsed by the representatives present at the conference which included SAFEX, SAREX, AMSAT-UK, the IARU Region 2 President, the IARU Satellite Advisor, (ZS5AKV), ARI (Italy) and RAC (Canada). While not present at the Toronto meeting, the US Mirex team has also been consulted and have agreed with the spirit of this experiment.
All hope that this experiment will help further understand how best to accommodate future operations of Amateur Radio on Manned Space Vehicles.
[ANS thanks Tim Bosma, W6ISS, AMSAT's Manned Space Frequency Coordinator and Frank Bauer, KA3HDO, AMSAT-NA's VP for Manned Space, for the information that went into this bulletin item.]
/EX
SB SAT @ AMSAT $ANS-327.02
SPUTNIK MODEL UPDATE
HR AMSAT NEWS SERVICE BULLETIN 327.02 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.02
Reports continue to be received from around the world indicating that the working model Sputnik satellite launched Monday, November 3 from the Russian MIR Space Station is maintaining a readable downlink signal from its 100 milliwatt transmitter.
Many news organizations around the world have featured articles

on the satellite. The Newport News Daily Press in Newport News, Virginia ran a front page story that stirred a lot of local interest in the Sputnik project and also in the Langley Research Center in Hampton, Virginia. Many at Langley remember the excitement and increased funding for space flight research after the original Sputnik was launched.
Two hams, W8RVH and W8ZCF, have been making temperature observations on the satellite since its launch using an audio generator, frequency counter and oscilloscope, providing the following data:
UTC Date/Time Frequency/Hz Temperature/Deg C
06 Nov. 1997 14:26 1269.3 27.0
07 Nov. 1997 13:27 1257.4 23.0
08 Nov. 1997 14:06 1255.9 22.0
09 Nov. 1997 13:08 1248.4 19.5
11 Nov. 1997 12:49 1248.3 19.5
12 Nov. 1997 11:49 1244.3 19.0
13 Nov. 1997 09:12 1257.0 21.8
13 Nov. 1997 14:03 1241.0 18.0
14 Nov. 1997 12:05 1244.5 19.0
14 Nov. 1997 16:17 1245.0 19.0
16 Nov. 1997 14:19 1246.0 19.0
17 Nov. 1997 13:20 1243.0 18.5
W8RVH and W8ZCF are continuing temperature analysis on Sputnik 40 with a more detailed analysis now being made on the temperature recordings, prompted by a notation of a downward drift of temperature during the latest passes. This downward change is currently unexplained.
The satellite was built as a joint project by schools in Russia and Reunion Island, with technical assistance from AMSAT-France. Operating solely on internal batteries, the downlink signal of the 1/3 scale model is only expected to continue for the next few weeks.
[ANS thanks F6FAO, WB5POJ, W8RVH and W8ZCF for information that went into this bulletin.]
/EX
SB SAT @ AMSAT $ANS-327.03
DOVE QSL ANNOUNCEMENT
HR AMSAT NEWS SERVICE BULLETIN 327.03 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.03
QSL cards for the DOVE (DO-17) satellite are once again available. These special cards depict a dove carrying an olive branch in its mouth and will be provided to anyone who sends a report indicating they've heard the satellite. DO-17 transmits on 145.825 and 2401.220 mHz, and is presently sending 1200 baud AX.25 (standard packet) ASCII telemetry on 2 meters.
On S band, DOVE transmits PSK flags continuously, and then repeats the same data transmitted on 2 meters.

To receive a QSL for hearing DOVE, send a reception report and
SASE to:
Dianne White N0IZO
45777 Rampart Road
Parker, Colorado 80138-4316
USA
[ANS thanks Jim White, WD0E, for this information.]
/EX
SB SAT @ AMSAT $ANS-327.04
CUBA TO BE ACTIVE ON SATELLITE
HR AMSAT NEWS SERVICE BULLETIN 327.04 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.04
A group of hams from Sweden, Denmark and Cuba will be active on
50, 144 and 432 MHz, as well as the satellites, from Punta Corella,
Cuba, starting November 25, 1997. Operation will end December
first. Operators will be Soren, OZ1FTU, Johan, SM3UZS and Oscar,
CO2OJ.
Punta Corella (grid square FL11sg) is a rare, never-before-
activated grid on VHF. In addition to terrestrial VHF/UHF
frequencies, Oscar promises operation on RS-12, FO-20, FO-29
and possibly AO-10. This will be an excellent opportunity for
those who need to confirm Cuba via satellite operation.
This VHF/UHF station is part of an international effort for the
CQ WW CW Contest. The HF group will use the callsign T48RCT on
all HF bands from 160 to 10 meters, including WARC bands. Once
the contest starts they will switch to the callsign T49C.
Oscar reports T49 is a "never before used" prefix and T49C will
be the first Cuban station with only one letter as a suffix.
More information on this entire operation is available at the
FRC Web Page:
http://www.infocom.etecsa.cu/new/frc/frcuba.htm
or at the Sweden Group Site:
http://ham.te.hik.sel/clubs/sk0ux/T48RCT.htm
[ANS thanks Oscar, CO2OJ, and Jon, N0JK, for this information.]
/EX
SB SAT @ AMSAT $ANS-327.05
SHUTTLE AUDIO RETRANSMISSIONS
HR AMSAT NEWS SERVICE BULLETIN 327.05 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.05
Although the current shuttle mission will not include operation
on any of the Ham Bands, the Goddard Amateur Radio Club (WA3NAN)
in Greenbelt, Maryland reminds amateurs and SWLs world wide that
the club retransmits shuttle audio on 3.860, 7.185, 14.295 and
occasionally 21.395 and 28.650 mHz. Locally in the Greenbelt
area, shuttle re-transmissions are handled on 147.45 mHz FM.
The club will be on the air when all of the following

conditions are met:
1. the Shuttle crew is awake
2. a volunteer control operator is available
3. no power outages, snowstorms, thunderstorms or major equipment failures at the club shack.
The club has had a severe shortage of control operators lately, so if the station is not on the air, it is probably due to the non-availability of a control operator. Any licensed ham living reasonably close to the area can be a volunteer control operator. Please contact the club if you are interested in serving in this role.
The GARC Shuttle Retransmission FAQ can be found at:
http://garc.gsfc.nasa.gov/www/retransmission/shuttle_faq.html
The club can be reached by telephone at (301) 286-6673, or by mail at PO Box 86, Greenbelt, Maryland 20768-0086.
[ANS thanks Dan Schultz, N8FGV, for this information.]
/EX
SB SAT @ AMSAT $ANS-327.06
ANS EDITORIAL TEAM NEWS
HR AMSAT NEWS SERVICE BULLETIN 327.06 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.06
BJ Arts, W0TN, Chief Editor for these weekly bulletins, is now reported to be resting comfortably at home after major surgery. BJ sends his thanks all for their thoughts and prayers during his recent hospitalization.
In a related development, Dan James, NN0DJ, has now also volunteered to join the Editorial team for ANS, and will be assisting BJ with writing the bulletins each week. Dan brings a wealth of on-air broadcast experience and polished news writing abilities to the ANS team.
"Both of these gentlemen deserve our continued thanks for their efforts to keep us all informed of the latest AMSAT news week after week," said Keith Baker, KB1SF, AMSAT-NA's Executive Vice President. "We're most pleased to have Dan join the team and we're VERY glad that BJ is now resting at home and eager to get back into the Editor's chair. We all wish him a speedy recovery!" Keith said.
[ANS thanks Keith Baker, KB1SF, for the information that went into this bulletin item.]
/EX
SB SAT @ AMSAT $ANS-327.07
WEEKLY SATELLITE REPORT PT 1
HR AMSAT NEWS SERVICE BULLETIN 327.07 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.07
MIR (Simplex 145.985 mHz, FM)
The MIR crew believes the antenna coax for the MIR PMS station

may have been damaged during the space walk on Thursday, November 6. It has been suggested to the crew not to use the PMS station until the cable is repaired. The crew may attempt to fix the coax cable during a scheduled December space walk. The PMS station is expected to be off the air for the next several weeks.

SAFEX, MIR 70 cm Repeater
(Uplink 435.750 mHz FM, Downlink 437.950 mHz FM, subaudible tone 141.3 Hz)
The repeater is working and stations are encouraged to use the SAFEX II repeater. The crew members have the option of using the Mic on the repeater to talk to amateurs using the repeater.

RS-10
(Uplink 145.865-145.905 mHz CW/SSB, Downlink 29.36-29.4 mHz CW/SSB) Not operational at this time.
RS-12
(Uplink, 145.91-145.95 mHz CW/SSB, Downlink 29.41-29.45 mHz) Operational, now in mode A. Lots of activity over North America with good downlink signal reports being received.
RS-15
(Uplink 145.858-145.898 mHz CW/SSB, Downlink 29.354-29.394 mHz CW/SSB) Operational. (Hint: If SSB doesn't work for you, try CW. CW is very easy to hear on the downlink)!
RS-16
Transponder information on RS-16.
Uplink = 145.915 - 145.948 mHz; Downlink = 29.415- 29.448 mHz
Beacons = 29.408 and 29.451 mHz
Pwr 29 mHz Down = 1.2 W /4 W
Beacon 1 = 435.504 mHz
Beacon 2 = 435.548 mHz
Pwr 435 mHz Beacons = 1.6 W
RS-17
Operational. Beacon: 145.820 mHz
AO-10
(Uplink 435.030-435.18 mHz CW/LSB, Downlink 145.975-145.825 mHz CW/USB) Operational. Stacey Mills, W4SM, would appreciate any perigee observations of AO-10's beacon or transponder during the next several weeks until conditions begin to improve.
If his orientation figures are correct, AO-10 should be down to a solar angle of -84 degs with only 11% illumination.
[ANS thanks Stacey Mills, W4SM, for this report]
AO-27
(Uplink 145.85 mHz FM, Downlink 436.792 mHz FM)
Operational with lots of activity including QRP stations heard over North America.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]
FO-20
(Uplink 145.9-146.0 mHz CW/LSB, Downlink 435.8-435.9 mHz CW/USB)

Operational. FO-20 is in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report]
FO-29
Voice/CW Mode JA:
(Uplink 145.9-146.0 mHz CW/LSB, Downlink 435.8-435.9 mHz CW/USB)
Digital Mode JD:
(Uplink 145.85, 145.87, 145.910 mHz FM, Downlink 435.910 mHz FM 9600
baud BPSK)
Operational.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report]
/EX
SB SAT @ AMSAT $ANS-327.08
WEEKLY SATELLITE REPORT PT 2
HR AMSAT NEWS SERVICE BULLETIN 327.08 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.08
KO-23
(Uplink 145.85, 145.9 mHz FM, Downlink 435.175 mHz FM,
9600 Baud FSK)
Stacey Mills, W4SM, has estimated from Keps that KO-23 will
not experience an eclipse again until December 12th. Starting
with the orbits of that day, eclipses rapidly increase in
duration from 2 to 11 minutes. Eclipse length will then
continue to increase, peaking at 35 minutes per orbit in the
December 28th thru January 4th time period. Eclipse length
will then begin slowly decreasing again. KO-23's download
efficiency has dropped dramatically due to the increasing
heat and its effects on the signal deviation.
[ANS thanks Stacey Mills, W4SM, for this report]
KO-25
(Uplink 145.980 mHz FM, Downlink 436.5 mHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]
OSCAR-11
(Downlink 145.825 mHz. FM, 1200 Baud PSK. Beacon 2401.500 mHz)
Operating normally. During the period of October 14th through
November 16th this satellite has continued to provide good
signals on its 145.826 mHz beacon.
Telemetry nominal. The battery voltage has been steady at
around 14.0 volts for most of the time, although occasional
values of 13.8 and 14.2 volts have been observed.
The internal temperatures continued to increase, reaching
maximum values around October 21st of 18C and 15C for
battery and telemetry electronics respectively. The
temperatures have now started to fall, and at the present
time are 13.6C and 10.6C. This change in temperature is due
to variations in solar eclipse times, which have now started
to increase. Two WOD surveys have been transmitted during the
period. Channels 17, 18, 27, 28 (+X, +Y, -X, -Y facet

temperatures), dated 16 September, and channels 10, 20, 30, 40
(-Y, +Y, -X, +X array currents) dated 29 October. These show
the effect of solar eclipses on array currents and external
temperatures.
Followers of OSCAR-11 will have noticed that the news bulletin
has not been changed recently. Richard, G3RWL, has received
very little feedback from his regular bulletin service, and at
a recent AMSAT-UK committee meeting it was decided to
discontinue the weekly postings and replace them by a static
bulletin. This may be changed at monthly intervals and will
contain items such as Keplerian elements and satellite
frequencies. ANS thanks Richard for providing this
service for so many years...well over a hundred bulletins!
The operating schedule remains unchanged:
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)
There are also additional status blocks after each bulletin is
transmitted, and between ASCII TLM and WOD.
The mode-S beacon is ON, transmitting an unmodulated carrier,
but telemetry indicates that it has partially failed, and
delivering half power. This beacon is a useful test source for
those testing mode-S converters, prior to the launch of P3-D.
It is considerably weaker than DOVE, which should be used for
initial testing. Any reports of reception on 2401mHz would be
most welcome. Please e-mail reception reports to g3cwv@amsat.org.
The 435.025 mHz beacon is normally OFF. However it can sometimes
be heard when the satellite is being commanded by ground
control, (i.e. within range of Guildford, Surrey, UK). When the
435 beacon is transmitting, the 145 beacon is normally OFF.
The data transmitted is mainly binary.
OSCAR-11 users are welcome to visit the G3CWV web site.
It contains some software for capturing data, and decoding
ASCII telemetry and the WOD survey. There is an archive of
raw data (mainly WOD) for analysis, which is continually being
expanded, as new data is captured.
The URL is - http://www.users.zetnet.co.uk/clivew/
[ANS thanks Clive Wallis, G3CWV, for this information]
AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 mHz FM, 1200 bps
Manchester FSK.
Downlink 437.0513 mHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 mHz.)
Operating normally.
Graphic information about WOD/Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/wod.htm

[ANS thanks Miguel A. Menendez, EA1BCU, for this report]
DO-17(DOVE)
(Downlink 145.825 mHz FM, 1200 Baud AFSK. Beacon 2401.220 mHz)
DOVE transmits on 145.825 mHz and 2401.220 mHz. It is presently sending 1200 baud AX.25 (standard packet) ASCII telemetry about every minute on two meters. On S band it transmits PSK flags continuously and also the same data as is sent on 2 meters.
[ANS thanks Jim White, WD0E, for this update]
WEBERSAT (WO-18)
(Downlink 437.104 mHz SSB, 1200 Baud PSK AX.25)
No report available at this time.
LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88, 145.9 mHz FM, Downlink 437.125 mHz SSB, 1200 bps RC-BPSK.)
Operating normally.
Graphic and general information about Telemetry values can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]
UO-22
(Uplink: 145.900 or 145.975 mHz FM. Downlink 435.120 mHz FM 9600 Baud FSK)
UO-22 is operating normally.
Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward communications task on the UO-22 On-Board Computer. This task includes incremental checksums which should make uploading slightly faster. In the old task, once an upload was complete, the spacecraft had to perform the checksum on the complete file. Depending on the file length, this could take quite a long time. With the new task, the checksum is computed on the fly - while the data is actually being uploaded. Thus there is no need to recompile at the end of the transfer and this checksum delay is then removed. However, all files that were started before Chris loaded the task will receive a corrupt body checksum error when the upload is completed. If anyone gets persistent body checksum errors while uploading files to UO-22 would they please let Chris Jackson know as soon as possible.
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and Operations Manager of UO-22, for this report]
IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.95 mHz FM,
Downlink 435.822 mHz SSB, 1200 Baud PSK)
The actual beacon is:
26th September 1997 Happy birthday ITAMSAT!
Today IO-26 is 4 years old and all sub-systems are OK
Best wishes from the IT-AMSAT team
[ANS thanks Daniele, IK2XRO, and Piercarlo, IW2EGC, ITMSAT Command Station for this report]
[Please send your Satellite or News reports to ANS Editor BJ Arts, WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX
Daniel (Dan) James
Amateur callsign: NN0DJ
Grid Square EN-28iv
Warroad, Minnesota U.S.A.
e-mail: nn0dj@amsat.org or danj@marvin.com
Amsat News Service Assistant Bulletin Editor
The ANS editor is BJ Arts, WT0N

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BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2857. AO-27 transmit power?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-23 00:00:00 UTC
From: KB9KHM <kb9khm@sprynet.com>
Message-ID: <34786345.5464B4E2@sprynet.com>
Source record: 17679

I was just curious if anyone knew what the transmit power of Oscar 27
was?

Thanks!

--
Mark <KB9KHM>

Home Page:
http://home.sprynet.com/sprynet/kb9khm

2858. Re: 10-m antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19971124171900.MAA25889@ladder01.news.aol.com>
Source record: 17581

In article <34788E76.5ABC@earthlink.net>, Rod Adkins <rodadkins@earthlink.net>
writes:

>
>I have had best success with a horizontal full-wave loop.
>I have used this at various heights from 10 to 20 feet, and used a
>wooden support for wire in a square configuration.
>I used a coax balun to adjust the impedance from the nominal 100 ohm
>loop to 50 ohms, but not convinced it made much difference!
>
>I found the loop out-performed crossed dipoles, & much quieter than a
>vertical. Used it successfully on RS-15 for transatlantic SSB contacts
>when I was in Ontario, Canada.

I concur.... I've tried dipoles, crossed dipoles, verticals, etc., but the
full-wave loop is by far the best. For the purists, the coax balun consists of
an electrical quarter-
wavelength of 75-ohm coax between your 50-ohm feedline and the loop. But, like
Rod, I don't think it makes a whole lot of difference in receive-only
applications like this......

73 de KA3HSW

2859. NORAD Two-Line Orbital Element Sets (TLE101)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <65d2v2$60p$1@blackbird.afit.af.mil>
Source record: 17582

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #101 -
Alouette 1
1 00424U 62049A 97326.49122860 .00000040 00000-0 36094-4 0 3332
2 00424 80.4638 127.3878 0023606 126.3346 233.9974 13.67909035753880
ATS 1
1 02608U 66110A 97324.28535460 .00000053 00000-0 10000-3 0 474
2 02608 14.4184 347.2087 0006871 127.3195 232.7239 1.00323595 30099
ATS 3
1 03029U 67111A 97327.38191727 -.00000113 00000-0 10000-3 0 7220
2 03029 14.8491 354.1374 0012863 276.4234 183.9732 1.00272601110024
Starlette
1 07646U 75010A 97327.58585385 -.00000190 00000-0 -36745-4 0 1039
2 07646 49.8252 239.3430 0205478 162.4916 198.3217 13.82193109151492
LAGEOS
1 08820U 76039A 97326.71513300 -.00000009 00000-0 00000+0 0 3342
2 08820 109.8161 205.3433 0044629 15.8661 344.3481 6.38664421247266
GOES 2
1 10061U 77048A 97327.45173137 .00000053 00000-0 10000-3 0 9175
2 10061 13.0014 31.2252 0010011 155.4172 221.6463 1.00283757 19706
IUE
1 10637U 78012A 97323.10382566 -.00000105 00000-0 10000-3 0 4187
2 10637 36.3039 75.3602 1381191 71.1142 303.2136 1.00083109 25148
GOES 3
1 10953U 78062A 97327.26752769 -.00000080 00000-0 00000+0 0 8732
2 10953 12.0330 34.3251 0004480 212.4783 162.6648 1.00276181 24319
SeaSat 1
1 10967U 78064A 97325.80752167 -.00000005 00000-0 42901-4 0 6207
2 10967 107.9960 176.2804 0002593 248.3918 111.6940 14.38207490 16589

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Nimbus 7
1 11080U 78098A 97327.59739350 -.00000030 00000-0 10197-4 0 7131
2 11080 98.8826 168.5162 0009528 358.4025 1.7097 13.83676594963692
GOES 5
1 12472U 81049A 97327.16089604 -.00000263 00000-0 10000-3 0 324
2 12472 8.9998 45.1146 0004842 113.9359 246.0231 1.00313262 18354
Cosmos 1383
1 13301U 82066A 97325.44393992 .00000015 00000-0 89482-7 0 6282
2 13301 82.9277 110.8736 0026217 240.2882 119.5659 13.68088393768786
LandSat 4
1 13367U 82072A 97327.22274198 .00000549 00000-0 13111-3 0 1161
2 13367 98.0021 6.0025 0005681 309.6006 50.4956 14.57222654816854
DMSP B5D2-1
1 13736U 82118A 97327.85194012 .00000494 00000-0 22579-3 0 3582
2 13736 98.6182 153.7404 0007654 301.3037 58.7404 14.25876424775830
IRAS
1 13777U 83004A 97327.56481238 -.00000125 00000-0 -56377-4 0 8367
2 13777 98.9744 148.1416 0013412 89.3584 270.9117 13.99278715426709
Cosmos 1447
1 13916U 83021A 97327.54334707 .00000056 00000-0 42677-4 0 7220
2 13916 82.9466 163.2100 0038507 129.0426 231.4164 13.74362514735762
TDRS 1
1 13969U 83026B 97324.56488755 -.00000299 00000-0 10000-3 0 8107
2 13969 9.6993 38.7738 0003765 217.8409 317.4182 1.00262898 26611
GOES 6
1 14050U 83041A 97327.26041667 .00000036 00000-0 10000-3 0 7548
2 14050 7.8715 48.8734 0002082 163.6572 175.9072 1.00307241111446
AO-10
1 14129U 83058B 97327.33402454 -.00000042 00000-0 10000-3 0 5171
2 14129 26.4409 115.5242 6029452 170.4062 210.5837 2.05880929 80661
LandSat 5
1 14780U 84021A 97325.19190493 -.00000229 00000-0 -40751-4 0 6620
2 14780 98.2673 26.8921 0003478 103.8413 256.3169 14.57087201729978
UO-11
1 14781U 84021B 97325.45210511 .00000240 00000-0 48217-4 0 174
2 14781 97.8525 300.5509 0010585 217.1713 142.8756 14.69619197734350
Cosmos 1574
1 15055U 84062A 97327.18992218 .00000032 00000-0 18789-4 0 9222
2 15055 82.9593 219.4710 0027321 326.4068 33.5359 13.73656550672927
Cosmos 1602
1 15331U 84105A 97328.07399536 .00000432 00000-0 47667-4 0 6059
2 15331 82.5342 341.2033 0021417 17.6820 342.5144 14.84989938710862
ERBS
1 15354U 84108B 97326.56111851 -.00000094 00000-0 13128-4 0 3193
2 15354 56.9942 86.3979 0009339 92.8378 267.3723 14.95102322715112
NOAA 9
1 15427U 84123A 97327.88807946 .00000082 00000-0 66778-4 0 3728
2 15427 98.8873 37.2985 0014095 267.0146 92.9412 14.13897951667771
Mir
1 16609U 86017A 97328.13070013 .00012289 00000-0 14956-3 0 8054
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2 16609 51.6563 1.7273 0007379 14.1836 345.9298 15.60947423671992
SPOT 1
1 16613U 86019A 97328.23225818 -.00000044 00000-0 00000+0 0 1395
2 16613 98.7755 39.5213 0001368 141.4957 218.5593 14.20000573294822
Cosmos 1766
1 16881U 86055A 97326.21849329 .00000399 00000-0 44923-4 0 5200
2 16881 82.5199 40.4733 0020734 53.3080 307.0032 14.83926166611409
EGP
1 16908U 86061A 97327.86003341 -.00000083 00000-0 10000-3 0 2256
2 16908 50.0108 183.9346 0011365 268.6723 91.2808 12.44417735181730
NOAA 10
1 16969U 86073A 97327.91020408 .00000058 00000-0 43144-4 0 3017
2 16969 98.5558 316.8651 0012085 264.6705 95.3096 14.25069374581332
MOS-1
1 17527U 87018A 97326.49101042 -.00000043 00000-0 00000+0 0 6066
2 17527 98.8662 21.0525 0019607 321.4710 38.5054 14.00450319548233
GOES 7
1 17561U 87022A 97328.20391979 -.00000135 00000-0 10000-3 0 4212
2 17561 4.0745 65.8435 0002014 211.2240 121.7136 1.00269966 22567
Kvant-1
1 17845U 87030A 97327.87461551 .00017161 00000-0 20622-3 0 2138
2 17845 51.6549 3.0207 0007722 11.8900 348.2278 15.60951093606067
DMSP B5D2-3
1 18123U 87053A 97327.87864000 -.00000012 00000-0 16041-4 0 1328
2 18123 98.7621 155.3518 0013769 194.3680 165.7107 14.15500018538722
RS-10/11
1 18129U 87054A 97326.52526592 .00000019 00000-0 47094-5 0 4284
2 18129 82.9222 121.7015 0011939 135.4113 224.8003 13.72385612521955
Meteor 2-16
1 18312U 87068A 97324.96629411 .00000026 00000-0 96836-5 0 6056
2 18312 82.5531 298.2087 0011399 190.4350 169.6575 13.84107357518352
Meteor 2-17
1 18820U 88005A 97328.11715972 .00000090 00000-0 66825-4 0 4201
2 18820 82.5429 349.5136 0015254 253.7989 106.1483 13.84786633496171
DMSP B5D2-4
1 18822U 88006A 97327.01559799 .00000027 00000-0 30205-4 0 6749
2 18822 98.3911 140.2083 0005402 278.7286 81.3280 14.23250631509084
Glonass 34
1 19163U 88043A 97327.22105768 -.00000044 00000-0 10000-3 0 2347
2 19163 65.4807 68.1844 0005087 201.4666 158.5180 2.13102282 73401
Glonass 36
1 19165U 88043C 97325.40212819 -.00000035 00000-0 10000-3 0 6392
2 19165 65.4692 68.1971 0002231 300.5105 59.4839 2.13101757 73982
METEOSAT 3
1 19215U 88051A 97323.41532252 -.00000087 00000-0 10000-3 0 3510
2 19215 4.2862 64.9805 0008001 149.1088 210.7552 0.96947624 22221
OKEAN 1
1 19274U 88056A 97325.57069008 .00000403 00000-0 46886-4 0 2199
2 19274 82.5112 142.5619 0018877 201.3617 158.6812 14.82712829506773
Meteor 3-2
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1 19336U 88064A 97325.54206512 .00000051 00000-0 10000-3 0 6176
2 19336 82.5419 156.8005 0017617 13.6717 346.4861 13.16984915448235
Glonass 39
1 19503U 88085C 97322.14823372 -.00000029 00000-0 10000-3 0 5194
2 19503 65.3651 307.1688 0006234 169.5012 190.5096 2.13101789 71402
NOAA 11
1 19531U 88089A 97327.89315181 .00000022 00000-0 36553-4 0 1897
2 19531 99.1338 4.3667 0011310 204.8042 155.2587 14.13154262472551
TDRS 3
1 19548U 88091B 97326.59747711 -.00000186 00000-0 10000-3 0 3153
2 19548 3.5184 69.0855 0004398 99.7188 192.8356 1.00265565 20779
Glonass 40
1 19749U 89001A 97327.34777329 -.00000046 00000-0 10000-3 0 7407
2 19749 65.4460 67.6673 0006445 250.9910 108.9607 2.13101255 69025
Glonass 41
1 19750U 89001B 97322.24020842 -.00000027 00000-0 10000-3 0 6446
2 19750 65.4526 67.9314 0006390 247.2996 112.6323 2.13101657 68939
GPS BII-01
1 19802U 89013A 97327.65128177 -.00000012 00000-0 00000+0 0 4961
2 19802 55.5959 89.7508 0020515 145.6293 214.5013 2.00555213 64234
Akebono
1 19822U 89016A 97327.89569655 .00018708 00000-0 96717-3 0 412
2 19822 75.0611 176.5915 3693703 66.5332 327.8059 8.01982673208473
Meteor 2-18
1 19851U 89018A 97327.25732650 .00000084 00000-0 61934-4 0 6039
2 19851 82.5264 223.1995 0013591 311.5615 48.4379 13.84443633441345
MOP-1
1 19876U 89020B 97326.59261168 -.00000160 00000-0 00000+0 0 2995
2 19876 3.0417 70.4583 0015675 282.3211 77.1804 0.97110943 11708
TDRS 4
1 19883U 89021B 97323.16762529 -.00000273 00000-0 10000-3 0 3723
2 19883 0.9257 85.5869 0004539 182.0377 170.0727 1.00273231204328
GPS BII-02
1 20061U 89044A 97325.99643339 -.00000054 00000-0 10000-3 0 4782
2 20061 53.8740 264.7757 0172563 226.9760 131.5206 2.00563495 61944
Nadezhda 1
1 20103U 89050A 97320.07057153 .00000016 00000-0 48828-6 0 1677
2 20103 82.9575 87.4733 0039235 54.4815 305.9973 13.73883995419652
GPS BII-03
1 20185U 89064A 97325.69609919 -.00000005 00000-0 10000-3 0 5051
2 20185 55.3768 90.1782 0022166 359.9770 0.0111 2.00570906 60510
GMS 4
1 20217U 89070A 97327.44436794 -.00000363 00000-0 10000-3 0 6720
2 20217 2.8317 72.5138 0001143 252.0930 17.8714 1.00263413 30675
INTERCOSMOS 24
1 20261U 89080A 97327.88120799 .00000275 00000-0 85699-4 0 6349
2 20261 82.5895 295.5547 1240198 288.5021 58.5424 12.47479662371320
GPS BII-04
1 20302U 89085A 97321.87474625 .00000004 00000-0 00000+0 0 5238
2 20302 53.1625 204.5591 0205979 220.6299 140.7734 2.00559097 59231
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Meteor 3-3
1 20305U 89086A 97327.46215409 .00000044 00000-0 10000-3 0 9419
2 20305 82.5462 122.1135 0007825 100.5265 259.6682 13.04441634386550
COBE
1 20322U 89089A 97328.08446150 -.00000038 00000-0 33009-5 0 3536
2 20322 98.9245 339.9274 0009355 18.5592 341.5911 14.03473477410556
Kvant-2
1 20335U 89093A 97327.87461551 .00017161 00000-0 20622-3 0 810
2 20335 51.6549 3.0207 0007722 11.8900 348.2278 15.60951093455078
GPS BII-05
1 20361U 89097A 97323.88518803 -.00000091 00000-0 00000+0 0 2869
2 20361 56.2706 32.7461 0098546 148.3927 212.2431 2.00567386 48755
COSMOS 2054 (Altair-1)
1 20391U 89101A 97324.07653446 -.00000213 00000-0 10000-3 0 5609
2 20391 4.7968 60.2466 0004212 168.9282 190.9282 1.00243235 29226
SPOT 2
1 20436U 90005A 97328.21367083 -.00000044 00000-0 00000+0 0 3002
2 20436 98.7130 40.6037 0000691 92.3011 267.8244 14.20033179406358
UO-14
1 20437U 90005B 97327.21369060 .00000037 00000-0 31037-4 0 3133
2 20437 98.5078 45.3584 0011657 96.8856 263.3643 14.29983013408948
AO-16
1 20439U 90005D 97325.19409325 .00000051 00000-0 36534-4 0 1084
2 20439 98.5290 46.6784 0012024 104.6676 255.5842 14.30028028408671
DO-17
1 20440U 90005E 97325.23426910 .00000042 00000-0 32742-4 0 1065
2 20440 98.5333 47.6890 0012077 103.4454 256.8078 14.30171421408715
WO-18
1 20441U 90005F 97328.24419567 .00000049 00000-0 35604-4 0 1146
2 20441 98.5305 50.5184 0012677 95.9771 264.2853 14.30138287409142
LO-19
1 20442U 90005G 97320.22333544 .00000067 00000-0 42374-4 0 1105
2 20442 98.5347 43.4135 0013490 119.4861 240.7684 14.30254273408023
GPS BII-06
1 20452U 90008A 97324.78008079 .00000052 00000-0 10000-3 0 4024
2 20452 54.0854 145.5017 0072439 96.9052 263.9512 2.00574256 57270
MOS-1B
1 20478U 90013A 97324.72998305 -.00000044 00000-0 00000+0 0 935
2 20478 99.0737 32.2230 0004746 262.2933 97.7690 13.93983553317219
DEBUT
1 20479U 90013B 97323.88283836 .00000004 00000-0 80814-4 0 1031
2 20479 99.0647 256.5976 0540568 24.1817 338.3671 12.83360407364693
FO-20
1 20480U 90013C 97319.83283140 -.00000002 00000-0 64385-4 0 102
2 20480 99.0652 253.0179 0540598 34.1490 329.3181 12.83241111364156
MOS-1B R/B
1 20491U 90013D 97326.50436523 .00000097 00000-0 24154-3 0 3982
2 20491 99.0168 338.6964 0470049 147.9745 215.0880 13.03009400370016
LACE
1 20496U 90015A 97325.75249205 .00004093 00000-0 11583-3 0 8105
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2 20496 43.0980 96.5929 0011555 230.6162 129.3654 15.37681611434217
Nadezhda 2
1 20508U 90017A 97327.54866199 .00000072 00000-0 60653-4 0 1690
2 20508 82.9541 216.3562 0045009 348.3223 11.6888 13.73530492387876
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2 20546 94.1149 292.8629 0048516 122.9513 237.6457 15.55821557426327
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2 20635 51.6550 3.0205 0007700 11.8135 348.2562 15.60949809425904
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Meteor 2-19
1 20670U 90057A 97327.42874971 .00000026 00000-0 10156-4 0 4558
2 20670 82.5430 291.4928 0014241 223.0559 136.9489 13.84136017374268
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2 20724 55.2445 87.5920 0140840 194.5995 164.9783 2.00563132 51963
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1 20788U 90081A 97327.93390989 .00000053 00000-0 63142-4 0 5726
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Meteor 2-20
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Glonass 49
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Glonass 52
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2 21218 64.6838 305.3603 0005931 234.1396 125.8539 2.13102532 51645
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Meteor 3-4
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2 21263 98.5325 337.2125 0012362 185.5916 174.5126 14.22767146339067
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2 21574 98.5452 38.7502 0001102 82.4528 277.6781 14.32248639332314
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1 21575U 91050B 97326.15692991 .00000086 00000-0 42829-4 0 8165
2 21575 98.2808 20.9599 0007809 131.3868 228.7990 14.37097632333171
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TUBSAT-A
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2 21577 98.2792 17.3411 0006557 140.3979 219.7689 14.36569040332844
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2 21578 98.3266 33.5992 0005572 118.9257 241.2488 14.39489452333863
TDRS 5
1 21639U 91054B 97320.40497396 .00000074 00000-0 10000-3 0 2384
2 21639 0.0206 275.1503 0004101 224.8742 246.9944 1.00271635 23041
Meteor 3-5
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2 21655 82.5525 314.3666 0013000 319.4510 40.5641 13.16857491300899
UARS
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1 21798U 91082A 97327.64278550 .00000026 00000-0 37209-4 0 9614
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Glonass 53
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Glonass 54
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2 21854 65.3700 66.5898 0016405 19.1645 340.9058 2.13105389 45298
Glonass 55
1 21855U 92005C 97326.34338638 -.00000043 00000-0 00000+0 0 4523
2 21855 65.3698 66.6681 0003364 201.4940 158.4872 2.13102016 45245
JERS-1
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2 21890 53.6704 205.0271 0050935 223.4653 136.2086 2.00568182 42162
GPS BIIA-13
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2 22014 54.9056 147.7556 0105154 344.2859 15.4073 2.00550639 32865
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TDRS 6
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Glonass 61
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NOAA 13
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Meteor 2-21
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2 22782 82.5476 297.6427 0022037 333.7288 26.2756 13.83085496212550
UFO F2
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SPOT 3
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STELLA
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AO-27
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2 22825 98.5305 30.4643 0008951 151.9281 208.2385 14.27743647215697
IO-26
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2 22826 98.5319 35.6372 0010472 140.7468 219.4481 14.27854367216428
HEATHSAT
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CORONAS I
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Glonass 62
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Nadezhda 4
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OKEAN 1-7
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RESURS 1-3
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NOAA 14
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Glonass 73
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2 23549 143.3546 223.7093 0163751 287.3232 70.9661 15.33880062146429
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2 23606 98.1511 265.7068 0007799 336.8825 23.2046 14.67511439127564
CERISE
1 23607U 95033C 97323.86930604 .00000188 00000-0 42123-4 0 2196
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2 23613 1.7506 80.2261 0002518 163.4304 174.6601 1.00278542 8633
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1 23620U 95037A 97328.07661184 .00000068 00000-0 00000+0 0 3592
2 23620 64.8150 186.4198 0018229 162.3163 197.8025 2.13100997 18193
Glonass 75
1 23621U 95037B 97326.84768265 .00000049 00000-0 00000+0 0 3751
2 23621 64.8249 186.4680 0018360 176.4376 183.6561 2.13102363 18161
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1 23622U 95037C 97325.02821385 .00000028 00000-0 00000+0 0 3751
2 23622 64.8074 186.5253 0036294 164.4607 195.7307 2.13102545 18125
Prognoz-M2
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2 23734 64.8143 186.3470 0016775 326.4259 33.5519 2.13102229 15153
Glonass 78
1 23735U 95068B 97323.89641804 .00000023 00000-0 00000+0 0 3417
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Glonass 77
1 23736U 95068C 97325.85054292 .00000036 00000-0 00000+0 0 3385
2 23736 64.7970 186.4109 0007285 190.5867 169.4764 2.13102142 15103
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2 23757 22.9847 101.3812 0013697 181.1432 178.9020 14.97971404103748
Polar
1 23802U 96013A 97327.79588406 -.00000004 00000-0 00000+0 0 1737
2 23802 86.3649 20.3550 6530184 260.4854 25.5830 1.35168199 8693
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1 23824U 96010E 97326.49965707 .00019106 00000-0 29746-1 0 3663
2 23824 48.0229 79.7158 6741926 188.8357 147.1626 2.89877676 16316
GPS BIIA-25
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2 23833 54.5151 326.5657 0018198 140.2788 219.8187 2.00566281 12192
Priroda
1 23848U 96023A 97327.87460704 .00016028 00000-0 19305-3 0 5230
2 23848 51.6550 3.0205 0007700 11.8135 348.2562 15.60949809 90473
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2 23851 99.4261 325.1316 0006657 161.0601 199.0806 13.97398638 80730
SAX
1 23857U 96027A 97327.18014489 .00001576 00000-0 78667-4 0 1126
2 23857 3.9625 241.1684 0013794 68.0694 292.0826 14.92051340 85523
MSTI 3
1 23868U 96031A 97327.10858107 .00005000 00000-0 97123-4 0 2268
2 23868 97.1125 154.6235 0010218 52.8088 307.4095 15.48029308 85802
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1 23940U 96037A 97327.76837773 .00006601 00000-0 27879-3 0 1855
2 23940 97.4162 232.7758 0012043 303.0628 56.9460 15.23532056 77438
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1 23953U 96041A 97326.32362184 -.00000013 00000-0 00000+0 0 2210
2 23953 55.2563 87.2579 0021507 6.5138 353.4825 2.00569166 9965
ADEOS
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2 24277 98.5873 42.9263 0002022 100.0977 260.0433 14.27038365 66199
FO-29
1 24278U 96046B 97324.95615075 -.00000056 00000-0 -23651-4 0 1223
2 24278 98.5210 344.6714 0352212 139.7899 222.9876 13.52634554 62316
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2 24286 82.9920 324.7995 2201811 69.7819 312.5394 10.83471896 49735
Microsat
1 24291U 96050A 97328.25194995 .00070656 73506-5 65255-3 0 3407
2 24291 62.7845 323.4641 0440146 174.9289 185.6492 14.98619274 66800
MO-30
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2 24305 82.9337 237.7471 0030403 123.0116 237.3961 13.73100689 60750
GPS BIIA-27
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2 24320 54.4696 267.2353 0049398 100.4382 260.1293 2.00565030 8581
SAC-B/HETE
1 24645U 96061A 97319.58308471 .00001009 00000-0 57610-4 0 1128
2 24645 37.9752 37.3588 0047036 57.4961 303.0337 15.15336919 57039
ZEYA
1 24744U 97010A 97328.19652145 .00007302 00000-0 23321-3 0 1134
2 24744 97.2625 230.2280 0004741 232.3696 127.7119 15.32754051 40586
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1 24753U 97012A 97327.71400413 .00000091 00000-0 72663-4 0 2595
2 24753 98.9155 11.4801 0009028 323.8288 36.2265 14.13015968 32915
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2 24779 150.9693 84.2770 0013573 55.6731 304.5233 14.98612482 32536
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1 24780U 97018B 97328.11394038 .00002211 00000-0 10195-3 0 620
2 24780 150.9780 86.7418 0020086 56.2295 304.0219 14.99829049 32551
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2 24786 0.0683 284.1945 0006227 352.0717 179.9279 1.00272539 2107
Feng Yun 2B
1 24834U 97029A 97317.49471065 -.00000338 00000-0 00000+0 0 895
2 24834 0.9151 260.0360 0000677 311.1187 123.7623 1.00266329 1552
GPS BIIR-02
1 24876U 97035A 97327.83506237 .00000086 00000-0 00000+0 0 740
2 24876 54.9478 147.2396 0013961 236.3083 123.3408 2.00536895 2521
SeaStar
1 24883U 97037A 97327.19866352 .00000096 00000-0 32388-4 0 780
2 24883 98.2185 63.3869 0002422 32.1173 328.0171 14.55494865 16754
Soyuz TM-26
1 24886U 97038A 97327.87460704 .00016028 00000-0 19305-3 0 1157
2 24886 51.6550 3.0205 0007700 11.8135 348.2562 15.60949809 17228
Meteosat 7
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2 24932 1.6588 290.2241 0003770 315.5521 228.7004 1.00272080 833
COSMOS 2346
1 24953U 97052A 97327.19505937 .00000062 00000-0 45407-4 0 312
2 24953 82.9225 236.5887 0041211 114.2061 246.3413 13.79048353 8336
FAISAT 2V
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Sputnik 40
1 24958U 97058C 97328.00245784 .00077460 00000-0 87878-3 0 318
2 24958 51.6633 2.3811 0006872 0.5230 359.5971 15.61646803 3172
Progress M-36
1 25002U 97058A 97327.87460704 .00016028 00000-0 19305-3 0 609
2 25002 51.6550 3.0205 0007700 11.8135 348.2562 15.60949809 7701
STEP-M4
1 25013U 97063A 97327.78995623 .00002128 00000-0 73224-4 0 326
2 25013 44.9651 210.0310 0049697 327.0355 32.7434 15.32932655 4951
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2 25020 26.3071 205.6479 7254353 194.7080 119.3388 2.34047712 611
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2 25031 35.1963 76.4245 0075551 312.7145 46.7204 15.18598551 2669
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Iridium 43
1 25039U 97069A 97328.19290991 -.00037794 00000-0 -13570-1 0 595
2 25039 86.3968 127.3398 0002473 74.1109 286.0578 14.34250071 2210
Iridium 41
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2 25040 86.3896 127.2895 0006027 169.4604 190.6704 14.34069866 2222
Iridium 40
1 25041U 97069C 97328.18549118 -.00024060 00000-0 -81569-2 0 412
2 25041 86.4201 127.3470 0002128 74.2366 285.9074 14.37036831 2216
Iridium 39
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2 25042 86.3977 127.3349 0000313 137.6489 222.4685 14.34590741 2211
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1 25044U 97069F 97327.89510331 .00126415 27219-5 69451-3 0 224
2 25044 83.5516 121.0549 0264146 297.7563 59.7345 15.44071213 2282
Kupon
1 25045U 97070A 97324.63385664 .00000089 00000-0 00000+0 0 93
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1 25046U 97070B 97317.37349553 .65689875 12556-4 15941-2 0 109
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2 25048 0.0734 308.5325 0015298 0.6460 50.7132 0.99607482 16
Sirius 2
1 25049U 97071A 97326.31859954 .00000125 00000-0 00000+0 0 207
2 25049 0.0512 29.1620 0042988 348.6794 168.0552 1.00946045 132
Cakrawarta 1
1 25050U 97071B 97326.52033231 -.00000364 00000-0 00000+0 0 211
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1 25051U 97071C 97325.66945621 .00063871 88518-6 33008-2 0 114
2 25051 6.9574 193.3469 7351792 185.5284 155.1130 2.22675582 205
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RESURS-F1M
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2 25060 82.3279 249.7319 0016709 352.4488 8.8532 16.55760951 425
STS 87
1 25061U 97073A 97328.37500000 .00006379 -70788-5 86431-5 0 151
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SPARTAN
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2 25062 28.4670 152.0507 0004250 340.7627 19.3663 15.97564591 5672
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Dr TS Kelso
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Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2860. NORAD Two-Line Orbital Element Set: Space Shuttle (97328.37500000)

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <65d2fa$5rp$1@blackbird.afit.af.mil>
Source record: 17583

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

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STS 87
1 25061U 97073A 97328.37500000 .00006379 -70788-5 86431-5 0 151
2 25061 28.4698 151.5630 0004259 355.6705 18.0966 15.97795019 727
SPARTAN
1 25062U 97073B 97328.31004399 .00133048 -66958-6 27678-3 0 94
2 25062 28.4670 152.0507 0004250 340.7627 19.3663 15.97564591 5672
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2861. Re: Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mzpmt3cah.fsf@spinner.ecofe.com>
Source record: 17584
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

You are entitled to your opinion of course, and I am entitled to mine. It
wasn't spam. It was an informative message about a non-profit organization.
[fiscus@mcn.net (Vincent Fiscus, KB7ADL)]

You are welcome to your opinion. But you do need to make it clear when
something is your opinion, and that you are acting on your own, not as
a representative of that organization (whether or not you are a member).
Otherwise, you can get yourself in trouble, as well as the organization
that you intend to promote. Please be more careful in the future.

-- KD6PAG (speaking for himself and
no one else in particular.)

2862. New Mir experiment [Was: ANS-327 WEEKLY BULLETINS]

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4msosl38wp.fsf@spinner.ecofe.com>
Source record: 17585

SB SAT @ AMSAT $ANS-327.01
MIR FREQUENCY EXPERIMENTS
HR AMSAT NEWS SERVICE BULLETIN 327.01 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 23, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-327.01

As part of ongoing frequency experiments to improve Amateur Radio
operations on board Mir, and to better understand how these
frequencies will be effective on the International Space Station,
Mir will begin a 2 phase frequency experiment beginning
December 1, 1997 and ending on May 31, 1997.

For phase 1, a 70cm/2m crosslink experiment will operate for a 3
month period from December 1, 1997 up to March 1, 1998.
On December 1 the Mir operating frequencies will change to:
Uplink: 437.850 MHz Downlink: 145.800 MHz

Phase 2 of this experiment will use a 2 meter-only set of uplink
and downlink frequencies. This phase of the experiment will
begin on March 1, 1998 and will also be of 3 months duration.

I'm concerned whether this will be compatable with SAFEX, and it will
depend on how it's implemented. Clearly, having two uplinks close
together isn't a problem, but when SAFEX operates as a repeater, it's
also transmitting on 437.95 and that will desense the packet/voice
receiver. If the uplink were at least 20 KHz from 435.750 MHz, then
the MIR packet/voice receiver could share the SAFEX duplexer with the
repeater, but that might involve a new cable going between modules
(and probably a pre-amp to compensate for cable loss), which, given
the Spektr experience, they might want to minimize.

Furthermore, this is the harder way of doing, as the terrestrial
transmitter is responsible for compensating for doppler. From using
the SAFEX repeater, i find that i'ts not easy to get the uplink doppler
right by hand at 70cm.

Now, a downlink of 437.850 MHz, and an uplink of 145.800 MHz would make
a lot of sense from an amateur standpoint, as the existing duplexer
would protect the SAFEX receiver from desense from Mir packet/voice and
the SAFEX transmitter would not even be in the same band as the uplink.
And the terrestrial station would need to compensate for doppler largely
on the downlink, where (s)he could hear if (s)he were on-frequency, with
little or no doppler correction for the uplink. But i think the reason
for doing this experiment is to try to avoid interfere from and/or to
the non-amateur transceiver at 143.625 MHz. It might be worthwhile to

try this split for ISS as a phase 3 test at some point, particularly if filtering can protect the 143.625 MHz uplink.

I hope this experiment can be done in a manner that doesn't require disabling SAFEX (which was only recently brought back on-line at least part of the time). But i do respect that MIR packet/voice may be higher priority.
-- KD6PAG

2863. RS16 Transponder

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@firstinter.net>
Message-ID: <3479F331.2481@firstinter.net>
Source record: 17586

Anyone know if the RS16 transponder is functional yet?

Rick Tannehill

2864. FS: Sat-Crossed X-Yagis 2mtr & 70cm

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcf8dc$07653ca0$f28d56cf@Kwiknet.ppp>
Source record: 17587

Hello All;
I'm selling used 2mtr 2x11 Element Crossed satellite X-yagi and
70cm 2x19 Element Crossed satellite X-Yagi.
Both are in good cosmetic & working shape. For details Please re:
email: n2rif@amsat.org You can also try calling but my phone is
usually busy... My ph# is 609-386-9382.. I am Asking $155.00 OBO
for both. No CODs All cash offers will be considered
Also since both of these antennas are too large to probably ship.
It is better for anyone within driving distance of my qth to come,
look and consider buying these beams. My qth is Burlington, NJ
about 8 miles N-E of Phila, Pa and 12 miles S-E of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2865. FS:Rf-Concept 4-110 70cm Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcf8dc$5768a2a0$f28d56cf@Kwiknet.ppp>
Source record: 17588

Hello All;
I'm selling a "like new" Rf-Concepts 4-110 Pre-amplified N/conn
10w-in 100-110w-out 70cm amplifier with all orignal boxes & docs.
Worked the satellites with this amp & a fantastic preamp. Reason
for sale is strictly financial. I am asking $255 + shipping OBO.
Sorry No CODs.....
Please re: me via email: n2rif@amsat.org Or Packet
N2RIF@WM2F.#SNJ.NJ.USA.NOAM. You can also try
calling but my phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2866. FS: Glen Martin Roof Tower + More

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcf8dc$1f3b3a00$f28d56cf@Kwiknet.ppp>
Source record: 17589

Hello All;
I am selling 5ft Glen Martin Roof Tower w/ matching thrust bearing and 9ft heavy duty aircraft aluminum 2" diameter mast. All in great shape almost like new. Email: n2rif@amsat.org You can try calling but my phone is usually busy cause Im on the net most of the time. My ph# is 609-386-9382..
New is cost over $400 for everything. I am asking $290 OBO. It is assembled. Shipping will probably be a bit hard to re-package. So anyone who is within driving distance should probably re: My qth is Burlington, NJ about 5 miles NorthEast of Phila,Pa and 12 miles South of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2867. FS: Almost New Mirage B1016B Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bcf8dc$3cfdf0a0$f28d56cf@Kwiknet.ppp>
Source record: 17590

Hello All;
I'm selling a "like new - used 9 times" Mirage B 1016G [made
by KLM not by MFJ] Pre-amplified 10w-in 160-170w-out 2mtr
amplifier with all orignal boxes & docs.
Worked the "Sats" with this amp & has super preamp. Reason
for sale is strictly financial. I am asking $285 + shipping OBO.
Sorry No CODs...
Please re: me via email: n2rif@amsat.org Or Packet
N2RIF@WM2F.#SNJ.NJ.USA.NOAM. You can also try
calling but my phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2868. Re: Belden 9913

Newsgroup: rec.radio.amateur.space
Date: 1997-11-24 00:00:00 UTC
From: "Howard W. Pepper, Jr." <hpepper@mindspring.com>
Message-ID: <65cb2o$f2j@camel20.mindspring.com>
Source record: 17680

According to the ARRL Antenna Book, 18th edition, Belden 9913 Velocity Factor is 89% (pg. 24-17)

Howard/AC4FS
"willy.wilson"@mizar.ursa.fi <"willy.wilson"@mizar.ursa.fi> wrote in message <4ac124.6254a8@mizar.ursa.fi>...
>From: "willy.wilson" <willy.wilson@virgin.net>
>
>Anyone know the velocity factor of Belden 9913 pse?
>Tks, Willy/GM3NUF.

2869. Re: Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <65d8pa$op7@news.mcn.net>
Source record: 17591
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Tim,
You are entitled to your opinion of course, and I am entitled to mine. It wasn't spam. It was an informative message about a non-profit organization. Of the 30 or so groups it could be relevant too. It was only posted to six. Have you never heard discussion about listening to satellites or MIR in the scanner newsgroup, or the SWL who listens to shuttle communications on his shortwave transmitted by amsat members at the Goddard amateur radio club in the shortwave newsgroup? Amsat is a place where information can be exchanged to help someone enjoy their radio hobby, whatever that might be.

KB7ADL

In article <34776183.90E1F3E5@mich.com>, ttyler@mich.com wrote:
>I thought you AMSAT guys were rocket scientists & stuff (i.e. intelligent,
> decent
>people), not white-trash that spam Usenet newsgroups with commercials! Perhaps
>Vinnie is the exception, but anyway, these frequent AMSAT spams (in particular,
> to
>groups like rec.radio.swap/shortwave & scanner) tend to reflect poorly on
> AMSAT,
>not just Vinnie...

2870. Re: Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <347ae84a.596111@news.mindspring.com>
Source record: 17592
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I myself do not find it to be 'spam'. To me spam is unrelated junk
mail.

The P3D satellite is built with and run by donations from Hams like
myself. And it is the most expensive ham satellite ever.

SWL's will be able to listen to P3D and should find it very enjoyable.
Hams worldwide will be able to work P3D with low power and easy to
build antennas.

W4SCO
AMSAT member
ARRL member
10-X #69103
Extra Class (but started life as a No Code Tech)

Tim Tyler <ttyler@mich.com> wrote:

>I thought you AMSAT guys were rocket scientists & stuff (i.e. intelligent, decent
>people), not white-trash that spam Usenet newsgroups with commercials! Perhaps
>Vinnie is the exception, but anyway, these frequent AMSAT spams (in particular, to
>groups like rec.radio.swap/shortwave & scanner) tend to reflect poorly on AMSAT,
>not just Vinnie...
>
>Vincent Fiscus, KB7ADL wrote:
>
>> Enter the world of amateur satellite communications with AMSAT - Radio Amateur
>> Satellite Corporation. Satellites are amateur radios highest frontier and you
>> can be a part of it. Like working DX but hate poor HF band conditions? Work
>> DX via satellite and leave all be qrm, qrn & qsb behind. Like Digital modes?
>> Upload a message to a pacsat and in 45 minutes a ham on the other side of the
>> world could read it and respond to it. You can leave a message with the
>> cosmonauts on the Mir space station or talk to the astronauts on the space
>> shuttle during SAREX missions. You can also play a part in helping AMSAT
>> complete it latest project, the Phase 3D satellite. Phase 3D is ham radios
>> largest and most complex satellite to date. Construction and testing of P3D
>> will soon be complete. Ham radio satellites mainly operate above 144 mHz, so
>> you won't need a fancy ham radio license to use them. A tech class license
>> will work just fine.
>> Of course you don't need to be a member of AMSAT to enjoy all these
>> things, But your membership will help keep present and future projects
>> going.If you've decided you won't join Amsat at this time, but would like to
>> donate to Phase 3D. You can send your contribution to:
>>

>> AMSAT-NA
>> 850 Sligo Ave. Suite 600
>> Silver Spring, MD. 20910-4703
>>
>> or call Martha at Amsat: (301) 589-6062
>>
>> For more info about AMSAT
>> and Phase 3D see: http://www.amsat.org
>>
>> 73 de KB7ADL

2871. WTB: 440 ALL MODE AMPLIFIER

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: wb5yqc@aol.com
Message-ID: <19971125153500.KAA09187@ladder01.news.aol.com>
Source record: 17593

i am looking for a BIG amp. if i have to settle for 100 to 150 watts so be it
but
i want over 200 watts.

2872. FS: RADIOS & MISC.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bcf9c8$c83938e0$ccf3efcf@restar.idir.net>
Source record: 17594
Cross-posted to: rec.radio.amateur.space,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
AMATEUR RADIOS
FOR SALE
FT 757GXII= $900 (low $700)
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300 (SOLD)
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

2873. Re: Correction... Join AMSAT.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: kb9bnr@revealed.nET
Message-ID: <347b1e35.364995635@snews.zippo.com>
Source record: 17595
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I would also have to say that this is NOT SPAM, in fact it's a dam
good idea to post it here. If we don't get more people interested in
ham radio, it will one day end. This Tim Tyler is making a big dea
lout of nothing. I picture him with his foot in his month right now.

On Sat, 22 Nov 1997 17:49:40 -0500, Tim Tyler <ttyler@mich.com> wrote:

>I thought you AMSAT guys were rocket scientists & stuff (i.e. intelligent, decent
>people), not white-trash that spam Usenet newsgroups with commercials! Perhaps
>Vinnie is the exception, but anyway, these frequent AMSAT spams (in particular, to
>groups like rec.radio.swap/shortwave & scanner) tend to reflect poorly on AMSAT,
>not just Vinnie...
>
>Vincent Fiscus, KB7ADL wrote:
>
>> Enter the world of amateur satellite communications with AMSAT - Radio Amateur
>> Satellite Corporation. Satellites are amateur radios highest frontier and you
>> can be a part of it. Like working DX but hate poor HF band conditions? Work
>> DX via satellite and leave all be qrm, qrn & qsb behind. Like Digital modes?
>> Upload a message to a pacsat and in 45 minutes a ham on the other side of the
>> world could read it and respond to it. You can leave a message with the
>> cosmonauts on the Mir space station or talk to the astronauts on the space
>> shuttle during SAREX missions. You can also play a part in helping AMSAT

>--
>Tim Tyler
>ttyler@mich.com
>http://www.mich.com/~ttyler/
>
>

2874. ARLK092 Keplerian data

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: w1aw@arrl.org
Message-ID: <$arlk092.1997@arrl.org>
Source record: 17596
Cross-posted to: rec.radio.info,rec.radio.amateur.space

```
SB KEP @ ARL $ARLK092
ARLK092 Keplerian data

ZCZC SK92
QST de W1AW
Keplerian Bulletin 92 ARLK092
From ARRL Headquarters
Newington, CT November 25, 1997
To all radio amateurs

SB KEP ARL ARLK092
ARLK092 Keplerian data

Thanks to Con, W5BWF, for the following Keplerian data.

Decode 2-line elsets with the following key:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-87
1 25061U 97073A 97329.58333333 .00006424 -70863-5 87159-5 0 195
2 25061 28.4652 142.4301 0004102 349.7264 149.6241 15.97828679 919
Spartan
1 25062U 97073B 97328.58333333 .00006306 -70846-5 85740-5 0 100
2 25062 28.4652 149.9839 0004181 336.5376 158.7448 15.97612360 5714
Sputnik Jr
1 24958U 97058C 97329.34624839 .00042902 00000-0 48985-3 0 339
2 24958 51.6591 355.5995 0008072 8.3606 351.7666 15.61722289 3378
AO-10
1 14129U 83058B 97327.33402454 -.00000042 00000-0 10000-3 0 5171
2 14129 26.4409 115.5242 6029452 170.4062 210.5837 2.05880929 80661
RS-10/11
1 18129U 87054A 97328.93119142 .00000023 00000-0 89918-5 0 04400
2 18129 82.9231 119.9247 0012237 129.2463 230.9782 13.72385763522288
UO-11
1 14781U 84021B 97328.92449059 .00000289 00000-0 56471-4 0 00433
2 14781 97.8528 303.8922 0010669 205.6368 154.4329 14.69621495734864
RS-12/13
1 21089U 91007A 97328.99781278 .00000033 00000-0 19531-4 0 00290
2 21089 82.9248 159.3987 0028166 207.8516 152.1132 13.74088714341241
UO-14
1 20437U 90005B 97329.17287592 .00000073 00000-0 44897-4 0 03250
2 20437 98.5077 47.2733 0011686 91.2730 268.9795 14.29983731409224
```

```
RS-15
1 23439U 94085A 97329.22961942 -.00000039 00000-0 10000-3 0 2622
2 23439 64.8174 252.4319 0145911 101.1920 260.5452 11.27528506120097
AO-16
1 20439U 90005D 97329.25227795 .00000050 00000-0 35928-4 0 1090
2 20439 98.5289 50.6540 0012274 93.5894 266.6691 14.30028779409252
RS-16
1 24744U 97010A 97329.24105487 .00008931 00000-0 28440-3 0 1140
2 24744 97.2619 231.2549 0004951 225.6372 134.4469 15.32779515 40740
DO-17
1 20440U 90005E 97329.29204638 .00000034 00000-0 29807-4 0 1076
2 20440 98.5330 51.6666 0012181 92.3767 267.8805 14.30172145409295
WO-18
1 20441U 90005F 97329.15371879 .00000054 00000-0 37382-4 0 01196
2 20441 98.5305 51.4098 0012669 93.1820 267.0813 14.30138502409273
LO-19
1 20442U 90005G 97329.17791135 .00000085 00000-0 49202-4 0 01176
2 20442 98.5325 52.1936 0013596 94.8019 265.4727 14.30256226409307
FO-20
1 20480U 90013C 97328.87645052 -.00000013 00000-0 43561-4 0 127
2 20480 99.0658 260.3750 0540610 13.6772 347.8338 12.83241082365313
AO-21
1 21087U 91006A 97328.99390471 .00000094 00000-0 82657-4 0 08832
2 21087 82.9379 292.5482 0034197 178.2875 181.8404 13.74589965342240
UO-22
1 21575U 91050B 97329.15080754 .00000089 00000-0 43866-4 0 08396
2 21575 98.2807 23.8411 0007931 122.5137 237.6814 14.37098457333600
KO-23
1 22077U 92052B 97329.07578177 -.00000037 00000-0 10000-3 0 7069
2 22077 66.0844 168.3755 0000355 131.2778 228.8271 12.86304684248449
KO-25
1 22828U 93061F 97329.20157571 .00000052 00000-0 38026-4 0 06031
2 22828 98.5277 40.1034 0010850 110.6975 249.5365 14.28202360185193
IO-26
1 22826U 93061D 97329.20606769 .00000158 00000-0 81230-4 0 5982
2 22826 98.5311 40.0159 0010198 127.6802 232.5304 14.27857352217062
AO-27
1 22825U 93061C 97329.17996021 .00000083 00000-0 50832-4 0 06049
2 22825 98.5300 39.7003 0009214 124.4109 235.7951 14.27745934217047
FO-29
1 24278U 96046B 97329.09853185 -.00000030 00000-0 27588-5 0 1235
2 24278 98.5201 348.2396 0352206 129.0692 234.2344 13.52634765 62879
MO-30
1 24305U 96052B 97329.18912827 .00000204 00000-0 20364-3 0 01732
2 24305 82.9324 235.5917 0030734 114.8834 245.5498 13.73101161061156
Mir
1 16609U 86017A 97329.47512766 .00011083 00000-0 13532-3 0 8092
2 16609 51.6560 354.9605 0007684 18.0079 342.1173 15.60980853672202
```

Keplerian bulletins are transmitted twice weekly from W1AW.
The next scheduled transmission of these data will be Saturday,
November 29, 1997, at 2330z on Baudot and AMTOR.
NNNN
/EX

2875. Re: help with FO-29

Newsgroup: rec.radio.amateur.space
Date: 1997-11-25 00:00:00 UTC
From: Erik van Bronkhorst <caseycct@ridgenet.net>
Message-ID: <347B5960.545D@ridgenet.net>
Source record: 17597

```
Oliver Welp wrote:
>
> Hi,
>
> kd4cga@tallassee.net wrote:
> >
> > Anyone know of a web site where
> > I can get current info on fo-29?
>
> Try
> http://www.kt.rim.or.jp/~jr1nvu/index.html
>
> 73 de Oliver
> (DL9QJ, N3NSF)
>

Sorry that doesn't exist either. :-(

--
Erik van Bronkhorst
CW/KotGT DoD#4342585443 AMA#438054
caseycct@ridgenet.net
http://www.ridgecrest.ca.us/~caseycct/erik/
http://www.2von.com
kc6uut@qsl.net
http://www.qsl.net/kc6uut/
kc6uut@wa6ybn.#soca.ca.usa.na
```

2876. Re: 10-m antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-11-26 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@firstinter.net>
Message-ID: <347C5D45.2800@firstinter.net>
Source record: 17598

Ka3hsw wrote:
>
> In article <34788E76.5ABC@earthlink.net>, Rod Adkins <rodadkins@earthlink.net>
> writes:
>
> >
> >I have had best success with a horizontal full-wave loop.
> >I have used this at various heights from 10 to 20 feet, and used a
> >wooden support for wire in a square configuration.
> >I used a coax balun to adjust the impedance from the nominal 100 ohm
> >loop to 50 ohms, but not convinced it made much difference!
> >
> >I found the loop out-performed crossed dipoles, & much quieter than a
> >vertical. Used it successfully on RS-15 for transatlantic SSB contacts
> >when I was in Ontario, Canada.
>
> I concur.... I've tried dipoles, crossed dipoles, verticals, etc., but the
> full-wave loop is by far the best. For the purists, the coax balun consists of
> an electrical quarter-
> wavelength of 75-ohm coax between your 50-ohm feedline and the loop. But, like
> Rod, I don't think it makes a whole lot of difference in receive-only
> applications like this......
>
> 73 de KA3HSW

I've had very good success using the Butternut HF5B butterfly (bow-tie?)
beam for 10M sat downlink. I believe that the loop is full-wave on 10M.

Rick T. W7RT

2877. shorton: AO-27 AND MIR FROM THE CARIBBEAN

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: shorton@juno.COM
Message-ID: <19971127.111245.5239.2.shorton@juno.com>
Source record: 17599

SAMUEL
KD4ESV
EL87RH
--------- Begin forwarded message ----------
From: shorton
To: amsat
Subject: AO-27 AND MIR FROM THE CARIBBEAN
Date: Thu, 27 Nov 1997 10:59:13 EST
Message-ID: <19971127.105916.5239.0.shorton@juno.com>

I WILL BE LEAVING ON SUNDAY FOR A SEVEN DAY CRUISE TO THE EASTERN
CARIBBEAN

OUT OF MIAMI AT 5 PM EDT AND PLAN TO TRY AND WORK AO-27 AND MIR FROM THE
SHIP.WILL ARRIVE IN ST.MAARTIN WED. DEC. 3 AND THEN ST. JOHN, AND ST
THOMAS

VIRGIN ISLANDS ON THUR.,DEC. 4 AND COCOCAY,BAHAMA ON SAT.,DEC. 6 AND
FINALLY

BACK IN MIAMI ON SUN.,DEC. 7 AT 8:30 AM EDT.

EQUIPMENT

HOME BREW DUAL BAND YAGI ANTENNA

3 EL. ON 2 METERS

7 EL. ON 70 CM.

DUAL BAND HAND HELD RADIO SHACK 2 METER HAND HELD

ICOM 220 HAND HELD

HOPE TO WORK YOU ON AO-27 OR MIR.USING LAPTOP FOR TRACKING SAT'S AND
LOGGING CONTACTS 73 DE KD4ESV SAMUEL

--------- End forwarded message ----------

2878. SWL HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: "Ralph M. Ferrara" <rmf218@servtech.com>
Message-ID: <347DAD6D.7E86DBA0@servtech.com>
Source record: 17600

Having heard the Sputnik jr. on several passes for the past few weeks I
am looking for any site that is sending SWL cards to confirmed contacts.
I have the Russian address but understand that the is another groupalso
sending confirmation cards. Can anyone help?. thanks.
WA2NTK......Ralph

2879. Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: Yik Feng Tan <yftan@acs.ucalgary.ca>
Message-ID: <65kj08$29a@ds2.acs.ucalgary.ca>
Source record: 17601
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Dear Masters,

I am a newbie to these mews group. I going to build a low power FM transmitter which is able to cover a radius of 300 ft. I wonder if any of you have or know any webpages that can help me build this device.

Personal reply will be highly apprecaited as I don't visit these newsgroup often.

Thanx a million. I love you all.

Yick

2880. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <347DF1C3.25B8@earthlink.net>
Source record: 17602
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Yik Feng Tan wrote:
>
> Dear Masters,
>
> I am a newbie to these mews group. I going to build a low power FM
> transmitter which is able to cover a radius of 300 ft. I wonder if any of
> you have or know any webpages that can help me build this device.

Ramsey Electronics sells a Stereo FM Xmtr of 100milliwatts out which
is legal in US and Canada and can cover 300ft easily...
Check with them (I think they have a web page.....use a search engine
to check for it)

Chris
WB5ITT
ABC Radio, Dallas
>
> Personal reply will be highly apprecaited as I don't visit these newsgroup
> often.
>
> Thanx a million. I love you all.
>
> Yick

2881. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <347E0433.50FE@ix.netcom.com>
Source record: 17603
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Yik Feng Tan wrote:
>
> Dear Masters,
>
> I am a newbie to these mews group. I going to build a low power FM
> transmitter which is able to cover a radius of 300 ft. I wonder if any of
> you have or know any webpages that can help me build this device.
>
> Personal reply will be highly apprecaited as I don't visit these newsgroup
> often.
>
> Thanx a million. I love you all.
>
> Yick

Hello Yick --- see URL:
http://www.durhamradio.ca/ramfm.htm
Several FM transmitter Kits there.

More kit projects at URL:
http://pw2.netcom.com/~ac6v/pageay.html

Good Luck
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

2882. Re: AO-27 transmit power?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-27 00:00:00 UTC
From: "John S. Sapyta" <jsapyta@goodnet.com>
Message-ID: <347E46A7.BD82095E@goodnet.com>
Source record: 17604

its half a watt...

KB9KHM wrote:

> I was just curious if anyone knew what the transmit power of Oscar 27
> was?
>
> Thanks!
>
> --
> Mark <KB9KHM>
>
> Home Page:
> http://home.sprynet.com/sprynet/kb9khm

2883. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-28 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <347EF922.E3BCC20D@sj.bigger.net>
Source record: 17605
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Http://www.ramseyelectronics.com more transitters...

AC6V wrote:

> Yik Feng Tan wrote:
> >
> > Dear Masters,
> >
> > I am a newbie to these mews group. I going to build a low power FM
> > transmitter which is able to cover a radius of 300 ft. I wonder if any of
> > you have or know any webpages that can help me build this device.
> >
> > Personal reply will be highly apprecaited as I don't visit these newsgroup
> > often.
> >
> > Thanx a million. I love you all.
> >
> > Yick
> -----
> Hello Yick --- see URL:
> http://www.durhamradio.ca/ramfm.htm
> Several FM transmitter Kits there.
>
> More kit projects at URL:
> http://pw2.netcom.com/~ac6v/pageay.html
>
> Good Luck
> Rod in San Diego
> --
> AC6V's HAM AND DX REFERENCE GUIDE
> 70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
> Main Page: http://pw2.netcom.com/~ac6v/index.html
> Master Index: http://pw2.netcom.com/~ac6v/pageas.html

2884. FO-20/29 users in near / mid East or North Africa?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-28 00:00:00 UTC
From: John Charles <jaycee@midmarsh.demon.co.uk>
Message-ID: <nkFgALApYvf0Ewmi@midmarsh.demon.co.uk>
Source record: 17606

Here in the UK I hear / work many European stations on the Fuji Oscars along with a few stations from the USA.

I have yet to hear any Canadian, Near Eastern or North African stations and wondered if there are operators in those areas working FO-20 or FO-29?

Occasionally the footprint will spread as far as India but apart from the USA I've not yet heard anyone outside Europe or had any responses from those areas to my CQ's.

73 John M1BTR
--
John Charles jaycee@midmarsh.demon.co.uk

2885. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-28 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <347EDE76.6C36@raccoon.com>
Source record: 17607
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Christopher (Chris) W. Boone wrote:
>
> Yik Feng Tan wrote:
> >
> > Dear Masters,
> >
> > I am a newbie to these mews group. I going to build a low power FM
> > transmitter which is able to cover a radius of 300 ft. I wonder if any of
> > you have or know any webpages that can help me build this device.
>
> Ramsey Electronics sells a Stereo FM Xmtr of 100milliwatts out which
> is legal in US and Canada and can cover 300ft easily...
> Check with them (I think they have a web page.....use a search engine
> to check for it)

Er not to pick nits...BUT...

On the FM band in the US, 100 mw out would NOT be legal...

AND, if you're talking about the FM-10, it is a myth that it puts out 100 mw (they're AM transmitter may, however)...the FM-10 and FM-10a only put out about 8-10 mw in stock configuration. Although, with a few simple mods invented by squest it is possible, with the stock transistor, to get 200-250 mw out of an FM-10. Technically, the part is rated at 250 mw but if you want to do that mod, you want to drop a little top hat heatsink on top. =-)

Oh yeah, although I'm not directly responding to you here...in it's stock configuration the FM-10 can cover much more than 300 feet with a well designed and properly located antenna. =-)

WireHead Prime

2886. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-28 00:00:00 UTC
From: "Jim (N8XYN)" <jim.n8xyn@worldnet.att.net>
Message-ID: <65nmfl$3it@bgtnsc03.worldnet.att.net>
Source record: 17608
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

actually it runs about 22 milliwatts with the high power strap. If you mean the FM25. If you look at the FM10 its more like 10 milliwatts. None of the above are legal in the US with a good antenna! Its not output power but field strength. I run an FM25 into a 1/2 watt amp and feed a radioshack dummy load. I get a good pattern and am very legal. On the other hand run 10 milliwatts into a nice groundplane and you'll be outside the rules....73's

Christopher (Chris) W. Boone wrote in message
<347DF1C3.25B8@earthlink.net>...
>Yik Feng Tan wrote:
>>
>> Dear Masters,
>>
>> I am a newbie to these mews group. I going to build a low power FM
>> transmitter which is able to cover a radius of 300 ft. I wonder if any of
>> you have or know any webpages that can help me build this device.
>
>Ramsey Electronics sells a Stereo FM Xmtr of 100milliwatts out which
>is legal in US and Canada and can cover 300ft easily...
>Check with them (I think they have a web page.....use a search engine
>to check for it)
>
>Chris
>WB5ITT
>ABC Radio, Dallas
>>
>> Personal reply will be highly apprecaited as I don't visit these
newsgroup
>> often.
>>
>> Thanx a million. I love you all.
>>
>> Yick

2887. *** Attention Amateurs and Scanner Listeners ***

Newsgroup: rec.radio.amateur.space
Date: 1997-11-29 00:00:00 UTC
From: troublemaker@radiotelephone.net.ham
Message-ID: <348022dc.2002082@news.total.net>
Source record: 17609

Hi. My name is TRouBLe MaKer. I have a ham and scanner related web site. Now, it is very easy to navigate (frames installed) !!

The contents are as follows:

- What's new ? (IC Canada Update etc., link to IC Canada's web site)

- Montreal Area Repeater Directory (including hidden illegal repeaters.) There is also a link to a page where you see all VE2 and VA2 (the province of Quebec) repeaters.

- Amateur Radio Basic Qualification Study Guide (online full version)

- General Information Sheet for Amateurs and Pros

- Amateur Radio Freqs and Countries concerned

- US Amateur Radio Exam Page

- Ham frequencies and British Columbia Frequencies

- Ham calling frequencies

- Ham license structure worldwide (Canada, US, Japan, Australia, New Zealand... and there are links that help you to obtain the Australian and New Zealanders license while you stay there !!)

- US Frequency Band Allocations (for each license)

- Amateur Radio Satellite Frequencies

- Space Station MIR Information Centre

- Amateur Radio Station Prefixes

- Royal Canadian Mounted POLICE 10 codes & International Q code list

- International Morse Code

- CB Information Desk

- International Air & Marine Frequencies

- Propagation General Information Centre

- HF Propagation PREDICTION online

- RS Scanner Info

- ADI's AT-600 Dual Band Information

- Cellular Phone Listening Centre (Cordless Phone will be
added soon !!)

- Radio Modification Centre

- VE7JPN & VA2QRU Station Equipments

It's at

http://www.radiotelephone.net/amateur/

See you there !!

Trouble Maker AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : troublemaker@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

2888. FS: OSCAR NEWS back issues.

Newsgroup: rec.radio.amateur.space
Date: 1997-11-29 00:00:00 UTC
From: Brian Gibbs <Brian@brimar.demon.co.uk>
Message-ID: <+Ro4kCA$18f0Ew3C@brimar.demon.co.uk>
Source record: 17610

I have a large number of the above to be sold to anyone interested.

They are the property of a local Silent Key op.

Enquiries by Email please. 73.....Brian.....g3mbn


```
==================================================================
= Brian Gibbs =
= Neston, Corsham, Wiltshire =
= brian@brimar.demon.co.uk =
==================================================================
```

2889. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.space
Date: 1997-11-29 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971129215127.19409B-100000@oso.slonet.org>
Source record: 17611
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space,sci.astro.amateur

Who was the ham that needs the two cassettes containing the RTTY decode program that Hamtronics put out for the Commodore 20? Cliff K7RR

2890. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Daniel Troglin <rfi905@indy.net>
Message-ID: <3481B01D.44D@indy.net>
Source record: 17612
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Jim (N8XYN) wrote:
>
> actually it runs about 22 milliwatts with the high power strap. If you mean
> the FM25. If you look at the FM10 its more like 10 milliwatts. None of the
> above are legal in the US with a good antenna!

A friend of mine did some calculations and he found that to be close to
legal the
output of the transmitter can only be 60 MICROWATTS INTO A 1/2 WAVE
DIPOLE!!
If you read the rules they say the unit cant have any kind of antenna
connector on it.
The antenna must be fixed to the unit.
LETS FACE IT WHAT THE REGS COVERING 88 - 108 MHz ARE FOR IS LOCAL
OSCILLATOR RADIATION!!!!!!
Big dan Radio Free Indianapolis
DEFUNKED

2891. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Squest@cris.com
Message-ID: <65sa9q$jmv@examiner.concentric.net>
Source record: 17613
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime (wiredone@raccoon.com) wrote:
: On the FM band in the US, 100 mw out would NOT be legal...

They get away with selling them from Ramsey because they are
exempt (kits) and the builder must comply with FCC rule.

: AND, if you're talking about the FM-10, it is a myth that it puts out
: 100 mw (they're AM transmitter may, however)...the FM-10 and FM-10a
: only put out about 8-10 mw in stock configuration.

I would like to say 2 or 3mw myself. It ain't much that's for
sure. A longer antenna helps, but a more efficient RF final is better.

: Although, with a
: few simple mods invented by squest it is possible, with the stock
: transistor, to get 200-250 mw out of an FM-10.

I was just going to say that. :) Plus, the parts needed to do
the mod to 250mw can be had at any Radio Shack. The mod to go up to
.940mw you need to purchase the transistor from an ECG, SK, or NTE dealer.

: Technically, the part
: is rated at 250 mw but if you want to do that mod, you want to drop
: a little top hat heatsink on top. =-)

Gets warm, but it won't die. I have an NTE-23 running without
heatsink right now, been running since turkey day. :) Output = 940mw
approximate. :) Running from a modified "Sound Feeder". :)

: Oh yeah, although I'm not directly responding to you here...in it's
: stock configuration the FM-10 can cover much more than 300 feet with
: a well designed and properly located antenna. =-)

Up high, to radiate out. :) 3rd story apartment advantage, eh
WireHead? ;)

sq

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2892. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Michael <MichaelSpringer.Sac.CA@worldnet.att.net>
Message-ID: <65sgjk$q5n@bgtnsc03.worldnet.att.net>
Source record: 17614
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

My name is Dane Springer and I am 16 years old. I am sereously interested in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to boost the power of my FM-10 to about 5-10 watts. I was wondering if i bought a 50 watt 2meter RF boster at radio shack would that work? My maximum I can spend is about $60. thanks.

2893. Re: Is there a VHF newsgroup?

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: sjolin@swbell.net
Message-ID: <09971030133411.OUI60.sjolin@swbell.net>
Source record: 17615

In article
<Pine.A41.3.95b.971123140430.18522A-100000@homer38.u.washington.edu>,
"J. Young" <jtyoung@u.washington.edu> wrote:

> Anyone know the address for a VHF newsgroup? I'm interested in setting
> up skeds for meteor scatter qsos and discussing propagation, etc.
Many > thanks. de John, K7JY.
>
> ....

http://www.cybercomm.net/cgi-bin/cgiwrap/slapshot/msrocks.sh

http://www.cybercomm.net/cgi-bin/cgiwrap/slapshot/vhfprop.sh

Also consider joining the VHF reflector:
To subscribe, send subscribe request to vhf-request@w6yx.stanford.edu

These are definitely the place for skeds and tracking what is happening
real time as far as meteors. The first two are more for short term
skeds, like you want one now or in an hour or so.

On the vhf reflector, requests for skeds generally start appearing a
week or so prior to the shower peak.

Good luck with the rocks. 73 de Dave, N0IT

--
- Dave Sjolin sjolin@swbell.net

2894. FS: Frequency Synthesizer PTS-160

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <65si38$7ph@camel19.mindspring.com>
Source record: 17616
Cross-posted to: alt.ham-radio.eme,alt.ham-radio.uwave,alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.swap

I have a couple of PTS160 MHz synthesizers asking $450 shipped US48.

Specs

Frequency Range: .1000000MHz to 159.9999999 MHz
Frequency Resolution 1Hz
Control local by 10 position dial, TTL BCD or GPIB
Switching time 20 microseconds to 5 microseconds
Output level +3 to +13 dBm
Flatness +/- 0.5dB
Impedance 50 Ohms
Spurious Outputs -75 dBc
Harmonics -40 dBc
Broad Phase Noise -63 dBc (.5 to 15 KHz)
(1 Hz) -105 dBc @ 100Hz, -115 dBc @ 1KHz
Frequency Std. TCXO
External drive 5 or 10 MHz
Dimensions 19 x 5.25 x 18 inches
Weight 35 lbs

Check the pictures and specs at my page:

http://www.mindspring.com/~wave/sale.html

Thanks
Pieter N4IP

2895. Mod for FT-290R

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Bill Pearson <bpearson@iname.com>
Message-ID: <3481CC14.3E68F987@iname.com>
Source record: 17617

Hello,

I was wondering if anyone has modified an original FT-290 to be
used with the 9600 baud birds? I have one, and was wondering
if it is worth trying to do a "do-it-yourself" mod.

Thanks for any info you might send me.
Bill
KN6UR

2896. ANS-334 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <65skc2$h2c$1@news3.mr.net>
Source record: 17618

ANS editor is BJ Arts, WT0N
Daniel (Dan) James, NN0DJ,
Amsat News Service Assistant Bulletin Editor
SB SAT @ AMSAT $ANS-334.01
MIR OPERATIONS
HR AMSAT NEWS SERVICE BULLETIN 334.01 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.01
The MIREX and SAREX teams report that American astronaut David Wolf has not been active on either the 2 meter or 435 MHz amateur radio equipment aboard MIR since the temporary power outage that occurred on Friday, November 21, 1997. Wolf has stated that powering up the radio equipment is "on his list" and it is hoped that MIR will be back on amateur radio frequencies soon. Please stay tuned to the SAREX reflector for late breaking news.
[ANS thanks Frank Bauer, KA3HDO, for this information]
/EX
SB SAT @ AMSAT $ANS-334.02
W5H SPECIAL EVENT STATION
HR AMSAT NEWS SERVICE BULLETIN 334.02 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.02
Houston, Texas AMSAT Area Coordinator Bruce Paige, KK5DO, will be operating special event station W5H on several amateur satellites this weekend, November 29 and 30, 1997. Sponsored by the Clear Lake Amateur Radio Club of Webster, Texas, W5H is commemorating the end of the Atlantic hurricane season.
Bruce is planning operation on AO-10, FO-20 and 29, AO-27 and RS-12, from 0000z - 0600z and 1500z - 2100z on November 29, and 1500z - 2400z on November 30, 1997. W5H satellite equipment will include an Icom IC-821H and yagi VHF and UHF antennas. W5H will also be operating on all high frequency amateur bands from 160 through 10 meters.
Bruce suggest that satellite operators send W5H QSL card requests (W5H satellite contacts only) directly to him at the following address;
Bruce Paige KK5DO
PO Box 310
Alief, Texas
77411
Stations that make a successful satellite contact with W5H will receive a club certificate and the satellite contact QSL card.
[ANS thanks Bruce Paige, KK5DO, for the information that went into this bulletin.]

/EX
SB SAT @ AMSAT $ANS-334.03
AO-27 CARIBBEAN OPERATION
HR AMSAT NEWS SERVICE BULLETIN 334.03 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.03
Samuel, KD4ESV, announced he will be active on AO-27 from several eastern Caribbean locations during a one week cruise to the area. On air operations will start Sunday, November 30, and continue through though Sunday, December 7, 1997, as time permits. Scheduled operating locations include Miami, followed by St. Martin, St. John and St. Thomas in the Virgin Islands and then several locations in the Bahamas. Equipment will include a 144/435 MHz yagi antenna, one dual band and one 2 meter handheld and a laptop computer for tracking AO-27 and logging contacts. QSL requests can be directed to the KD4ESV callbook address.
[ANS thanks Samuel, KD4ESV, for the information that went into this bulletin.]
/EX
SB SAT @ AMSAT $ANS-334.04
SPUTNIK-40 OBSERVATIONS
HR AMSAT NEWS SERVICE BULLETIN 334.04 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.04
Many stations, including Clive, G3CWV, and Charles, W9ODI have continued to observe changes in satellite temperature during RS-17 passes at different times of the day and night. Temperature differences are thought to be due to eclipses. A possible explanation of the recent fall in average temperatures may be that the duration of the eclipses has slightly changed.
G3CWV is using a program which checks the eclipse state every two minutes during a pass. Clive found that the percentage of full sunlight has fallen slightly since the initial launch. G3CWV has also used the same program to predict the eclipses of OSCAR-11, and has found the program to give a reasonable correlation, although it does tend to give somewhat early predictions of changes. This may be due to not computing the effect of partial eclipses.
W8RVH, Dayton, Ohio and W8ZCF, Cincinnati, Ohio also continue to take and analyze frequency data from Sputnik's "beep" tone. Their measurements as well as a report from IK1SLD in Italy, shows a decrease in temperature as the satellite proceeds thru the pass. However, in observing an adjacent pass 1 hour 36 minutes later, the temperature has usually recovered at AOS to the "general" higher level. When plotted on a day to day basis, W8RVH reports there appears to be a "sawtooth" pattern for each pass, with the average temperature over several days remaining fairly constant.
W9ODI reports on morning passes where the satellite is coming out of eclipse into sun, a rise in temperature. Chuck is also observing passes at night where the satellite is coming out of sun into darkness, and

reports the temperature is definitely dropping.
RS-17 is expected to continue operation into mid-December before its
internal batteries are exhausted.
[ANS thanks W9ODI, IK1SLD, G3CWV, W8RVH and W8CVF for this information]
/EX
SB SAT @ AMSAT $ANS-334.05
INTERNATIONAL SPACE STATION UPDATE
HR AMSAT NEWS SERVICE BULLETIN 334.05 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.05
Various published news reports are now saying that NASA
will not have the International Space Station fully assembled
until December 2003. NASA has pledged that the U.S. habitation
module, the astronaut living quarters, will be fully outfitted
by December of 2002. However, NASA is also promising that a
crew will be on the station starting long before 2002 ends.
AMSAT-NA's VP of Manned Space, Frank Bauer, KA3HDO, indicates
that Ham Radio's presence on the station should also happen far
sooner than the 2002 date. Frank reports that the current plan
is to operate the space station in a "crew tended" fashion
sometime beginning in early 1999, just a little over a year
from now!
In line with that schedule, Frank says that the ISS
Ham Radio team is now working VERY hard to incorporate the
first phase of the ISS Ham Radio project...a transportable
station...and deliver this equipment to the Johnson Space
Center in Houston, Texas for flight certification in June of
next year (1998). Delivery of that equipment to the
space station is now slated for December, 1998.
Stay tuned to ANS for more information on Ham Radio's planned
presence on ISS as it develops.
[ANS thanks the ARRL, Newsline and Frank Bauer, KA3HDO, for
this information]
/EX
SB SAT @ AMSAT $ANS-334.06
CUBA EXPEDITION ACTIVE ON SATELLITE
HR AMSAT NEWS SERVICE BULLETIN 334.06 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.06
For those of you looking for T49C via satellite, Oscar, CO2OJ, reports
he is active on RS-15. Mike, N1JEZ, worked T49C on Saturday, November 29,
at 1819 UTC. T49C is also active on terrestrial VHF, with stations in
the southern US reporting hearing signals from T49C. Oscar recommends
looking for T49C on the morning passes of RS-12 and RS-15.
[ANS thanks Oscar, CO2OJ, and Mike, N1JEZ for this information]
/EX
SB SAT @ AMSAT $ANS-334.07
ARRL OSCAR CALENDAR DISCONTINUED

HR AMSAT NEWS SERVICE BULLETIN 334.07 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.07
The ARRL's support of the OSCAR locator is being discontinued. For some years now, the League has offered a monthly orbit calendar for use with the OSCAR locator. According to Jon Bloom, K3EZ, requests for this monthly listing have dwindled to less than a half dozen. As a result, the League plans to end this service at year's end. Computer tracking programs that have been developed in recent years are now widely used by most active satellite stations.
[ANS thanks the ARRL and Jon Bloom, K3EZ, for this information]
/EX
SB SAT @ AMSAT $ANS-334.08
WEEKLY SATELLITE REPORT PT 1
HR AMSAT NEWS SERVICE BULLETIN 334.08 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.08
MIR
Dave Wolf has stated that powering up the radio is "On his List" and it is hoped that Mir will be back on the air soon.
As part of ongoing frequency experiments to improve Amateur Radio operations on board MIR, and to better understand how these frequencies will be effective on the International Space Station, MIR will begin a 2-phase frequency experiment beginning December 1, 1997 and ending on May 31, 1997.
For phase 1, a 70cm/2m crosslink experiment will operate for a 3 month period from December 1, 1997 up to March 1, 1998.
On December 1, 1997 the MIR operating frequencies will change to:
Uplink: 437.850 MHz Downlink: 145.800 MHz
Phase 2 of this experiment will use a 2 meter-only set of uplink and downlink frequencies. This phase of the experiment will begin on March 1, 1998 and will also be of 3 months duration.
SAFEX, MIR 70cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
The SAFEX, MIR 70cm repeater is not operational at this time.
[ANS thanks the MIREX team for this information]
RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
Not operational at this time.
RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz)
Operational, now in mode A. Lots of activity over North America with good downlink signal reports being received. T49C reported active from Cuba.
RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational. (Hint: If SSB doesn't work for you, try CW. CW is very easy to hear on the downlink)!
RS-16

Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 and 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W
Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W
RS-17
Operational. 145.820 MHz
QSL Information is as follows:
Sergej Samburov (or) FR5KJ Radio Club
PO Box 73 College Jules Reydellet
Kaliningrad - 10 City 103 Rue de la Republique
Moscow Area 10470 97 489 Saint Denis Cedex
Russia Reunion Island , France
AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational. Stacey Mills, W4SM, would appreciate any perigee
observations of AO-10's beacon or transponder during the next several
weeks until conditions begin to improve. If his orientation figures are
correct, AO-10 should be down to a solar angle of -84 degs with only 11%
illumination. Send reports to w4sm@amsat.org
[ANS thanks Stacey Mills, W4SM, for this report]
AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational with lots of activity including QRP stations heard over
North America. The control ops have programmed AO-27 to start earlier in
its pass.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]
FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report]
FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational. FO-29 was in JA mode on November 29, 1997.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX
SB SAT @ AMSAT $ANS-334.09
WEEKLY SATELLITE REPORT PT 2
HR AMSAT NEWS SERVICE BULLETIN 334.09 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 30, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-334.09

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK)
KO-23 has variable, but generally low, downlink efficiency.
Stacey Mills, W4SM, has estimated the keps show that KO-23 will not
experience an eclipses again until December 12th. During the orbits of
that day, eclipses rapidly increase in duration from 2 to 11 minutes.
Eclipse length will then continue to increase, peaking at 35 minutes per
orbit in the December 28th thru January 4th time period. Eclipse length
will then begin slowly decreasing again. KO-23's download efficiency
has dropped dramatically due to the increasing heat and its affects on
the signal deviation.
[ANS thanks Stacey Mills, W4SM, and Jim Weisenberger, AA7KC,
for this report]
KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]
OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally. During the period of October 14th through November
16th this satellite has continued to provide good signals on its 145.826
MHz beacon.
The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)
There are also additional status blocks after each bulletin is
transmitted, and between ASCII TLM and WOD.
The mode-S beacon is ON, transmitting an unmodulated carrier, but
telemetry indicates that it has partially failed, and delivering half
power. This beacon is a useful test source for those testing mode-S
converters, prior to the launch of P3-D. It is considerably weaker
than DOVE, which should be used for initial testing. Any reports of
reception on 2401.00 MHz would be most welcome. Please e-mail reception
reports to g3cwv@amsat.org.
The 435.025 MHz beacon is normally OFF. However it can sometimes be
heard when the satellite is being commanded by ground control, (i.e.
within range of Guildford, UK). When the 435 beacon is transmitting,
the 145 beacon is normally OFF. The data transmitted is mainly
binary.
OSCAR-11 users are welcome to visit the G3CWV web site. It contains
some software for capturing data, and decoding ASCII telemetry and the
WOD survey. There is an archive of raw data (mainly WOD) for analysis,
which is continually being expanded, as new data is captured.
The URL is - http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this information]
AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
State of the batteries at the end of an eclipse orbit.
Uptime is 1168/17:19:55. Time is Sat Nov 29 22:47:42 1997
Bat 1 V= 1.259 V Bat 2 V= 1.295 V
Bat 3 V= 1.287 V Bat 4 V= 1.323 V Bat 5 V= 1.267 V
Bat 6 V= 1.281 V Bat 7 V= 1.281 V Bat 8 V= 1.312 V
Total Array C= 0.000 Bat Ch Cur=-0.560 Ifb= 0.158 I+10V= 0.424
TX:010C BCR:1E PWRC:59F BT: A WC:25 EDAC:45
Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]
DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
DOVE transmits on 145.825 MHz and 2401.220 MHz. It is presently
sending 1200 baud AX.25 (standard packet) ASCII telemetry about
every minute on two meters. On S band it transmits PSK flags
continuously and also the same data as is sent on 2 meters.
Jim White, WD0E, reports that QSL requests for DO-17 have been well
received, with recent requests including one from Germany. Jim notes
he will be putting the QSL availability info on the DOVE two meter
broadcast in the next few days.
[ANS thanks Jim White, WD0E, for this update]
WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
No report available at this time.
LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88,
145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)
Operating normally.
Uptime is 893/08:21:52. Time is Sat Nov 29 22:27:02 1997
[BEACON]
November 6 - 1997.
BBS is open.
Uplink qrg: 145.840, 860, 880, 900
Norberto - LU8DYF.
General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]
UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK)
UO-22 is operating normally.
Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.

In the old task, once an upload was complete, the spacecraft had to
perform the checksum on the complete file. Depending on the file
length, this could take quite a long time. With the new task, the
checksum is computed on the fly - while the data is actually being
uploaded. Thus there is no need to recompile at the end of the
transfer and this checksum delay is then removed.
However, all files that were started before Chris loaded the task
will receive a corrupt body checksum error when the upload is completed.
If anyone gets persistent body checksum errors while uploading files to
UO-22 would they please let Chris Jackson know as soon as possible
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and
Operations Manager of UO-22, for this report]
IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz
SSB, 1200 Baud PSK)
IY2SAT-1>AMSAT <UI>:
12th November 1997
All sub-systems are OK.
Loading in progress.
Please don't tx on uplink. Stay tuned for further news!
Best wishes from the ITAMSAT team.
[ANS thanks Daniele, IK2XRO, and Piercarlo, IW2EGC,
ITMSAT Command Station for this report]
[Please send your Satellite or News reports to ANS Editor BJ Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]
/EX

BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2897. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <3481D773.CBD@scan.missouri.org>
Source record: 17619
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Michael wrote:
>
> My name is Dane Springer and I am 16 years old. I am sereously interested
> in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
> boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> bought a 50 watt 2meter RF boster at radio shack would that work? My
> maximum I can spend is about $60. thanks.

You might want to "sereously" consider forgetting the whole thing. Mom
and Dad may become "sereously interested" in your activities when the
Federal Marshals knock on the door of the family home intent on
confiscating every piece of electronic apparatus within. You might be
"sereously" in trouble.

2898. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: cmoore@sedona.intel.com
Message-ID: <3481D8F5.2514@sedona.intel.com>
Source record: 17620
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Michael wrote:
>
> My name is Dane Springer and I am 16 years old. I am sereously interested
> in pirate radio.

Dane, you can remove all the rec.radio.amateur.* groups from your posting.
People on the ham radio newsgroups are more likely to turn you into the
FCC than to help you violate the law.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

2899. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Ernie Stedman <n2ojq@worldnet.att.net>
Message-ID: <65smve$oia@bgtnsc03.worldnet.att.net>
Source record: 17621
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Richard Carroll wrote:
>
> Michael wrote:
> >
> > My name is Dane Springer and I am 16 years old. I am sereously interested
> > in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> > my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
> > boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> > bought a 50 watt 2meter RF boster at radio shack would that work? My
> > maximum I can spend is about $60. thanks.
>
> You might want to "sereously" consider forgetting the whole thing. Mom
> and Dad may become "sereously interested" in your activities when the
> Federal Marshals knock on the door of the family home intent on
> confiscating every piece of electronic apparatus within. You might be
> "sereously" in trouble.
Look at the bright side.... you can learn to spell in jail!!

2900. Solar Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: "R. Wise" <rweis@sympatico.ca>
Message-ID: <65t9od$1ce$1@news21.bellglobal.com>
Source record: 17622

Could someone please forward the schematics for a simple solar receiver to monitor the sun. I live in a small apt. so I am looking for something that does not require to much space and can be connected to my computer that is running win 95. so software would be appreciated. Also interested in meteor observing any recommendations about building or modifying a receiver for a limited amt. of money?

Thanxs
R. Wise
rweis@sympatico.ca

2901. Satellite Antenna Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Rich Wall <richwall@asan.com>
Message-ID: <65tajg$im7$1@usenet85.supernews.com>
Source record: 17623

Q. I would like to know the minimum length of boom required to work the popular birds in the 2/70 mode. Do I need to use 20 footers or can I get away with the 12 or 14 foot antennas?

Q. Would I regret setting up a station with shorter booms and have little or no success? I don't need everything but do want to try my hand at satellites and have limits to size of array.

Thanks to all replies!

--
RichWall@Asan.com

2902. Re: Solar Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-11-30 00:00:00 UTC
From: Cathryn Mataga <cathryn@junglevision.com>
Message-ID: <34825AD3.D3856A12@junglevision.com>
Source record: 17624

Good idea. I'm curious too. Does the sun spit out any interesting
signals that we could receive at home? Actually, if I just turn
on an AM radio -- isn't some of the daytime static coming from the sun?

R. Wise wrote:
>
> Could someone please forward the schematics for a simple solar receiver to
> monitor the sun. I live in a small apt. so I am looking for something that
> does not require to much space and can be connected to my computer that is
> running win 95. so software would be appreciated. Also interested in meteor
> observing any recommendations about building or modifying a receiver for a
> limited amt. of money?
>
> Thanxs
> R. Wise
> rweis@sympatico.ca

2903. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: Yik Feng Tan <yftan@acs.ucalgary.ca>
Message-ID: <65vcke$f02@ds2.acs.ucalgary.ca>
Source record: 17481
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

> Dear Masters,
>
> I am a newbie to these mews group. I going to build a low power FM
> transmitter which is able to cover a radius of 300 ft. I wonder if any of
> you have or know any webpages that can help me build this device.
>
> Personal reply will be highly apprecaited as I don't visit these newsgroup
> often.
>
> Thanx a million. I love you all.
>

I don't intend to break the law, so, please discuss FM transmitters within
legal limit only. Transmitting without permit is very illegal. Don't take
your chance.

Thank you all of you. It really helps.

2904. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: Steve Sampson <ssampson@access.usa-site.net>
Message-ID: <34836500.E50255E7@access.usa-site.net>
Source record: 17482
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

This is a cryptographically signed message in MIME format.

--------------ms74379FDB0EE3BDEAB2A1B1A9
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Not anymore. Most are able to vote, some even to bear arms again.
Federal prison is usually pretty good. The standards are higher, and
the food is better. Most federal prisons now have family visits
with time for sex and a haircut.

The one you want to stay away from, is the Oklahoma City holding
facility. Senator Nichols is here this week trying to figure out
how a prisoner was beaten, head slit open, and blood smeared all
over the walls, was pronounced dead of suicide. The guy was a
petty criminal.

Since more laws are being created every day (mostly contraband laws,
such as Freon, Video Tape Rentals, listening to prohibited frequencies,
etc) most of us will spend time in prison before we die.

Just look at all the crooks in Washington. Most never even were
disbarred.

FYI

Steve

Ken wrote:
>
> You guys may not know that what you are talking about doing
> is a federal offense and a felony. Do you know what a felony
> conviction could do to the rest of your life? The only job you
> would be able to get would be manual labor or blue collar
> for the rest of your life!
> No voting and the only license permitted you would be a drivers
> license. No bonds, no nothing ...regardless of your degree.
>
> Ken K5MBV
>
> Michael wrote:
> >> >
> >> > My name is Dane Springer and I am 16 years old. I am sereously interested
> >> > in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> >> > my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to

> >> > boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> >> > bought a 50 watt 2meter RF boster at radio shack would that work? My
> >> > maximum I can spend is about $60. thanks.
--------------ms74379FDB0EE3BDEAB2A1B1A9
Content-Type: application/x-pkcs7-signature; name="smime.p7s"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="smime.p7s"
Content-Description: S/MIME Cryptographic Signature

<encoded_portion_removed>
evTLdgvnzeCr4YK6KYH6V29WZGWW0jNs/w==
--------------ms74379FDB0EE3BDEAB2A1B1A9--

2905. Am radio

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: Chris Kauhi <chris@moab-canyonlands.com>
Message-ID: <34832A5B.375F@moab-canyonlands.com>
Source record: 17483

I spose this is the wrong place to ask this question...but I need some help. DH is a ham, we live way out in the boonies, he's gone right now and I want to listen to the radio but I can't remember how to get his Icom transceiver to pick up AM radio...Can somebody please help?

Chris K.
chris@moab-canyonlands.com

2906. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <3482D7F8.9B292406@sj.bigger.net>
Source record: 17625
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

I will answer your question:
The Radio Shack Power Amp requires more drive than your FM-10 can supply. Check out MYCAL's web page for a more suitable one that will boost the FM-10 to something of your liking. Try this one...
http://fov1.fov.uni-mb.si/~ufopra374a/index.html
or this one...
http://www.paranoia.com/~filipg/HTML/LINK/F_FM10.html

friend,
Lute

Richard Carroll wrote:

> Michael wrote:
> >
> > My name is Dane Springer and I am 16 years old. I am sereously interested
> > in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> > my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
> > boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> > bought a 50 watt 2meter RF boster at radio shack would that work? My
> > maximum I can spend is about $60. thanks.
>
> You might want to "sereously" consider forgetting the whole thing. Mom
> and Dad may become "sereously interested" in your activities when the
> Federal Marshals knock on the door of the family home intent on
> confiscating every piece of electronic apparatus within. You might be
> "sereously" in trouble.

2907. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: KC5QXU <bayou@fsbnet.com>
Message-ID: <3482DE18.59B0@fsbnet.com>
Source record: 17626
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Steve Quest wrote:
>
> WireHead Prime (wiredone@raccoon.com) wrote:
> : On the FM band in the US, 100 mw out would NOT be legal...
>
> They get away with selling them from Ramsey because they are
> exempt (kits) and the builder must comply with FCC rule.
>
> : AND, if you're talking about the FM-10, it is a myth that it puts out
> : 100 mw (they're AM transmitter may, however)...the FM-10 and FM-10a
> : only put out about 8-10 mw in stock configuration.
>
> I would like to say 2 or 3mw myself. It ain't much that's for
> sure. A longer antenna helps, but a more efficient RF final is better.
>
> : Although, with a
> : few simple mods invented by squest it is possible, with the stock
> : transistor, to get 200-250 mw out of an FM-10.
>
> I was just going to say that. :) Plus, the parts needed to do
> the mod to 250mw can be had at any Radio Shack. The mod to go up to
> .940mw you need to purchase the transistor from an ECG, SK, or NTE dealer.
>
> : Technically, the part
> : is rated at 250 mw but if you want to do that mod, you want to drop
> : a little top hat heatsink on top. =-)
>
> Gets warm, but it won't die. I have an NTE-23 running without
> heatsink right now, been running since turkey day. :) Output = 940mw
> approximate. :) Running from a modified "Sound Feeder". :)
>
> : Oh yeah, although I'm not directly responding to you here...in it's
> : stock configuration the FM-10 can cover much more than 300 feet with
> : a well designed and properly located antenna. =-)
>
> Up high, to radiate out. :) 3rd story apartment advantage, eh
> WireHead? ;)
>
> sq
>
> --
> -<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make

> ============================> /_\ no law abridging the freedom
> MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

looks like you and your friend will be shareing same cell together,maybe
you can read to each other,should have plenty of time on your hands.

73's good luck!

2908. Re: Satellite Antenna Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: notmbv@airmail.net
Message-ID: <65uqi6hjm1@tilde.csc.ti.com>
Source record: 17627

In article <65tajg$im7$1@usenet85.supernews.com>, richwall@asan.com says...
>
>Q. I would like to know the minimum length of boom required to work the
>popular birds in the 2/70 mode. Do I need to use 20 footers or can I get
>away with the 12 or 14 foot antennas?
>
>Q. Would I regret setting up a station with shorter booms and have little or
>no success? I don't need everything but do want to try my hand at satellites
>and have limits to size of array.
>
>Thanks to all replies!

The response to this will have to be subjective. ...It all depends...
If you are talking about the LEO birds, no problem, but if you want
to use AO-10 then:

Do you also have limits on the quality of the coax or hardline? How about
the preamps...do you have good ones that you can mount at the antennas?
How much power will you be able to run? Do you have a good DSP for reducing
noise?
If you have top notch equipment and are willing to dig
into the noise for signals, then small antennas will be fine for AO-10.

Ken K5MBV

2909. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: notmbv@airmail.net
Message-ID: <65ur87hjm2@tilde.csc.ti.com>
Source record: 17628
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

You guys may not know that what you are talking about doing
is a federal offense and a felony. Do you know what a felony
conviction could do to the rest of your life? The only job you
would be able to get would be manual labor or blue collar
for the rest of your life!
No voting and the only license permitted you would be a drivers
license. No bonds, no nothing ...regardless of your degree.

Ken K5MBV

Michael wrote:
>> >
>> > My name is Dane Springer and I am 16 years old. I am sereously interested
>> > in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
>> > my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
>> > boost the power of my FM-10 to about 5-10 watts. I was wondering if i
>> > bought a 50 watt 2meter RF boster at radio shack would that work? My
>> > maximum I can spend is about $60. thanks.

2910. Re: Solar Receiver

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <3482F023.4E392DE8@direct.ca>
Source record: 17629

What you need is a receiver on any frequency high enough for
atmospheric noise not to be an issue (about 30 MHz will do),
and an antenna.

What you'll hear is a part of the sky where the background hiss
is louder than in other areas. You can integrate the noise
to sharpen responses, which is where computers come in handy.

Snoop around for references on radio astronomy. There are lots.

AM radio daytime static is generated in the atmosphere, BTW,
and is not of celestial origin.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

2911. Re: Satellite Antenna Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-12-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <347ea3d9.418180960@news.atl.bellsouth.net>
Source record: 17630

On Sun, 30 Nov 1997 22:27:20 -0500, "Rich Wall" <richwall@asan.com> wrote:

>Q. I would like to know the minimum length of boom required to work the
>popular birds in the 2/70 mode. Do I need to use 20 footers or can I get
>away with the 12 or 14 foot antennas?

That should be more than sufficient for the LEO birds (simple groundplanes
have been used). To use Oscar 10, the bigger antennas really help, and they
may be useful for P3D too despite the higher power it will run. The better you
can hear, the lower power the other fellow has to run.

>Q. Would I regret setting up a station with shorter booms and have little or
>no success? I don't need everything but do want to try my hand at satellites
>and have limits to size of array.

Jump in with even simpler antennas. You can always upgrade to bigger
antennas later if you feel the need. Look in the Satellite Experimenter's
Handbook for some simple antenna ideas you can *build*. There's no
need to spend hundreds to get started. The big antennas require much
better pointing accuracy, and that can be expensive. Use simple low
gain antennas to start, you'll have enough to do without worrying about
constantly repeaking your antennas.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2912. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: wirehead@fuzzy.raccoon.com
Message-ID: <348366ae.0@news.raccoon.com>
Source record: 17484
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

In article <3481D773.CBD@scan.missouri.org>,
Richard Carroll <w0ex@scan.missouri.org> wrote:
>Michael wrote:
>>
>> My name is Dane Springer and I am 16 years old. I am sereously interested
>> in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
>> my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
>> boost the power of my FM-10 to about 5-10 watts. I was wondering if i
>> bought a 50 watt 2meter RF boster at radio shack would that work? My
>> maximum I can spend is about $60. thanks.
>
>
>You might want to "sereously" consider forgetting the whole thing. Mom
>and Dad may become "sereously interested" in your activities when the
>Federal Marshals knock on the door of the family home intent on
>confiscating every piece of electronic apparatus within. You might be
>"sereously" in trouble.

Go worship Hitler or Stalin or whatever and leave people alone you wretched
bully.

Wirehead Prime

2913. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Squest@cris.com
Message-ID: <65vq8u$2md@examiner.concentric.net>
Source record: 17485
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Ken (notmbv@airmail.net) wrote:
: You guys may not know that what you are talking about doing
: is a federal offense and a felony. Do you know what a felony
: conviction could do to the rest of your life? The only job you
: would be able to get would be manual labor or blue collar
: for the rest of your life!
: No voting and the only license permitted you would be a drivers
: license. No bonds, no nothing ...regardless of your degree.
:
: Ken K5MBV

And you're ok with the fact that micropower broadcasting is
punishable THE SAME as someone raping your daughter?

Are you hams ok in the head? Are you actually ok with the idea
that micropower broadcasters are being subject to ARREST and FORFEITURE as
tho what they're doing is a serious crime against humanity?

It's time we all left the Federalist Amerika, find a country that
only prosecutes _violent_ crimes, crimes with a VICTIM, not these
so-called rule violation "crimes" that they punish so severely.....sq

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2914. Re: SWL HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Tom@astro.net
Message-ID: <6600cdbeh1@news.mhv.net>
Source record: 17486

In article <347DAD6D.7E86DBA0@servtech.com>, "Ralph M. Ferrara" <rmf218@servtech.com>
wrote:
>Having heard the Sputnik jr. on several passes for the past few weeks I
>am looking for any site that is sending SWL cards to confirmed contacts.
>I have the Russian address but understand that the is another groupalso
>sending confirmation cards. Can anyone help?. thanks.
>WA2NTK......Ralph

Ralph,
As far as I know the only place is in Russia. Send an IRC and an SASE.
Don't hold your breath though, their postal system is rather crooked based on
what I've been told.

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2915. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Squest@cris.com
Message-ID: <65vqf5$2md@examiner.concentric.net>
Source record: 17487
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

KC5QXU (bayou@fsbnet.com) wrote:
> Steve Quest wrote:
> >
> > WireHead Prime (wiredone@raccoon.com) wrote:
> > : Although, with a
> > : few simple mods invented by squest it is possible, with the stock
> > : transistor, to get 200-250 mw out of an FM-10.
> >
> > I was just going to say that. :) Plus, the parts needed to do
> > the mod to 250mw can be had at any Radio Shack. The mod to go up to
> > .940mw you need to purchase the transistor from an ECG, SK, or NTE dealer.
>
> looks like you and your friend will be shareing same cell together,maybe
> you can read to each other, should have plenty of time on your hands.

Yup, looks like it. Strange isn't it? People leave tyranny all
over the world, and come to Amerika, HOPEFULLY to find freedom, only to
find that in Amerika, a person can be JAILED for committing an act of
civil disobedience (read: non-violent crime). Isn't it just incredible
that WireHead and I are going to have to go to prison for committing the
vile act of EXERCISING OUR FIRST AMENDMENT RIGHTS? However, isn't it even
more incredible that _YOU_ SOMEHOW ACCEPT THIS AS BEING OKAY? :-/

Recently in the news an immigrant from Russia came here 22 years
ago and started a plastics company. A perfume company ordered viles from
him to package their product. He set to manufacturing these small viles.
Drug dealers found the viles to be excellent packaging for crack cocaine,
since the immigrant had produced a large number of them, and sold the
surplus through various outlets as surplus packaging. Thousands ended up
on the streets used to package crack. He was arrested and charged with
conspiracy to distribute crack cocaine. His production records showed the
surplus to be ABLE to package approximately 10 tons of crack, thus he was
charged with conspiracy to distribute 10 tons of crack, punishable by life
imprisonment. LIFE IMPRISONMENT FOR MANUFACTURING PLASIC VILES THAT
COULD HAVE BEEN USED TO PACKAGE CRACK COCAINE! All of his personal
assets, his family home, his factory were all seized, he was left without
money to pay for a decent lawyer to defend himself, and his court-
appointed public defender sold him down the river by convincing him to
sign a statement of guilt, which later was used against him.

A man leaves the despotic regime of the USSR and comes here in
search of freedom, only to find that his hard work to build an industry
here can be dashed to the rocks by criminal prosecution, and by civil

forfeiture, all without HIM actually committing any crime. The man's name is is Sam Zhadanov, and you can search for news articles yourselves if you believe this is so incredible that it can't be real. Or better still, write to the man yourself, he is currently service life imprisonment in a federal slave labor camp, in Pennsylvania. His address appears below...sq

SAM ZHADANOV, REG #42489-053
ALLENWOOD FEDERAL PRISON WORK CAMP
MONTGOMERY, PENNSYLVANIA 17752

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2916. GE GL-6299 preamp (10 meters)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: nvjims@aol.com
Message-ID: <19971202024200.VAA03191@ladder02.news.aol.com>
Source record: 17488

Hi,
I have aquired a two stage preamp using the General Electric GL-6299 tubes.
So far, it looks like one side of the filament is connected internally to the
cathode and the circuit seems similar to one in QST Dec. 1956 page 42 which is
for the 416A tube.
I'm looking for the specs on the tube, plate voltage, filament voltage, etc.
I hope to use this on the RS satillites.
THese tubes were originally used in telephone microwave gear in the early
50's and are about the size of your little finger with several bands and a pin
on each end. They are gold plated and ceramic construction.

Thanks for the help.

Jim, N7WVZ

Jim, Nevada Jim's Outdoor Sports, Elko, NV

2917. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Mark Morgan <konstans@geocities.com>
Message-ID: <3483D130.69BF@geocities.com>
Source record: 17489
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Steve,
The rightness of an act, has very little to do with the lawfullness
of an act, which is after a fashion your point Steve. Really Flaming
Ken for pointing out this fact, as well as the suggestion that the rest
of us hams, are not right in the head for KNOWING and advising someone
of what the Law is, and the consequences of breaking it. I happen to
feel that the FCC rules on the subject are way too restrictive (oh for a
spell checker under netscape) on this subject, but alas for the present
they are the rules.

As to moving, if you learn of a country not going down this path
of lawing us to death, do let us all know.

Mark Morgan
KB9RQZ

> Re: Making a Low power FM transmitter
> Date:
> 2 Dec 1997 02:03:10 GMT
> From:
> Squest@cris.com (Steve Quest)
> Organization:
> Concentric Internet Services
> Newsgroups:
> alt.radio.pirate, rec.radio.amateur.equipment, rec.radio.amateur.antenna,
> rec.radio.amateur.digital.misc, rec.radio.amateur.misc, rec.radio.amateur.space,
> alt.radio.broadcasting, alt.radio.digital
> Followup-To:
> alt.radio.pirate, rec.radio.amateur.equipment, rec.radio.amateur.antenna,
> rec.radio.amateur.digital.misc, rec.radio.amateur.misc, rec.radio.amateur.space,
> alt.radio.broadcasting, alt.radio.digital
> References:
> 1 , 2 , 3 , 4 , 5 , 6 , 7
>
>
> Ken (notmbv@airmail.net) wrote:
> : You guys may not know that what you are talking about doing
> : is a federal offense and a felony. Do you know what a felony
> : conviction could do to the rest of your life? The only job you
> : would be able to get would be manual labor or blue collar
> : for the rest of your life!
> : No voting and the only license permitted you would be a drivers
> : license. No bonds, no nothing ...regardless of your degree.

> :
> : Ken K5MBV
>
> And you're ok with the fact that micropower broadcasting is
> punishable THE SAME as someone raping your daughter?
>
> Are you hams ok in the head? Are you actually ok with the idea
> that micropower broadcasters are being subject to ARREST and FORFEITURE as
> tho what they're doing is a serious crime against humanity?
>
> It's time we all left the Federalist Amerika, find a country that
> only prosecutes _violent_ crimes, crimes with a VICTIM, not these
> so-called rule violation "crimes" that they punish so severely.....sq
>
> --
> -<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
> ============================> /_\ no law abridging the freedom
> MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.
>
>

2918. Re: Satellite Antenna Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: John Charles <jaycee@midmarsh.demon.co.uk>
Message-ID: <H2EIUDAR69g0Ew7o@midmarsh.demon.co.uk>
Source record: 17490

In article <65tajg$im7$1@usenet85.supernews.com>, Rich Wall
<richwall@asan.com> writes

>Q. I would like to know the minimum length of boom required to work the
>popular birds in the 2/70 mode. Do I need to use 20 footers or can I get
>away with the 12 or 14 foot antennas?

Don't know about minimum length booms but I work FO-20, FO-29 and AO-27
using a 7 element ZL special (about 6 ft boom) for the 2m uplink and a
44 el Jaybeam (boom about the same length) for 70 cm downlink. These
work fine down to about 1 degree above the horizon in spite of being
only 25 ft above the ground and in a fairly built-up area. Not so good
when the sat is really high as I don't have elevation control as yet.

Uplink is possible using my tri-band vertical but suffers from signal
fading. Max power used here is 40W

Have a look at the FAQ's on the Amsat www site - you'll find all sorts
of useful info. http://www.amsat.org/amsat/articles/

73 John M1BTR (still looking for a UK - Canada or UK - N. African
contact ;>)
--
John Charles jaycee@midmarsh.demon.co.uk

2919. Re: SWL HELP

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Roger Koss <kossr@edl1.ksc.nasa.gov>
Message-ID: <34843C4B.1548@edl1.ksc.nasa.gov>
Source record: 17491

Tom@astro.net wrote:
>
> In article <347DAD6D.7E86DBA0@servtech.com>, "Ralph M. Ferrara" <rmf218@servtech.com>
wrote:
> >Having heard the Sputnik jr. on several passes for the past few weeks I
> >am looking for any site that is sending SWL cards to confirmed contacts.
> >I have the Russian address but understand that the is another groupalso
> >sending confirmation cards. Can anyone help?. thanks.
> >WA2NTK......Ralph
>
> Ralph,
> As far as I know the only place is in Russia. Send an IRC and an SASE.
> Don't hold your breath though, their postal system is rather crooked based on
> what I've been told.
>
> 73,
> Tom
>
> Tom Randall Amateur Radio - KB2SMS
> trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
> Member: AAVSO Solar Division
> APRS on 145.790 - Dutchess county,N.Y.
>
> My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
>
> Opinions herein are mine and may not be that of MHV.NET!

Ralph, and Tom:

Check the following URL:
http://www.oceanes.fr/~fr5fc/angmodelreduit.html.
These are the folks who built the Sputnik model jointly with the
Russians. They are offering a Certificate as well.

73 de Roger, KD4ITU

2920. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: notmbv@airmail.net
Message-ID: <661vh7$a5g$4@tilde.csc.ti.com>
Source record: 17492
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

>:
>
> And you're ok with the fact that micropower broadcasting is
>punishable THE SAME as someone raping your daughter?
>
> Are you hams ok in the head? Are you actually ok with the idea
>that micropower broadcasters are being subject to ARREST and FORFEITURE as
>tho what they're doing is a serious crime against humanity?

If you kids like prison and menial jobs afterward, then by all means
go for it. In fact, after reading your post I say *please go for it*!
I didn't write the laws and don't like some of them, but I do like
to think that outside of prison is more free than *in* prison with the
same laws. Let us know when you get out......nah never mind, don't bother.

Ken K5MBV

2921. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Dodge <gtx70@flash.net>
Message-ID: <3484A165.3C87@flash.net>
Source record: 17493
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Ken wrote:
>
> >:
> >
> > And you're ok with the fact that micropower broadcasting is
> >punishable THE SAME as someone raping your daughter?
> >
> > Are you hams ok in the head? Are you actually ok with the idea
> >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> >tho what they're doing is a serious crime against humanity?
>
> ---
> If you kids like prison and menial jobs afterward, then by all means
> go for it. In fact, after reading your post I say *please go for it*!
> I didn't write the laws and don't like some of them, but I do like
> to think that outside of prison is more free than *in* prison with the
> same laws. Let us know when you get out......nah never mind, don't bother.
>
> Ken K5MBV

I thank God that the Fore Fathers didn't think Ken's way..I guess it
just boils down to when and where you want to make your stand..
BD

2922. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <662dt0$8d5@lehi.kuentos.guam.net>
Source record: 17494
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Mark Morgan <konstans@geocities.com> wrote:

> As to moving, if you learn of a country not going down this path
>of lawing us to death, do let us all know.

China. No radio rules at all. Run what you brung. No license required.
No enforcement at all.
Philippines. Same as above.
Indonesia. Same as above.

By the way, is this FM10 thing you guys are discussing a digital transmitter ?

73, Jim KH2D

2923. Re: Satellite Antenna Questions

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: Erik van Bronkhorst <caseycct@ridgenet.net>
Message-ID: <3484D30B.7D88@ridgenet.net>
Source record: 17495

John Charles wrote:
>
> In article <65tajg$im7$1@usenet85.supernews.com>, Rich Wall
> <richwall@asan.com> writes
>
> >Q. I would like to know the minimum length of boom required to work the
> >popular birds in the 2/70 mode. Do I need to use 20 footers or can I get
> >away with the 12 or 14 foot antennas?
>

I work FO-20 and -29, and AO-27 with a pair of 8 element
Jbeam brand yagis, rg-389/u (extreme low loss coax) and
10 watts on 2m. For the 70cm I have a homemade
13 turn axial mode helix and rg-8/u and also 10 watts.
Neither use preamps.
The uplink antennas are aimed horizontally, the downlink is inclined
about 15 degrees. I have only azimuth control.

I have gotten cw and ssb signals through AO-10, but only near
perigee. I am getting a 100w amp and 9913 coax
for 70cm and hope to have better success with AO-10,
assuming it cooperates.
I can hear AO-10 reasonably (when it is being
reasonable :-) even at apogee. I may get
a mast mount preamp depending on how the above additions fare.

Pictures of the stuff can be found at
http://www.qsl.net/kc6uut/rigs1.html

73 and I hope to work you on the birds!

kc6uut, DM15cp
ps. if anyone wants to sked, email me!

Erik van Bronkhorst
CW/KotGT DoD#4342585443 AMA#438054
caseycct@ridgenet.net
http://www.ridgecrest.ca.us/~caseycct/erik/
http://www.2von.com
kc6uut@qsl.net
http://www.qsl.net/kc6uut/
kc6uut@wa6ybn.#soca.ca.usa.na

2924. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <3484BD68.6652@mail.rancho.cc.ca.us>
Source record: 17496
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Anthony Clifton wrote:

> In article <3481D773.CBD@scan.missouri.org>,
> Richard Carroll <w0ex@scan.missouri.org> wrote:
> >Michael wrote:

> >> My name is Dane Springer and I am 16 years old. I am sereously interested
> >> in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> >> my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
> >> boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> >> bought a 50 watt 2meter RF boster at radio shack would that work? My
> >> maximum I can spend is about $60. thanks.

> >You might want to "sereously" consider forgetting the whole thing. Mom
> >and Dad may become "sereously interested" in your activities when the
> >Federal Marshals knock on the door of the family home intent on
> >confiscating every piece of electronic apparatus within. You might be
> >"sereously" in trouble.

> Go worship Hitler or Stalin or whatever and leave people alone you wretched
> bully.
> Wirehead Prime

And so you're going to recommend that nothing be said about this to him,
because by doing so, it might destroy his 'spirit' to pursue pirate
radio? In other words, by your silence, you will cause others to become
victims of the legal system?

I think you're the one that should go away. Permanantly.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@

2925. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: **** <****@no.net>
Message-ID: <34844402.48B4@no.net>
Source record: 17497
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Steve Quest wrote:

>
> I understand that the Netherlands tends to be the most free nation
> on earth right now. I even understand the police in Amsterdam are
> FRIENDLY and have go-tee's and long hair! :) I have yet to visit the
> country, but if it is all that I hear it is, I'll be moving there if at
> all possible. Just as my heroes (George Washington, Ben Franklin, Thomas
> Jefferson) left their country (Great Brittan) to seek freedom, so shall I.
>
> sq
>
> --
> -<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
> ============================> /_\ no law abridging the freedom
> MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

Good, when are you going? Their loss will be our gain.

2926. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-02 00:00:00 UTC
From: **** <****@no.net>
Message-ID: <34844477.2574@no.net>
Source record: 17498
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:
>
> Ken wrote:
> >
> > >:
> > >
> > > And you're ok with the fact that micropower broadcasting is
> > >punishable THE SAME as someone raping your daughter?
> > >
> > > Are you hams ok in the head? Are you actually ok with the idea
> > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > >tho what they're doing is a serious crime against humanity?
> >
> > ---
> > If you kids like prison and menial jobs afterward, then by all means
> > go for it. In fact, after reading your post I say *please go for it*!
> > I didn't write the laws and don't like some of them, but I do like
> > to think that outside of prison is more free than *in* prison with the
> > same laws. Let us know when you get out......nah never mind, don't bother.
>
> Ken, (and I think I speak for many) I pity you.
>
> People like you permitted McCarthy to have his way.
> People like you blame the victim of injustice.
> People like you just sit around and smugly proclaim "That's the way it is!"
> and can't be bothered to stand up to make it any better.
> People like you sat around and said, "But England protects us...why do we
> want freedom. We don't like it either but that's the way it is."
>
> You're wrong and you have no courage. I just want you to know that.
>
> Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> walkie talkies with your friends, we're out here genuinely suffering trying
> to make America more free, which will benefit you in the end.
>
> Wirehead Prime

Oh boy, our savior at last!!!! We are really glad to know you are
suffering
so much for our good.

2927. NORAD Two-Line Orbital Element Set Format

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <662809$hp8$1@blackbird.afit.af.mil>
Source record: 17499

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.space on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW,

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. In addition, element sets (updated daily) and some documentation and software are also available via anonymous ftp from

archive.afit.af.mil (129.92.1.66)

in the directory pub/space.

==========

Data for each satellite consists of three lines in the following format:

```
AAAAAAAAAAAAAAAAAAAAAAA
1 NNNNNU NNNNNAAA NNNNN.NNNNNNNN +.NNNNNNNN +NNNNN-N +NNNNN-N N NNNNN
2 NNNNN NNN.NNNN NNN.NNNN NNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNN
```

Line 0 is a twenty-four character name (this change is being made to be consistent with the name length in the NORAD SATCAT).

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

Line 1
Column Description
01 Line Number of Element Data
03-07 Satellite Number
08 Classification (U=Unclassified)
10-11 International Designator (Last two digits of launch year)
12-14 International Designator (Launch number of the year)
15-17 International Designator (Piece of launch)
19-20 Epoch Year (Last two digits of year)
21-32 Epoch (Day of the year and fractional portion of the day)
34-43 First Time Derivative of the Mean Motion
45-52 Second Time Derivative of Mean Motion (decimal point assumed)
54-61 BSTAR drag term (decimal point assumed)
63 Ephemeris type
65-68 Element number
69 Checksum (Modulo 10)
(Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2
Column Description
01 Line Number of Element Data
03-07 Satellite Number
09-16 Inclination [Degrees]
18-25 Right Ascension of the Ascending Node [Degrees]
27-33 Eccentricity (decimal point assumed)
35-42 Argument of Perigee [Degrees]
44-51 Mean Anomaly [Degrees]
53-63 Mean Motion [Revs per day]
64-68 Revolution number at epoch [Revs]
69 Checksum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 14
1 23455U 94089A 97320.90946019 .00000140 00000-0 10191-3 0 2621
2 23455 99.0090 272.6745 0008546 223.1686 136.8816 14.11711747148495
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2928. Pactor MBO & Gateway list

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Albert AERTS <albertaerts@nospam.innet.be>
Message-ID: <34850AB1.C15C8370@nospam.innet.be>
Source record: 17500
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.space,tnn.radio.amateur,alabama.birmingham.radio.amateur,git.radio.amateur,de.comm.ham

```
The " Pactor MBO & Gateway list " which is accessible from
the " ON6TS Fact Sheet " has been UPDATED.

http://www.club.innet.be/~pub01234

73's de Albert

--
Amateur Radio Callsign: ON6TS
HF Pactor: 14076.5, 18106.5 or 21076.5 mark carrier
Email: albertaerts@innet.be
URL: http://www.club.innet.be/~pub01234
```

2929. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Squest@cris.com
Message-ID: <663916$la2@examiner.concentric.net>
Source record: 17501
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Mark Morgan (konstans@geocities.com) wrote:
: Steve,
: The rightness of an act, has very little to do with the lawfullness
: of an act, which is after a fashion your point Steve. Really Flaming
: Ken for pointing out this fact, as well as the suggestion that the rest
: of us hams, are not right in the head for KNOWING and advising someone
: of what the Law is, and the consequences of breaking it. I happen to
: feel that the FCC rules on the subject are way too restrictive (oh for a
: spell checker under netscape) on this subject, but alas for the present
: they are the rules.
:
: As to moving, if you learn of a country not going down this path
: of lawing us to death, do let us all know.

I understand that the Netherlands tends to be the most free nation
on earth right now. I even understand the police in Amsterdam are
FRIENDLY and have go-tee's and long hair! :) I have yet to visit the
country, but if it is all that I hear it is, I'll be moving there if at
all possible. Just as my heroes (George Washington, Ben Franklin, Thomas
Jefferson) left their country (Great Brittan) to seek freedom, so shall I.

sq

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2930. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Squest@cris.com
Message-ID: <663ap0$la2@examiner.concentric.net>
Source record: 17502
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Dodge (gtx70@flash.net) wrote:
: Ken wrote:
: > >
: > > And you're ok with the fact that micropower broadcasting is
: > >punishable THE SAME as someone raping your daughter?
: > >
: > > Are you hams ok in the head? Are you actually ok with the idea
: > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
: > >tho what they're doing is a serious crime against humanity?
: >
: > ---
: > If you kids like prison and menial jobs afterward, then by all means
: > go for it. In fact, after reading your post I say *please go for it*!
: > I didn't write the laws and don't like some of them, but I do like
: > to think that outside of prison is more free than *in* prison with the
: > same laws. Let us know when you get out......nah never mind, don't bother.
:
: I thank God that the Fore Fathers didn't think Ken's way..I guess it
: just boils down to when and where you want to make your stand..

Actually, if you study history, most of the colonists in early
America were loyalists to the crown. It was something like 3% of the
population that wanted independence and freedom, all others liked being
surfs and serving a king, paying heavy taxes to the crown.....sq

(the minority won, mostly because they fought for freedom while the
hessian and british soldiers fought for money. Fighting for an ideal
makes you want to fight harder, suffer more, and give a damn. The Hessian
mercenaries and british soldiers fighting here were only interested in
getting paid for their service, they didn't care if they won or lost. The
Americans however, were willing to die for what they believed in, while
the hessian mercinaries and british soldiers wanted to live at all cost.)

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2931. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348529CB.620D@raccoon.com>
Source record: 17503
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Ken wrote:
>
> >:
> >
> > And you're ok with the fact that micropower broadcasting is
> >punishable THE SAME as someone raping your daughter?
> >
> > Are you hams ok in the head? Are you actually ok with the idea
> >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> >tho what they're doing is a serious crime against humanity?
>
> ---
> If you kids like prison and menial jobs afterward, then by all means
> go for it. In fact, after reading your post I say *please go for it*!
> I didn't write the laws and don't like some of them, but I do like
> to think that outside of prison is more free than *in* prison with the
> same laws. Let us know when you get out......nah never mind, don't bother.

Ken, (and I think I speak for many) I pity you.

People like you permitted McCarthy to have his way.
People like you blame the victim of injustice.
People like you just sit around and smugly proclaim "That's the way it is!"
and can't be bothered to stand up to make it any better.
People like you sat around and said, "But England protects us...why do we
want freedom. We don't like it either but that's the way it is."

You're wrong and you have no courage. I just want you to know that.

Oh, and by the way, don't call us kids. While you PLAY with your overgrown
walkie talkies with your friends, we're out here genuinely suffering trying
to make America more free, which will benefit you in the end.

Wirehead Prime

2932. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <34852E7B.16E6@raccoon.com>
Source record: 17504
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

John Lundgren wrote:
>
> Anthony Clifton wrote:
>
> > In article <3481D773.CBD@scan.missouri.org>,
> > Richard Carroll <w0ex@scan.missouri.org> wrote:
> > >Michael wrote:
>
> > >> My name is Dane Springer and I am 16 years old. I am sereously interested
> > >> in pirate radio. I bought the Ramsy FM-10 and setup a j pole antenna on
> > >> my roof. Suprisingly the signal travaled about 1500ft. I wouldf like to
> > >> boost the power of my FM-10 to about 5-10 watts. I was wondering if i
> > >> bought a 50 watt 2meter RF boster at radio shack would that work? My
> > >> maximum I can spend is about $60. thanks.
>
> > >You might want to "sereously" consider forgetting the whole thing. Mom
> > >and Dad may become "sereously interested" in your activities when the
> > >Federal Marshals knock on the door of the family home intent on
> > >confiscating every piece of electronic apparatus within. You might be
> > >"sereously" in trouble.
>
> > Go worship Hitler or Stalin or whatever and leave people alone you wretched
> > bully.
> > Wirehead Prime
>
> And so you're going to recommend that nothing be said about this to him,
> because by doing so, it might destroy his 'spirit' to pursue pirate
> radio? In other words, by your silence, you will cause others to become
> victims of the legal system?

I would recommend that you stop underestimating his intelligence.

> I think you're the one that should go away. Permanantly.

I know you do. That would be easier. If everyone we didn't like would just
go away. Wouldn't it be dreamy???? That's the way people like you think...
whatever frightens you or is unpleasant, just make it go away. I believe the
Nazis made a few million Jews and others go away. I believe we, as Americans,
made a few million Native Americans go away.

I instructed you to leave people alone, implying that if that meant you left
this thread well so be it. You respond by suggesting I should be imprisoned
forever (IE the Permanently remark). Does the thought of fellow Americans
being imprisoned forever for violating an Unconstitutional Federal Regulation

make you feel all warm and fuzzy inside? What kind of sicko does that make YOU?

In either case, you're not trying to protect him; you're trying to protect the government and corporate America. Why? What is your vested interest?

Wirehead Prime

2933. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <34854B3D.40AA@mail.rancho.cc.ca.us>
Source record: 17505
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:

> John Lundgren wrote:
[snip]

> > > Go worship Hitler or Stalin or whatever and leave people alone you wretched
> > > bully.
> > > Wirehead Prime

> whatever frightens you or is unpleasant, just make it go away. I believe the
> Nazis made a few million Jews and others go away. I believe we, as Americans,
> made a few million Native Americans go away.
> Wirehead Prime

You violated Godwin's Law, therefore you automatically LOSE the
argument.

Sorry. GO TO JAIL, Do not pass GO, do not collect $200.

PLONK

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@

2934. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: sw
Message-ID: <663udb$e3b@cs1.FTA-Berlin.de>
Source record: 17506
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Yik Feng Tan wrote:
>>
>> Dear Masters,
>>
>> I am a newbie to these mews group. I going to build a low power FM
>> transmitter which is able to cover a radius of 300 ft. I wonder if any of
>> you have or know any webpages that can help me build this device.

Take a look at: http://www.IAEhv.nl/users/nero/tinyt.html

--
Stefan Wimmer Cellware Broadband
Email sw@cellware.de Rudower Chaussee 5
WWW http://www.cellware.de/ 12489 Berlin, Germany

Visit my private Homepage: Love, Rockets, Fireworks!
http://www.geocities.com/CapeCanaveral/6368/

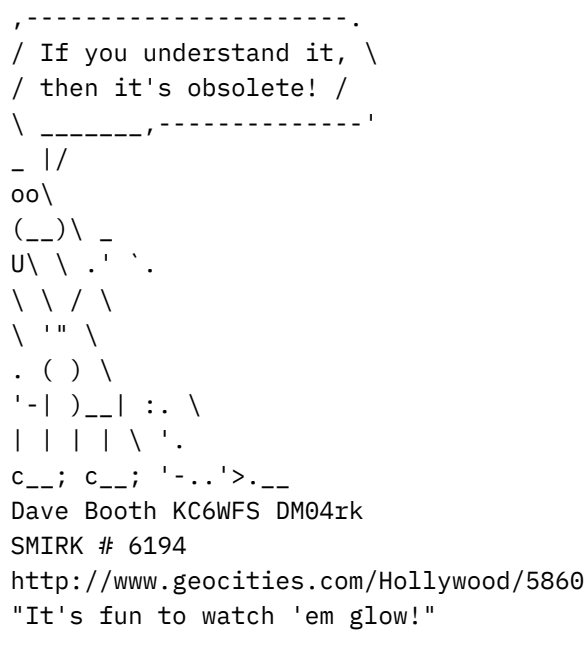
2935. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Dave Booth <booth@pactitle.com>
Message-ID: <34858463.15FB@pactitle.com>
Source record: 17507
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

```
**** wrote:
>
> WireHead Prime wrote:
> >
> > Ken wrote:
> > >
> > > >:
> > > >
> > > > And you're ok with the fact that micropower broadcasting is
> > > >punishable THE SAME as someone raping your daughter?
> > > >
> > > > Are you hams ok in the head? Are you actually ok with the idea
> > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > >tho what they're doing is a serious crime against humanity?
> > >
> > > ----------------------------------------------------------------
> > > If you kids like prison and menial jobs afterward, then by all means
> > > go for it. In fact, after reading your post I say *please go for it*!
> > > I didn't write the laws and don't like some of them, but I do like
> > > to think that outside of prison is more free than *in* prison with the
> > > same laws. Let us know when you get out......nah never mind, don't bother.
> > >
> > Ken, (and I think I speak for many) I pity you.
> >
> > People like you permitted McCarthy to have his way.
> > People like you blame the victim of injustice.
> > People like you just sit around and smugly proclaim "That's the way it is!"
> > and can't be bothered to stand up to make it any better.
> > People like you sat around and said, "But England protects us...why do we
> > want freedom. We don't like it either but that's the way it is."
> >
> > You're wrong and you have no courage. I just want you to know that.
> >
> > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > walkie talkies with your friends, we're out here genuinely suffering trying
> > to make America more free, which will benefit you in the end.
> >
> > Wirehead Prime
>
> Oh boy, our savior at last!!!! We are really glad to know you are
> suffering
> so much for our good.
```

If you saw all the hate and discontent in the alt.radio.pirate against
the US gov you would understand why they are cracking down on you all.

--



Dave Booth KC6WFS DM04rk
SMIRK # 6194
http://www.geocities.com/Hollywood/5860
"It's fun to watch 'em glow!"

2936. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Dodge <gtx70@flash.net>
Message-ID: <3485A264.4791@flash.net>
Source record: 17508
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

```
Steve Quest wrote:
>
> Dodge (gtx70@flash.net) wrote:
> : Ken wrote:
> : > >
> : > > And you're ok with the fact that micropower broadcasting is
> : > >punishable THE SAME as someone raping your daughter?
> : > >
> : > > Are you hams ok in the head? Are you actually ok with the idea
> : > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> : > >tho what they're doing is a serious crime against humanity?
> : >
> : > ----------------------------------------------------------------
> : > If you kids like prison and menial jobs afterward, then by all means
> : > go for it. In fact, after reading your post I say *please go for it*!
> : > I didn't write the laws and don't like some of them, but I do like
> : > to think that outside of prison is more free than *in* prison with the
> : > same laws. Let us know when you get out......nah never mind, don't bother.
> :
> : I thank God that the Fore Fathers didn't think Ken's way..I guess it
> : just boils down to when and where you want to make your stand..
>
> Actually, if you study history, most of the colonists in early
> America were loyalists to the crown. It was something like 3% of the
> population that wanted independence and freedom, all others liked being
> surfs and serving a king, paying heavy taxes to the crown.....sq
>
> (the minority won, mostly because they fought for freedom while the
> hessian and british soldiers fought for money. Fighting for an ideal
> makes you want to fight harder, suffer more, and give a damn. The Hessian
> mercenaries and british soldiers fighting here were only interested in
> getting paid for their service, they didn't care if they won or lost. The
> Americans however, were willing to die for what they believed in, while
> the hessian mercinaries and british soldiers wanted to live at all cost.)
>
> --
> -<squest@cris.com>---------\ ( ( | ) ) Amendment1 Congress shall make
> ============================> /_\ no law abridging the freedom
> MicroPower FM Broadcasting-/ /\_/\ of speech, or of the press.

Oh, I have..I know..
BD
```

2937. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <34856238.5F2C@raccoon.com>
Source record: 17509
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

John Lundgren wrote:
>
> WireHead Prime wrote:
>
> > John Lundgren wrote:
> [snip]
>
> > > > Go worship Hitler or Stalin or whatever and leave people alone you wretched
> > > > bully.
> > > > Wirehead Prime
>
> > whatever frightens you or is unpleasant, just make it go away. I believe the
> > Nazis made a few million Jews and others go away. I believe we, as Americans,
> > made a few million Native Americans go away.
> > Wirehead Prime
>
> You violated Godwin's Law, therefore you automatically LOSE the
> argument.

WRONG. I never told you to go away. I told you to leave people alone.
Telling you to go worship Hitler or Stalin does not imply that you are not
welcome to return at any time after you've prayed to them for whatever
evil regime it is you desire.

You told ME to go away PERMANENTLY. Quite different.

BUZZ You lose.

Wirehead Prime

2938. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <34856649.6B21@raccoon.com>
Source record: 17510
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

**** wrote:
>
> WireHead Prime wrote:
> >
> > Ken wrote:
> > >
Squest wrote:
> > > >:
> > > >
> > > > And you're ok with the fact that micropower broadcasting is
> > > >punishable THE SAME as someone raping your daughter?
> > > >
> > > > Are you hams ok in the head? Are you actually ok with the idea
> > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > >tho what they're doing is a serious crime against humanity?
> > >
> > > ----------
> > > If you kids like prison and menial jobs afterward, then by all means
> > > go for it. In fact, after reading your post I say *please go for it*!
> > > I didn't write the laws and don't like some of them, but I do like
> > > to think that outside of prison is more free than *in* prison with the
> > > same laws. Let us know when you get out......nah never mind, don't bother.
> >
> > Ken, (and I think I speak for many) I pity you.
> > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > walkie talkies with your friends, we're out here genuinely suffering trying
> > to make America more free, which will benefit you in the end.
>
> Oh boy, our savior at last!!!! We are really glad to know you are
> suffering
> so much for our good.

Guess what. I'm going to take pity on you and GIVE you the last word.
That's the only reason you're involved in this thread anyway. To win.

I'm involved because I wanted people to know that your point of view is skewed
and biased by the fact that you are protected and privileged by an organization
that keeps everyone (including you but you don't realize it) from expressing
yourself to the masses with the same effectiveness as a giant wealthy corporation
for no more reason than that that giant wealthy corporation has given them blood
money.

Enjoy your repeaters and all your special frequency allocations but, in a few years, when micropower broadcasters fill the airwaves with relevant, timely information that serves the communities they broadcast in...and those same giant corporations have convinced the FCC to take away your allocations one by one and turn them over to commercial services, well don't come crying about it here. I don't think you'll get alot of sympathy. Maybe, then, you'll have to be the pirates.

At any rate, you win we're all going to jail, we're completely wrong and our victories are meaningless. You can go back to your safe little hamshack now and tell your buddies on 2 meters that you've saved the world from freedom for one more day.

Wirehead Prime

2939. FS: EQUIPMENT

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bd0021$914ff8a0$6af3efcf@restar.idir.net>
Source record: 17511
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
HAM RADIOS
FOR SALE
FT 757GXII= $900
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

2940. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Bill <billr*@no.net>
Message-ID: <3485187A.1E3C@no.net>
Source record: 17512
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:
Snip some drivel:

> Enjoy your repeaters and all your special frequency allocations but, in a few
> years, when micropower broadcasters fill the airwaves with relevant, timely
> information that serves the communities they broadcast in...and those same
> giant corporations have convinced the FCC to take away your allocations one by
> one and turn them over to commercial services, well don't come crying about it
> here. I don't think you'll get alot of sympathy. Maybe, then, you'll have to
> be the pirates.

You call little boys who want to play radio playing acid junk rock
noise, spewing
divel with every other word being a four letter vulgarity, and screaming
anti-everything, which is what most micropower broadcaster do, relevant,
timely information that serves the community?
Give me a break!!!!

>
> At any rate, you win we're all going to jail, we're completely wrong and
> our victories are meaningless. You can go back to your safe little hamshack
> now and tell your buddies on 2 meters that you've saved the world from freedom
> for one more day.

You haven't had any victories yet, and not likely to until you clean up
you act.

2941. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-03 00:00:00 UTC
From: Bill <billr*@no.net>
Message-ID: <34862FEF.5395@no.net>
Source record: 17513
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

```
Howard and Kelly Lute wrote:
>
> Bill wrote:
>
> > WireHead Prime wrote:
> > Snip some drivel:
> >
> > > Enjoy your repeaters and all your special frequency allocations but, in a few
> > > years, when micropower broadcasters fill the airwaves with relevant, timely
> > > information that serves the communities they broadcast in...and those same
> > > giant corporations have convinced the FCC to take away your allocations one by
> > > one and turn them over to commercial services, well don't come crying about it
> > > here. I don't think you'll get alot of sympathy. Maybe, then, you'll have to
> > > be the pirates.
> >
> > You call little boys who want to play radio playing acid junk rock
> > noise, spewing
> > divel with every other word being a four letter vulgarity, and screaming
> > anti-everything, which is what most micropower broadcaster do, relevant,
> > timely information that serves the community?
> > Give me a break!!!!
>
> Now really, I'm anything but a "little boy", I just like playing the Blues, the
> local station (1 only w/i 25 miles) plays regular ol' crap and I hate it. I asked
> around at the local beer pub re:what they'd like in a radio station..."the blues and
> nothin' but" was thier answer. I gave 'em what they want, it's clean, professionally
> operated w/ free ads for all comers. But I'm hardly a "little boy".
>
> >
> >
> > >
> > > At any rate, you win we're all going to jail, we're completely wrong and
> > > our victories are meaningless. You can go back to your safe little hamshack
> > > now and tell your buddies on 2 meters that you've saved the world from freedom
> > > for one more day.
> >
> > You haven't had any victories yet, and not likely to until you clean up
> > you act.
>
> Every day is a victory. I've been 24/7 now for almost two years. They love it, I
> love doin' it. No screamin', no cussin', just the blues, a few free ads and that's
> it. A little local news once a day to keep everyone appraised. It's fun and I'm
```

> hardly harming anyone with my lil' 20 Watts of clean RF.

As I said in my post, "which is what most microbroadcasters do", you are obviously not one of the "most". You are to be congratulated.

2942. NORAD Two-Line Orbital Element Set: Space Shuttle (97337.25000000)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <664tba$3k5$1@blackbird.afit.af.mil>
Source record: 17514

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 87
1 25061U 97073A 97337.25000000 .00006096 -70987-5 77286-5 0 440
2 25061 28.4669 84.5092 0003703 314.3692 99.9718 15.98497779 2146
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2943. NORAD Two-Line Orbital Element Sets (TLE104)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <664vke$47s$1@blackbird.afit.af.mil>
Source record: 17515

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #104 -
Alouette 1
1 00424U 62049A 97334.90262003 .00000040 00000-0 36094-4 0 3353
2 00424 80.4644 119.0885 0023975 105.3841 254.9956 13.67909779755036
ATS 1
1 02608U 66110A 97335.24925013 .00000078 00000-0 10000-3 0 487
2 02608 14.4115 347.0931 0007147 128.1557 231.8994 1.00327427 30206
ATS 3
1 03029U 67111A 97334.54959068 -.00000105 00000-0 10000-3 0 7249
2 03029 14.8470 354.0572 0012706 275.9840 251.9141 1.00272559110092
Starlette
1 07646U 75010A 97336.18941434 -.00000110 00000-0 24691-4 0 1056
2 07646 49.8261 205.3917 0205880 190.9028 168.7366 13.82193550152680
LAGEOS
1 08820U 76039A 97335.17106057 .00000016 00000-0 00000+0 0 3368
2 08820 109.8166 208.2390 0044471 14.1569 346.0493 6.38664609247809
GOES 2
1 10061U 77048A 97335.46783669 .00000061 00000-0 10000-3 0 9216
2 10061 13.0122 31.1438 0009973 152.8759 238.3398 1.00286441 19781
IUE
1 10637U 78012A 97323.10382566 -.00000105 00000-0 10000-3 0 4187
2 10637 36.3039 75.3602 1381191 71.1142 303.2136 1.00083109 25148
GOES 3
1 10953U 78062A 97334.48939360 -.00000074 00000-0 00000+0 0 8786
2 10953 12.0421 34.2470 0004377 214.1027 248.2148 1.00276737 24387
SeaSat 1
1 10967U 78064A 97334.22361785 .00000057 00000-0 62992-4 0 6225
2 10967 107.9977 193.6996 0002581 246.0766 114.0103 14.38210302 17793

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Nimbus 7
1 11080U 78098A 97335.11766662 -.00000041 00000-0 97461-8 0 7140
2 11080 98.8820 175.6188 0009421 338.4213 21.6545 13.83676503964737
GOES 5
1 12472U 81049A 97327.16089604 -.00000263 00000-0 10000-3 0 324
2 12472 8.9998 45.1146 0004842 113.9359 246.0231 1.00313262 18354
Cosmos 1383
1 13301U 82066A 97335.24412787 .00000062 00000-0 55550-4 0 6306
2 13301 82.9291 103.6870 0026361 212.9176 147.0331 13.68089631770123
LandSat 4
1 13367U 82072A 97336.62979485 -.00000218 00000-0 -38582-4 0 1194
2 13367 98.0026 15.0397 0005870 285.1292 74.9254 14.57218596818221
DMSP B5D2-1
1 13736U 82118A 97337.18483552 .00000137 00000-0 75902-4 0 3650
2 13736 98.6168 162.9188 0007601 272.7920 87.2390 14.25878265777163
IRAS
1 13777U 83004A 97336.07384009 .00000214 00000-0 17697-3 0 8448
2 13777 98.9732 156.4744 0013747 66.6760 293.5849 13.99283183427896
Cosmos 1447
1 13916U 83021A 97335.55158240 .00000095 00000-0 83543-4 0 7248
2 13916 82.9444 157.2841 0039012 107.2305 253.3124 13.74363615736863
TDRS 1
1 13969U 83026B 97329.50589869 -.00000288 00000-0 10000-3 0 8135
2 13969 9.7199 38.6597 0002533 159.9636 358.8575 1.00262558 26665
GOES 6
1 14050U 83041A 97335.26424167 .00000038 00000-0 10000-3 0 7572
2 14050 7.8869 48.8145 0002654 168.0187 181.9184 1.00309543111525
AO-10
1 14129U 83058B 97333.64124932 -.00000024 00000-0 10000-3 0 5185
2 14129 26.4589 114.5142 6027450 172.1079 205.2863 2.05880955 80794
LandSat 5
1 14780U 84021A 97334.18777878 -.00000351 00000-0 -67836-4 0 6648
2 14780 98.2659 35.8136 0003515 83.0342 277.1256 14.57081267731283
UO-11
1 14781U 84021B 97333.89475457 .00000362 00000-0 68778-4 0 194
2 14781 97.8524 308.6724 0010706 189.5120 170.5887 14.69626075735599
Cosmos 1574
1 15055U 84062A 97335.20223640 .00000041 00000-0 27878-4 0 9241
2 15055 82.9591 213.5645 0026738 303.2912 56.5682 13.73657243674026
Cosmos 1602
1 15331U 84105A 97336.09242032 .00000552 00000-0 61661-4 0 6073
2 15331 82.5331 333.6834 0020881 352.3485 7.7368 14.85000570712052
ERBS
1 15354U 84108B 97335.18643761 .00000093 00000-0 30101-4 0 3212
2 15354 56.9950 51.9219 0009516 98.1403 262.0785 14.95109461716405
NOAA 9
1 15427U 84123A 97336.94610812 .00000101 00000-0 76465-4 0 3815
2 15427 98.8824 46.2971 0014169 239.4147 120.5627 14.13900822669059
Mir
1 16609U 86017A 97337.15714908 .00009456 00000-0 11576-3 0 8264
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2 16609 51.6563 316.2774 0007802 47.0634 313.0939 15.61124925673405
SPOT 1
1 16613U 86019A 97334.78524673 -.00000044 00000-0 00000+0 0 1416
2 16613 98.7736 46.0173 0001385 122.2534 237.8776 14.20001436295755
Cosmos 1766
1 16881U 86055A 97335.25412618 .00000487 00000-0 55576-4 0 5227
2 16881 82.5199 32.0041 0020405 25.3320 334.8889 14.83935053612740
EGP
1 16908U 86061A 97335.89136172 -.00000083 00000-0 10000-3 0 2279
2 16908 50.0090 159.2431 0011454 289.4548 70.5050 12.44417997182736
NOAA 10
1 16969U 86073A 97336.96754168 .00000072 00000-0 48870-4 0 3106
2 16969 98.5566 325.6974 0012031 235.2687 124.7361 14.25071566582622
MOS-1
1 17527U 87018A 97336.70764493 -.00000043 00000-0 00000+0 0 6099
2 17527 98.8635 30.9590 0019120 293.1976 66.7174 14.00448165549663
GOES 7
1 17561U 87022A 97335.63333193 -.00000128 00000-0 10000-3 0 4257
2 17561 4.0880 65.8573 0002396 220.4345 274.3347 1.00269340 22645
Kvant-1
1 17845U 87030A 97335.81283290 .00017768 00000-0 21201-3 0 2220
2 17845 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445607301
DMSP B5D2-3
1 18123U 87053A 97336.92645482 .00000095 00000-0 70673-4 0 1416
2 18123 98.7614 164.2430 0014145 167.6072 192.5463 14.15502418540006
RS-10/11
1 18129U 87054A 97334.83664156 .00000069 00000-0 58594-4 0 4300
2 18129 82.9230 115.5585 0012408 113.4428 246.8038 13.72386631523095
Meteor 2-16
1 18312U 87068A 97333.42416763 .00000065 00000-0 44969-4 0 6075
2 18312 82.5523 291.4957 0011972 165.5803 194.5701 13.84108348519526
Meteor 2-17
1 18820U 88005A 97336.57088904 .00000072 00000-0 51121-4 0 4289
2 18820 82.5422 342.7869 0015296 227.3600 132.6273 13.84786784497343
DMSP B5D2-4
1 18822U 88006A 97336.01422032 .00000093 00000-0 59522-4 0 6812
2 18822 98.3911 148.7880 0005293 248.6597 111.4016 14.23252930510360
Glonass 34
1 19163U 88043A 97333.32146099 -.00000027 00000-0 10000-3 0 2360
2 19163 65.4863 67.9752 0007476 165.0354 195.0003 2.13102277 73539
Glonass 36
1 19165U 88043C 97331.50255524 -.00000040 00000-0 10000-3 0 6419
2 19165 65.4676 67.9855 0003301 328.0651 31.9124 2.13101502 74118
METEOSAT 3
1 19215U 88051A 97327.54102632 -.00000152 00000-0 10000-3 0 3527
2 19215 4.2943 64.9659 0008025 149.4679 210.3628 0.96948950 22260
OKEAN 1
1 19274U 88056A 97334.20883156 .00000689 00000-0 82226-4 0 2214
2 19274 82.5109 134.4703 0019524 172.5109 187.6401 14.82723948508051
Meteor 3-2
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1 19336U 88064A 97333.89887036 .00000051 00000-0 10000-3 0 6191
2 19336 82.5413 150.8864 0017281 352.6620 7.4248 13.16985154449333
Glonass 39
1 19503U 88085C 97336.22612104 -.00000009 00000-0 10000-3 0 5230
2 19503 65.3493 306.7061 0006363 143.9954 216.0398 2.13101964 71707
NOAA 11
1 19531U 88089A 97336.95591687 .00000003 00000-0 26478-4 0 1985
2 19531 99.1339 13.6127 0011629 178.4913 181.6297 14.13155615473838
TDRS 3
1 19548U 88091B 97331.79755561 -.00000173 00000-0 10000-3 0 3160
2 19548 3.5294 69.0382 0004527 103.3413 266.2797 1.00264620 20836
Glonass 40
1 19749U 89001A 97335.32524259 -.00000014 00000-0 10000-3 0 7423
2 19749 65.4506 67.4002 0006435 254.7348 105.2193 2.13101363 69194
Glonass 41
1 19750U 89001B 97334.44104106 -.00000019 00000-0 10000-3 0 6482
2 19750 65.4642 67.5200 0009108 257.5443 102.3852 2.13101835 69199
GPS BII-01
1 19802U 89013A 97335.62884368 -.00000003 00000-0 00000+0 0 4991
2 19802 55.6129 89.4253 0021178 170.5067 189.7311 2.00555971 64392
Akebono
1 19822U 89016A 97334.87865030 .00010218 00000-0 52467-3 0 483
2 19822 75.0583 172.4536 3693095 61.1482 330.9832 8.02153530209036
Meteor 2-18
1 19851U 89018A 97336.21903068 .00000062 00000-0 41969-4 0 6052
2 19851 82.5238 216.0547 0012957 283.6378 76.3339 13.84444364442585
MOP-1
1 19876U 89020B 97336.88971165 -.00000066 00000-0 00000+0 0 3001
2 19876 3.0619 70.4214 0015697 282.3850 77.0129 0.97109527 11802
TDRS 4
1 19883U 89021B 97331.05119177 -.00000254 00000-0 10000-3 0 3735
2 19883 0.9642 85.6318 0004456 191.2037 126.6983 1.00270326204401
GPS BII-02
1 20061U 89044A 97334.97095768 -.00000010 00000-0 10000-3 0 4813
2 20061 53.8616 264.4079 0170654 227.1475 131.4261 2.00563516 62120
Nadezhda 1
1 20103U 89050A 97336.89362555 .00000003 00000-0 -12956-4 0 1712
2 20103 82.9542 75.0702 0038351 8.9605 351.2227 13.73884417421967
GPS BII-03
1 20185U 89064A 97331.67882824 -.00000020 00000-0 10000-3 0 5062
2 20185 55.3791 89.9383 0022235 359.8142 0.1626 2.00570875 60638
GMS 4
1 20217U 89070A 97336.64868853 -.00000357 00000-0 10000-3 0 6797
2 20217 2.8450 72.4740 0001441 272.8897 79.3826 1.00258580 30760
INTERCOSMOS 24
1 20261U 89080A 97335.90115378 .00000361 00000-0 11305-3 0 6368
2 20261 82.5947 290.4246 1239755 270.2318 75.7115 12.47487365372320
GPS BII-04
1 20302U 89085A 97336.82795969 .00000062 00000-0 00000+0 0 5252
2 20302 53.1955 203.8984 0184483 219.7418 138.3068 2.00559317 59534
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Meteor 3-3
1 20305U 89086A 97335.82266829 .00000044 00000-0 10000-3 0 9498
2 20305 82.5442 116.3311 0007310 82.3010 277.8910 13.04429267387648
COBE
1 20322U 89089A 97336.56810839 -.00000159 00000-0 -73595-4 0 3557
2 20322 98.9222 348.2469 0009391 355.4776 4.6301 14.03470381411740
Kvant-2
1 20335U 89093A 97335.81283290 .00017768 00000-0 21201-3 0 889
2 20335 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445456312
GPS BII-05
1 20361U 89097A 97334.35524103 -.00000050 00000-0 00000+0 0 2903
2 20361 56.2755 32.3371 0099835 148.4166 212.2475 2.00567498 48968
COSMOS 2054 (Altair-1)
1 20391U 89101A 97336.04687096 -.00000205 00000-0 10000-3 0 5619
2 20391 4.8176 60.1543 0003838 147.8407 211.9314 1.00240533 29342
SPOT 2
1 20436U 90005A 97334.55511317 -.00000044 00000-0 00000+0 0 3029
2 20436 98.7125 46.8456 0000664 91.5702 268.5552 14.20034661407250
UO-14
1 20437U 90005B 97335.75013659 .00000063 00000-0 41005-4 0 3158
2 20437 98.5069 53.6986 0011952 73.3593 286.8901 14.29985032410169
AO-16
1 20439U 90005D 97333.73027175 .00000029 00000-0 27770-4 0 1102
2 20439 98.5282 55.0388 0012333 81.1960 279.0606 14.30029349409895
DO-17
1 20440U 90005E 97333.76958922 .00000076 00000-0 45959-4 0 1088
2 20440 98.5330 56.0569 0012346 79.9671 280.2903 14.30173450409933
WO-18
1 20441U 90005F 97337.19949308 .00000060 00000-0 39838-4 0 1169
2 20441 98.5309 59.2964 0012792 70.2205 290.0356 14.30140016410425
LO-19
1 20442U 90005G 97337.22302525 .00000069 00000-0 43122-4 0 1146
2 20442 98.5335 60.0858 0013585 72.4223 287.8470 14.30257632410459
GPS BII-06
1 20452U 90008A 97335.74798832 .00000072 00000-0 10000-3 0 4050
2 20452 54.0744 145.0487 0067508 97.0723 263.7066 2.00574377 57492
MOS-1B
1 20478U 90013A 97337.21897948 -.00000044 00000-0 00000+0 0 967
2 20478 99.0712 44.4796 0005020 227.8235 132.2505 13.93984519318957
DEBUT
1 20479U 90013B 97332.84763276 .00000058 00000-0 20413-3 0 1057
2 20479 99.0659 263.8927 0540540 3.8735 356.6305 12.83361887365844
FO-20
1 20480U 90013C 97333.39824205 .00000014 00000-0 10552-3 0 133
2 20480 99.0662 264.0538 0540752 3.4250 357.0326 12.83241650365892
MOS-1B R/B
1 20491U 90013D 97333.10798485 .00000488 00000-0 97615-3 0 4004
2 20491 99.0163 344.2225 0470243 132.4775 231.7088 13.03017678370877
LACE
1 20496U 90015A 97337.24928145 .00004569 00000-0 12784-3 0 8145
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2 20496 43.1015 30.7482 0012277 297.7441 62.2163 15.37806809435980
Nadezhda 2
1 20508U 90017A 97335.56169581 .00000061 00000-0 49595-4 0 1715
2 20508 82.9544 210.4478 0044415 326.0826 33.7507 13.73530799388977
OKEAN 2
1 20510U 90018A 97336.82126644 .00003022 00000-0 40670-3 0 6351
2 20510 82.5230 89.9635 0019646 20.0526 340.1444 14.78816352418537
GPS BII-07
1 20533U 90025A 97336.02358621 -.00000007 00000-0 00000+0 0 3782
2 20533 54.2081 266.7357 0034151 49.4675 310.8526 1.91041236 55934
PegSat
1 20546U 90028A 97336.88717096 .00022154 00000-0 29893-3 0 1822
2 20546 94.1158 298.0237 0049652 90.0893 270.6196 15.56230596427717
HST
1 20580U 90037B 97335.26718342 .00000784 00000-0 70035-4 0 94
2 20580 28.4649 51.4560 0014767 131.1677 229.0183 14.86551210217932
MACSAT 2
1 20608U 90043B 97334.08535865 .00000320 00000-0 52217-4 0 3134
2 20608 89.9212 168.7073 0106929 0.9678 359.1724 14.65058181404017
Glonass 44
1 20619U 90045A 97336.15954856 -.00000010 00000-0 10000-3 0 4493
2 20619 64.9545 305.6468 0026422 208.1658 151.7189 2.13102488 58667
Glonass 45
1 20620U 90045B 97335.33956187 -.00000014 00000-0 10000-3 0 4240
2 20620 64.9356 305.6704 0010086 32.1309 327.9128 2.13102386 58688
Glonass 46
1 20621U 90045C 97334.93723850 -.00000016 00000-0 10000-3 0 557
2 20621 64.9675 305.7560 0016498 199.9811 159.9288 2.13103221 58675
Kristall
1 20635U 90048A 97335.81283290 .00017768 00000-0 21201-3 0 8804
2 20635 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445427144
ROSAT
1 20638U 90049A 97335.25436227 .00000691 00000-0 63299-4 0 7097
2 20638 52.9922 62.3697 0010632 307.4371 52.5649 15.07800829412570
Meteor 2-19
1 20670U 90057A 97336.39246475 .00000054 00000-0 34737-4 0 4637
2 20670 82.5431 284.3712 0014701 195.1001 164.9722 13.84136816375509
CRRES
1 20712U 90065A 97335.62068064 .00000292 00000-0 38076-3 0 5302
2 20712 18.1529 32.8778 7190830 59.3512 352.0129 2.36007578 55682
GPS BII-08
1 20724U 90068A 97332.48742054 -.00000023 00000-0 10000-3 0 3068
2 20724 55.2472 87.3912 0140916 194.7794 164.7874 2.00563128 52061
Feng Yun1-2
1 20788U 90081A 97336.85851634 -.00000002 00000-0 27035-4 0 5812
2 20788 98.8223 330.3170 0017250 90.7598 269.5545 14.01396126370840
Meteor 2-20
1 20826U 90086A 97334.19928147 .00000091 00000-0 68628-4 0 1163
2 20826 82.5270 221.7775 0014521 106.9460 253.3292 13.83665850362275
GPS BII-09
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1 20830U 90088A 97336.03141417 -.00000048 00000-0 10000-3 0 2537
2 20830 56.2102 30.1400 0069736 93.7047 267.1584 2.00559213 52771
GPS BIIA-10
1 20959U 90103A 97335.43438861 -.00000004 00000-0 00000+0 0 2696
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2 21006 65.4257 66.7710 0057208 189.4650 170.4448 2.13102268 54329
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2 21140 1.6165 78.8236 0004665 161.5060 224.8892 1.00271866 26951
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2 21152 82.9236 111.2248 0041325 302.6686 57.0471 13.73555384336873
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2 21217 64.6874 305.0395 0008772 234.3542 125.5544 2.13101882 51842
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1 21218U 91025C 97332.81476414 -.00000026 00000-0 10000-3 0 5292
2 21218 64.6796 305.1008 0005193 236.0965 123.8535 2.13102667 51809
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Meteor 3-5
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DMSP B5D2-6
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Glonass 55
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Glonass 61
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Glonass 77
1 23736U 95068C 97336.64349545 .00000092 00000-0 00000+0 0 3429
2 23736 64.8126 186.0486 0008198 189.0121 171.0572 2.13102192 15337
XTE
1 23757U 95074A 97333.65620981 .00001306 00000-0 79175-4 0 1918
2 23757 22.9838 40.1576 0013036 286.8829 73.0232 14.97988321105091
Polar
1 23802U 96013A 97335.19425882 .00000043 00000-0 00000+0 0 1785
2 23802 86.3650 20.2867 6531929 260.1393 25.7123 1.35166235 8795
1996010E
1 23824U 96010E 97336.48156107 .00027659 00000-0 45551-1 0 3720
2 23824 48.0236 76.1233 6734882 192.1455 135.4429 2.90482481 16600
GPS BIIA-25
1 23833U 96019A 97333.38384416 -.00000049 00000-0 00000+0 0 2789
2 23833 54.5125 326.3204 0018239 140.3952 219.7504 2.00566259 12310
Priroda
1 23848U 96023A 97335.81283290 .00017768 00000-0 21201-3 0 5304
2 23848 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445 91713
MSX
1 23851U 96024A 97334.56705460 -.00000047 00000-0 00000+0 0 2904
2 23851 99.4250 332.3264 0007833 139.2528 220.9221 13.97396351 81716
SAX
1 23857U 96027A 97336.06970754 .00002293 00000-0 14703-3 0 1148
2 23857 3.9541 175.7130 0013981 195.8393 164.1759 14.92082535 86852
MSTI 3
1 23868U 96031A 97336.98029988 .00198763 15172-4 41338-3 0 2468
2 23868 97.0879 164.3690 0141781 27.7622 333.1129 15.83574769 87334
TOMS-EP
1 23940U 96037A 97335.25540105 .00007244 00000-0 30442-3 0 1908
2 23940 97.4195 240.1795 0012265 274.5754 85.4084 15.23664596 78576
GPS BIIA-26
1 23953U 96041A 97336.29502682 -.00000004 00000-0 00000+0 0 2272
2 23953 55.2612 86.8589 0024708 350.7632 9.1828 2.00568716 10167
ADEOS
1 24277U 96046A 97337.22574246 -.00000019 00000-0 10005-4 0 2701
2 24277 98.5862 51.7318 0002065 102.8306 257.3114 14.27039401 67478
FO-29
1 24278U 96046B 97333.90662140 .00000002 00000-0 34450-4 0 1243
2 24278 98.5199 352.3829 0352156 116.6061 247.1614 13.52635278 63524
FAST
1 24285U 96049A 97335.95626207 .00002880 00000-0 28098-3 0 1555
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2 24285 82.9793 320.9027 2202964 56.8540 322.4881 10.82920984 50575
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1 24286U 96049B 97333.46370364 .00003725 00000-0 35786-3 0 1641
2 24286 82.9927 322.3051 2201710 60.3470 319.8718 10.83517336 50313
Microsat
1 24291U 96050A 97336.19067551 .00037481 67110-5 35335-3 0 3450
2 24291 62.7832 296.5563 0437560 176.2516 184.2083 14.99238168 67995
MO-30
1 24305U 96052B 97335.23726595 .00000204 00000-0 20364-3 0 1651
2 24305 82.9380 231.1357 0031947 100.9902 259.4845 13.73099854 61983
GPS BIIA-27
1 24320U 96056A 97335.16436191 -.00000011 00000-0 00000+0 0 1304
2 24320 54.4474 266.8083 0051506 95.0143 265.5755 2.00563870 8805
SAC-B/HETE
1 24645U 96061A 97335.19997024 .00001632 00000-0 88776-4 0 1164
2 24645 37.9760 303.9844 0046716 184.8232 175.2087 15.15388263 59408
ZEYA
1 24744U 97010A 97335.24691111 .00007647 00000-0 24311-3 0 1170
2 24744 97.2628 237.1495 0005504 202.4731 157.6272 15.32879458 41660
DMSP B5D2-9
1 24753U 97012A 97336.99010053 .00000093 00000-0 73982-4 0 2689
2 24753 98.9143 20.7126 0008656 296.8721 63.1565 14.13018632 34221
MINISAT 01
1 24779U 97018A 97335.22234717 .00003147 00000-0 18263-3 0 628
2 24779 150.9676 129.9428 0014448 129.2597 230.9286 14.98648009 33595
CELESTIS
1 24780U 97018B 97336.16583629 .00002567 00000-0 12990-3 0 641
2 24780 150.9808 138.9302 0019639 139.6284 220.5686 14.99857182 33763
GOES 10
1 24786U 97019A 97335.49265137 -.00000080 00000-0 00000+0 0 1458
2 24786 0.0377 287.8271 0006388 1.1307 214.1240 1.00262715 2233
Feng Yun 2B
1 24834U 97029A 97328.78885538 -.00000324 00000-0 00000+0 0 911
2 24834 0.9028 258.3593 0001082 77.1142 116.4646 1.00274425 1677
GPS BIIR-02
1 24876U 97035A 97332.82176006 .00000084 00000-0 00000+0 0 773
2 24876 54.9524 147.0404 0016606 239.0503 120.8248 2.00537114 2627
SeaStar
1 24883U 97037A 97335.31064887 .00000164 00000-0 48071-4 0 801
2 24883 98.2184 71.3696 0002134 11.2159 348.9084 14.55498328 17935
Soyuz TM-26
1 24886U 97038A 97335.81283290 .00017768 00000-0 21201-3 0 1221
2 24886 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445 18467
Meteosat 7
1 24932U 97049B 97335.83218171 -.00000074 00000-0 00000+0 0 742
2 24932 1.6410 290.3631 0002888 332.7913 96.8560 1.00273027 929
COSMOS 2346
1 24953U 97052A 97336.19186449 .00000033 00000-0 17036-4 0 343
2 24953 82.9239 229.8628 0041586 89.7820 270.8104 13.79048412 9575
FAISAT 2V
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1 24954U 97052B 97336.77613375 .00000043 00000-0 26677-4 0 310
2 24954 82.9229 229.4376 0041598 88.3626 272.2296 13.78974901 9661
Sputnik 40
1 24958U 97058C 97335.16813383 .00046692 00000-0 52071-3 0 342
2 24958 51.6573 326.2406 0007507 32.2274 327.9178 15.62298052 4291
Progress M-36
1 25002U 97058A 97335.81283290 .00017768 00000-0 21201-3 0 672
2 25002 51.6557 323.0492 0007730 40.8141 319.2526 15.61106445 8940
STEP-M4
1 25013U 97063A 97333.06833271 .00002561 00000-0 86013-4 0 347
2 25013 44.9655 180.9465 0049609 358.5063 1.5658 15.32969574 5761
1997065C
1 25021U 97065C 97329.99657836 -.00000253 00000-0 10000-4 0 111
2 25021 0.0166 350.2128 0008052 91.3545 278.5567 1.01064250 1097
MAQSAT H
1 25023U 97066A 97336.79150732 -.00000124 00000-0 -31093-3 0 182
2 25023 7.8605 41.0647 6539393 211.5283 82.9665 3.07855375 1024
MAQSAT B
1 25024U 97066B 97332.18748291 -.00000192 00000-0 -21232-3 0 162
2 25024 7.8298 43.4436 6535303 206.6443 94.8735 3.08571991 888
YES
1 25025U 97066C 97336.14744064 .00000371 00000-0 25559-2 0 147
2 25025 7.8383 41.4054 6530645 210.7281 83.1563 3.07795030 980
1997066D
1 25026U 97066D 97333.21866798 -.00000210 00000-0 -43725-3 0 210
2 25026 7.8516 43.0442 6539417 207.5973 92.0668 3.07932348 919
GPS BIIA-28
1 25030U 97067A 97318.13414556 .00000027 00000-0 10000-3 0 170
2 25030 54.8914 209.2111 0145163 95.5811 266.7340 1.99879326 224
1997067B
1 25031U 97067B 97334.52027305 .00003245 00000-0 14410-3 0 123
2 25031 35.1974 32.9973 0074812 14.4517 345.8325 15.18653036 3729
1997067C
1 25032U 97067C 97336.72708233 .00080059 -56651-6 15864-2 0 338
2 25032 34.9937 187.9590 6036535 219.7801 75.0293 4.07532224 1066
Iridium 43
1 25039U 97069A 97336.91354321 -.00004315 00000-0 -15476-2 0 706
2 25039 86.3982 123.7025 0002718 39.1429 320.9947 14.34260967 3462
Iridium 41
1 25040U 97069B 97334.53546687 -.00000479 00000-0 -17781-3 0 600
2 25040 86.3941 124.6972 0002189 88.0477 272.0951 14.34272991 3123
Iridium 40
1 25041U 97069C 97337.23875525 -.00002199 00000-0 -75281-3 0 584
2 25041 86.4209 123.5777 0001957 89.6162 270.5243 14.36800267 3518
Iridium 39
1 25042U 97069D 97336.86949111 .00000742 00000-0 25797-3 0 583
2 25042 86.4011 123.7224 0001812 169.2457 190.8859 14.34228991 3457
Iridium 38
1 25043U 97069E 97335.54664396 -.00003824 00000-0 -13075-2 0 498
2 25043 86.4152 124.2871 0002214 111.5621 248.5804 14.36683425 3278
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1997069F
1 25044U 97069F 97336.89860421 .00098230 12880-5 52321-3 0 311
2 25044 83.5565 113.0556 0258801 263.9849 93.1846 15.45670131 3675
Kupon
1 25045U 97070A 97336.89048800 .00000091 00000-0 00000+0 0 219
2 25045 0.0626 61.9811 0496137 198.8169 161.3645 0.99628881 175
1997070B
1 25046U 97070B 97317.37349553 .65689875 12556-4 15941-2 0 109
2 25046 51.6160 312.6725 0002858 115.2641 244.8685 16.46147752 119
1997070C
1 25047U 97070C 97319.14177011 .15418202 12931-4 98767-4 0 212
2 25047 51.6306 302.7054 0011413 329.7985 30.1827 16.53074858 407
1997070D
1 25048U 97070D 97328.65032168 .00000108 00000-0 00000+0 0 47
2 25048 0.0584 308.4228 0015232 0.9497 50.5538 0.99608330 124
Sirius 2
1 25049U 97071A 97331.03337384 .00000101 00000-0 00000+0 0 271
2 25049 1.1068 71.4461 0037006 217.2791 153.9118 1.00693884 171
Cakrawarta 1
1 25050U 97071B 97336.77679977 -.00000326 00000-0 00000+0 0 344
2 25050 0.1601 56.0362 0013319 42.4933 0.3216 1.00187937 240
1997071C
1 25051U 97071C 97332.81033332 .00072929 82831-7 59683-2 0 132
2 25051 6.9404 190.4246 7337280 191.0814 132.3834 2.23717245 364
1997071D
1 25052U 97071D 97336.72062421 .00043716 00000-0 49592-2 0 94
2 25052 6.9729 188.4652 7282265 194.5796 120.1056 2.29983099 462
1997070E
1 25053U 97070E 97334.49352716 .00000723 00000-0 64146-3 0 134
2 25053 47.5430 311.3249 7281199 4.4813 359.3831 2.25587347 397
1997070F
1 25054U 97070F 97335.78813885 .00002759 00000-0 63295-3 0 110
2 25054 47.5068 310.9045 7303206 4.8545 359.3472 2.26049253 429
RESURS-F1M
1 25059U 97072A 97337.14729167 .00051626 -28979-7 62888-4 0 374
2 25059 82.3302 235.4855 0023662 91.5895 82.6165 16.07332237 2373
1997072B
1 25060U 97072B 97325.03414774 .25094872 -12234-5 11916-3 0 238
2 25060 82.3279 249.7319 0016709 352.4488 8.8532 16.55760951 425
STS 87
1 25061U 97073A 97337.25000000 .00006096 -70987-5 77286-5 0 440
2 25061 28.4669 84.5092 0003703 314.3692 99.9718 15.98497779 2146
TRMM
1 25063U 97074A 97334.81505958 .00111696 00000-0 11145-2 0 90
2 25063 34.9991 30.0362 0011633 310.0074 49.9528 15.64223355 469
Hikoboshi
1 25064U 97074B 97336.55793125 .00015781 00000-0 35138-3 0 120
2 25064 34.9718 19.6307 0115793 231.2627 127.7694 15.35817671 679
1997074C
1 25065U 97074C 97333.56389675 .00023460 00000-0 44289-3 0 108
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2 25065 34.5455 40.1802 0117594 204.0961 155.4220 15.40099969 203
1997074D
1 25066U 97074D 97336.21861975 .00054587 00000-0 54377-3 0 82
2 25066 34.9982 20.6445 0013896 329.7466 30.2319 15.64415197 664
JCSAT-5
1 25067U 97075A 97336.75705315 -.00000012 00000-0 00000+0 0 16
2 25067 4.0052 232.3978 7294179 178.0008 189.0455 2.28277368 07
Equator-S
1 25068U 97075B 97336.78308159 -.00000013 00000-0 00000+0 0 16
2 25068 4.0378 232.0856 7301360 178.3460 210.9872 2.27427102 06
1997075D
1 25070U 97075D 97336.75786657 -.00000012 00000-0 00000+0 0 18
2 25070 3.9958 232.4672 7295103 177.9508 189.9427 2.27975236 03
1997076B
1 25072U 97076B 97337.26442326 .00999768 12106-4 15000-3 0 18
2 25072 51.5932 67.0854 0041104 267.9748 91.8485 16.30638631 42
1997076C
1 25073U 97076C 97337.26507221 .00626070 12072-4 15000-3 0 10
2 25073 51.5646 67.0801 0011538 250.5860 110.9444 16.28584954 30
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
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2944. FS: Glen Martin Roof Tower + More

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bd00b6$02ebd620$ef8d56cf@Kwiknet.ppp>
Source record: 17516

Hello All;
I am selling 5ft Glen Martin Roof Tower w/ matching thrust bearing and 9ft heavy duty aircraft aluminum 2" diameter mast. All in great shape almost like new. Email: n2rif@amsat.org You can try calling but my phone is usually busy cause Im on the net most of the time. My ph# is 609-386-9382..
New it cost over $400 for everything. I am asking $290 OBO. It is assembled. Shipping will probably be a bit hard to re-package. So anyone who is within driving distance should probably re: My qth is Burlington, NJ about 5 miles NorthEast of Phila,Pa and 12 miles South of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2945. FS: L-New Mirage B1016 160w 2mtr Amp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bd00b5$e62c85c0$ef8d56cf@Kwiknet.ppp>
Source record: 17517

Hello All;
I'm selling a "like new - used 9 times" Mirage B 1016G [made
by KLM not by MFJ] Pre-amplified 10w-in 160-170w-out 2mtr
amplifier with all orignal boxes & docs.
Worked the "Sats" with this amp & has super preamp. Reason
for sale is strictly financial. I am asking $285 + shipping OBO.
Sorry No CODs...
Please re: me via email: n2rif@amsat.org Or Packet
N2RIF@K2UL.NJ.USA.NOAM. You can also try
calling but my phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

2946. 10M downlink antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: Jeff Griffin <kb2wqm@amsat.org>
Message-ID: <3486CDBE.77EA09E6@amsat.org>
Source record: 17518

I'm currently using a 1/4 wave vertical (radiator angled 30 degrees'), and a 1/4 wave crossed dipole for 10 meter downlink receive. Switch selectable. Does anyone have something that would have more gain, perhaps several 1/4 wave verticals phased together? I would like to improve my downlink signal somewhat, but have run out of ideas. Any input from anyone that is using anything different I would like to hear from.

Jeff kb2wqm FM29pe

2947. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348687C5.45BD@raccoon.com>
Source record: 17519
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Dave Booth wrote:
>
> **** wrote:
> >
> > WireHead Prime wrote:
> > >
> > > Ken wrote:
> > > >
> > > > >:
> > > > >
> > > > Are you hams ok in the head? Are you actually ok with the idea
> > > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > > >tho what they're doing is a serious crime against humanity?
> > > >
> > > > ----------
> > > > If you kids like prison and menial jobs afterward, then by all means
> > > > go for it. In fact, after reading your post I say *please go for it*!
> > > > I didn't write the laws and don't like some of them, but I do like
> > > > to think that outside of prison is more free than *in* prison with the
> > > > same laws. Let us know when you get out......nah never mind, don't bother.
> > >
> > > Ken, (and I think I speak for many) I pity you.
> > >
> > > You're wrong and you have no courage. I just want you to know that.
> > >
> > > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > > walkie talkies with your friends, we're out here genuinely suffering trying
> > > to make America more free, which will benefit you in the end.
>
> If you saw all the hate and discontent in the alt.radio.pirate against
> the US gov you would understand why they are cracking down on you all.

Sorry, just can't let this one by:

Ummmmm...since when is it illegal to hate or be discontented with the government? And in what way does hating the government or being discontented with it justify breaking down a guy's door, handcuffing him on the floor (pointing a gun at his pets and yelling, "freeze or I'll shoot" to be funny or something) and then taking away everything electronic that he owns?

And, if pirates are such evil criminals, why are they only RARELY charged with an actual crime? Most of the time their stuff gets taken under civil forfeiture laws but they never get tried in court for their alledged crimes.

Sounds like they're guilty until proven innocent to me.

What's next? Maybe burn someone at the stake for having an 'evil eye'? Round up a bunch of minorities and put them in a camp?

Do you have any idea how stupid you sound? You basically just said that people who oppose the government should be punished for it.

You're completely out of your skull. Like I say, when the FCC pulls your allocations and auctions them off for commercial services don't come crying here. You won't get alot of sympathy.

Wirehead Prime

2948. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: glenq@NOSPAMcyberhighway.net
Message-ID: <34922032.28414055@news.cyberhighway.net>
Source record: 17520
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime <wiredone@raccoon.com> wrote:

>Ken wrote:
>>
>> >:
>> >
>> > And you're ok with the fact that micropower broadcasting is
>> >punishable THE SAME as someone raping your daughter?
>> >
>> > Are you hams ok in the head? Are you actually ok with the idea
>> >that micropower broadcasters are being subject to ARREST and FORFEITURE as
>> >tho what they're doing is a serious crime against humanity?
>>
>> ---
>> If you kids like prison and menial jobs afterward, then by all means
>> go for it. In fact, after reading your post I say *please go for it*!
>> I didn't write the laws and don't like some of them, but I do like
>> to think that outside of prison is more free than *in* prison with the
>> same laws. Let us know when you get out......nah never mind, don't bother.
>
>Ken, (and I think I speak for many) I pity you.
>
>People like you permitted McCarthy to have his way.
>People like you blame the victim of injustice.
>People like you just sit around and smugly proclaim "That's the way it is!"
>and can't be bothered to stand up to make it any better.
>People like you sat around and said, "But England protects us...why do we
>want freedom. We don't like it either but that's the way it is."
>
>You're wrong and you have no courage. I just want you to know that.
>
>Oh, and by the way, don't call us kids. While you PLAY with your overgrown
>walkie talkies with your friends, we're out here genuinely suffering trying
>to make America more free, which will benefit you in the end.
>
>Wirehead Prime

Oh, for crying out loud! Get over yourself, kid. Pirate radio is
about as much about "saving America" as was Timothy McVeigh, although
on a much lower level of insanity.

"Saving" America involves a lot of hard work in the political
trenches, not playing silly defiance games that only get you blasted

by the existing power structure.
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

http://www.cyberhighway.net/~glenq/

2949. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <348744AB.9411C1F3@sj.bigger.net>
Source record: 17521
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill wrote:

> WireHead Prime wrote:
> Snip some drivel:
>
> > Enjoy your repeaters and all your special frequency allocations but, in a few
> > years, when micropower broadcasters fill the airwaves with relevant, timely
> > information that serves the communities they broadcast in...and those same
> > giant corporations have convinced the FCC to take away your allocations one by
> > one and turn them over to commercial services, well don't come crying about it
> > here. I don't think you'll get alot of sympathy. Maybe, then, you'll have to
> > be the pirates.
>
> You call little boys who want to play radio playing acid junk rock
> noise, spewing
> divel with every other word being a four letter vulgarity, and screaming
> anti-everything, which is what most micropower broadcaster do, relevant,
> timely information that serves the community?
> Give me a break!!!!

Now really, I'm anything but a "little boy", I just like playing the Blues, the local station (1 only w/i 25 miles) plays regular ol' crap and I hate it. I asked around at the local beer pub re:what they'd like in a radio station..."the blues and nothin' but" was thier answer. I gave 'em what they want, it's clean, professionally operated w/ free ads for all comers. But I'm hardly a "little boy".

>
>
> >
> > At any rate, you win we're all going to jail, we're completely wrong and
> > our victories are meaningless. You can go back to your safe little hamshack
> > now and tell your buddies on 2 meters that you've saved the world from freedom
> > for one more day.
>
> You haven't had any victories yet, and not likely to until you clean up
> you act.

Every day is a victory. I've been 24/7 now for almost two years. They love it, I love doin' it. No screamin', no cussin', just the blues, a few free ads and that's it. A little local news once a day to keep everyone appraised. It's fun and I'm hardly harming anyone with my lil' 20 Watts of clean RF.

2950. NORAD Two-Line Orbital Element Set: Space Shuttle (97338.36179398)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <667dhp$12n$1@blackbird.afit.af.mil>
Source record: 17522

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

****

STS 87
1 25061U 97073A 97338.36179398 .00006201 -71104-5 75403-5 0 483
2 25061 28.4674 76.0892 0003176 331.8047 15.8184 15.99390388 2321
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2951. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <34874559.CB9E5411@sj.bigger.net>
Source record: 17523
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Wirehead,
He will get sympathy tho'...he will. We'll throw in with his poor folks too and help them out, it's in our blood. They are just plain jealous, they are driven by fear and freedom means nothing to them. Pay them little attention 'til they have a need, then see who they come whinin' to.
friend,
Lute

WireHead Prime wrote:

> Dave Booth wrote:
> >
> > **** wrote:
> > >
> > > WireHead Prime wrote:
> > > >
> > > > Ken wrote:
> > > > >
> > > > > >:
> > > > > >
> > > > > Are you hams ok in the head? Are you actually ok with the idea
> > > > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > > > >tho what they're doing is a serious crime against humanity?
> > > > >
> > > > > ----------
> > > > > If you kids like prison and menial jobs afterward, then by all means
> > > > > go for it. In fact, after reading your post I say *please go for it*!
> > > > > I didn't write the laws and don't like some of them, but I do like
> > > > > to think that outside of prison is more free than *in* prison with the
> > > > > same laws. Let us know when you get out......nah never mind, don't bother.
> > > >
> > > > Ken, (and I think I speak for many) I pity you.
> > > >
> > > > You're wrong and you have no courage. I just want you to know that.
> > > >
> > > > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > > > walkie talkies with your friends, we're out here genuinely suffering trying
> > > > to make America more free, which will benefit you in the end.
> > >
> > If you saw all the hate and discontent in the alt.radio.pirate against
> > the US gov you would understand why they are cracking down on you all.
> >
> Sorry, just can't let this one by:

>
> Ummmmm...since when is it illegal to hate or be discontented with the
> government? And in what way does hating the government or being discontented
> with it justify breaking down a guy's door, handcuffing him on the floor
> (pointing a gun at his pets and yelling, "freeze or I'll shoot" to be funny or
> something) and then taking away everything electronic that he owns?
>
> And, if pirates are such evil criminals, why are they only RARELY charged
> with an actual crime? Most of the time their stuff gets taken under civil
> forfeiture laws but they never get tried in court for their alledged crimes.
> Sounds like they're guilty until proven innocent to me.
>
> What's next? Maybe burn someone at the stake for having an 'evil eye'?
> Round up a bunch of minorities and put them in a camp?
>
> Do you have any idea how stupid you sound? You basically just said that
> people who oppose the government should be punished for it.
>
> You're completely out of your skull. Like I say, when the FCC pulls your
> allocations and auctions them off for commercial services don't come crying
> here. You won't get alot of sympathy.
>
> Wirehead Prime

2952. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-04 00:00:00 UTC
From: Mark White <"markw(NOJUNK)"@iconnect.net>
Message-ID: <348664D2.3DB7@iconnect.net>
Source record: 17524
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Steve Quest wrote:
>
> KC5QXU (bayou@fsbnet.com) wrote:
> > Steve Quest wrote:
> > >
> > > WireHead Prime (wiredone@raccoon.com) wrote:
>>>>

>>>>(rest snipped as it has no bearing on the punchline)

But the real question is.....

Should CW be a requirement for pirate FM?

2953. Sputnik-40 still working?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: nungeste@sdd.hp.com
Message-ID: <669g8p$5tb@news.sdd.hp.com>
Source record: 17431

Sputnik-40 (RS-17) has a nearly-overhead pass here in San Diego today at 4:50pm local time. I want to announce a demo here at work, but haven't tried to hear it for several weeks. Is the transmitter still working? All I need is a single quick response. I want to be sure of success before getting 10's of people outside to listen.

2954. Re: Sputnik-40 still working?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: "L.Mortensen" <labmo@post3.tele.dk>
Message-ID: <34888058.17F9@post3.tele.dk>
Source record: 17432

Go ahead, it's still working, I heard it yesterday !

vy 73 de OZ4UI / Lars

****

Rick Nungester wrote:
>
> Sputnik-40 (RS-17) has a nearly-overhead pass here in San Diego today at
> 4:50pm local time. I want to announce a demo here at work, but haven't
> tried to hear it for several weeks. Is the transmitter still working? All
> I need is a single quick response. I want to be sure of success before
> getting 10's of people outside to listen.

2955. Signal Reports

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: timw@juno.COM
Message-ID: <19971205.152206.4543.0.TimW@juno.com>
Source record: 17433

I noticed on several occasions that to get a QSL card or certificate from a satellite (i.e. DO-17 or RS-17), that a signal report must be written. What format do these reports take, and how does one write one up?

thanks,
Tim, AB7LP: ab7lp@qsl.net

"The ideas of the ruling class are in every epoch the ruling ideas, i.e., the class which is the ruling _material_ force of society, is at the same time its ruling _intellectual_ force."
---The German Ideology

2956. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd0197$a22d2900$128a92d0@bitnet.bit-net.com>
Source record: 17434
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

The slow, but steady drift towards anarchy continues.

We are cursed with a President who rejects all standards (legal and moral) that have applied to all previous presidents, and a citizenry who now believe they may freely make their own rules.

I guess it has been a pretty good "run", this great experiment, America. Count the days - we cannot long survive when selfishness prevails. Such was not the nature of the foundational expectations of our founders - our system will not tolerate pervasive lawlessness.

Too bad too, this is the best system ever implemented in the history of humanity. I pray that the completion of the disintegration may be stalled until my children are old enough to cope better. :-(DavidC

2957. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: frog207lillypads@juno.com
Message-ID: <667s40rvj1@news.ncal.verio.com>
Source record: 17525
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

```
>>
>> Now really, I'm anything but a "little boy", I just like playing the Blues,
> the
>> local station (1 only w/i 25 miles) plays regular ol' crap and I hate it. I
> asked
>> around at the local beer pub re:what they'd like in a radio station..."the
> blues and
>> nothin' but" was thier answer. I gave 'em what they want, it's clean,
> professionally
>> operated w/ free ads for all comers. But I'm hardly a "little boy".

Ah, I see. The FCC is going to assign one microbroadcaster for each local
beer pub. How meaningful ! Shouldn't take more than about 2 microwatts to
cover it, though. Ought to be able to squeeze in quite a few on the same
frequency if you space them about a block apart.

Ed

REPLY INFO:
============================================================
Return address modified to prevent automatic SPAM response.
TO REPLY: remove the "lillypads" from my return address.
============================================================
```

2958. Re: 10M downlink antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34878941.37A6@inreach.com>
Source record: 17526

Jeff Griffin wrote:
>
> I'm currently using a 1/4 wave vertical (radiator angled 30 degrees'),
> and a 1/4 wave crossed dipole for 10 meter downlink receive. Switch
> selectable. Does anyone have something that would have more gain,
> perhaps several 1/4 wave verticals phased together? I would like to
> improve my downlink signal somewhat, but have run out of ideas. Any
> input from anyone that is using anything different I would like to hear
> from.
>
> Jeff kb2wqm FM29pe
try two 3 element yagis, one vertical, one horizontal, with a 1/4
wavelength jumper between them, this will give a circularly polarized
yagi, better gain and reception for satellite than a quarter wave
vertical.
got a big yard? try a 10 meter horn. ;')
Bill, kc6ufe

2959. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: anborg <anborg@eagle.seed.net.tw>
Message-ID: <3488A3F3.3B10@eagle.seed.net.tw>
Source record: 17527
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

> Every day is a victory. I've been 24/7 now for almost two years. They love it, I
> love doin' it. No screamin', no cussin', just the blues, a few free ads and that's
> it. A little local news once a day to keep everyone appraised. It's fun and I'm
> hardly harming anyone with my lil' 20 Watts of clean RF.

Yes, but what if everyone in your city got on the air with their own
lil' 20 Watts of clean RF? Pretty obvious that no one could hear
anything. Thats why they came up with rules. I haven't checked recently
but when I was younger, it wasn't out of reach for someone to get on the
air with a 250 Watt legal station. Think about it.

Best regards,

Art Borg

2960. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <3488160E.9F2F1C69@sj.bigger.net>
Source record: 17528
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

I obviously don't give a damn what the FCC does, says or makes as
'rules", I, as I said, am absolutely alone in what I am doing in my little town.
The "local" station here is AM and could care less. The beer pub was only the germ
of the idea, not the base of operations, though we're now toying with the idea of
direct broadcast's when certain blues artists are there. The closest FM station is
25 miles away and is 10 MHz higher than my signal. There is nothing to argue
about.
friend,
Lute

Ed G. wrote:

> >>
> >> Now really, I'm anything but a "little boy", I just like playing the Blues,
> > the
> >> local station (1 only w/i 25 miles) plays regular ol' crap and I hate it. I
> > asked
> >> around at the local beer pub re:what they'd like in a radio station..."the
> > blues and
> >> nothin' but" was thier answer. I gave 'em what they want, it's clean,
> > professionally
> >> operated w/ free ads for all comers. But I'm hardly a "little boy".
>
> Ah, I see. The FCC is going to assign one microbroadcaster for each local
> beer pub. How meaningful ! Shouldn't take more than about 2 microwatts to
> cover it, though. Ought to be able to squeeze in quite a few on the same
> frequency if you space them about a block apart.
>
> Ed
>
> REPLY INFO:
> ==
> Return address modified to prevent automatic SPAM response.
> TO REPLY: remove the "lillypads" from my return address.
> ==

2961. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: vortec@channel1.com
Message-ID: <6697m5qqu1@news1.channel1.com>
Source record: 17529
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

anborg <anborg@eagle.seed.net.tw> sez:

>Yes, but what if everyone in your city got on the air with their own
>lil' 20 Watts of clean RF? Pretty obvious that no one could hear
>anything. Thats why they came up with rules.

Well, that's why they *say* they came up with "rules" but some people
and views of radio history suggest otherwise. It was the commercial
interests that first lobbied for the "rules" in the first place....

> I haven't checked recently
>but when I was younger, it wasn't out of reach for someone to get on the
>air with a 250 Watt legal station. Think about it.

HA HA HA HA HA!!!!!! hee hee hee hee ho ho ..... Will somebody
please bring this guy up to speed? He's obviously been locked in that
closet waaayyy too long....

--Y.R.N.>

2962. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-05 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <3487E6A8.527C@raccoon.com>
Source record: 17530
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Howard and Kelly Lute wrote:
>
> Wirehead,
> He will get sympathy tho'...he will. We'll throw in with his poor folks too and help
> them out, it's in our blood. They are just plain jealous, they are driven by fear and
> freedom means nothing to them. Pay them little attention 'til they have a need, then
> see who they come whinin' to.

I like your attitude. It's much more relaxed than my own.

Hmmm...

Wirehead

> WireHead Prime wrote:
>
> > Dave Booth wrote:
> > >
> > > **** wrote:
> > > >
> > > > WireHead Prime wrote:
> > > > >
> > > > > Ken wrote:
> > > > > >
> > > > > > >:
> > > > > > >
> > > > > > Are you hams ok in the head? Are you actually ok with the idea
> > > > > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > > > > >tho what they're doing is a serious crime against humanity?
> > > > > >
> > > > > > ----------
> > > > > > If you kids like prison and menial jobs afterward, then by all means
> > > > > > go for it. In fact, after reading your post I say *please go for it*!
> > > > > > I didn't write the laws and don't like some of them, but I do like
> > > > > > to think that outside of prison is more free than *in* prison with the
> > > > > > same laws. Let us know when you get out......nah never mind, don't bother.
> > > > > >
> > > > > Ken, (and I think I speak for many) I pity you.
> > > > >
> > > > > You're wrong and you have no courage. I just want you to know that.
> > > > >
> > > > > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > > > > walkie talkies with your friends, we're out here genuinely suffering trying
> > > > > to make America more free, which will benefit you in the end.

> > >
> > > If you saw all the hate and discontent in the alt.radio.pirate against
> > > the US gov you would understand why they are cracking down on you all.
> >
> > Sorry, just can't let this one by:
> >
> > Ummmmm...since when is it illegal to hate or be discontented with the
> > government? And in what way does hating the government or being discontented
> > with it justify breaking down a guy's door, handcuffing him on the floor
> > (pointing a gun at his pets and yelling, "freeze or I'll shoot" to be funny or
> > something) and then taking away everything electronic that he owns?
> >
> > And, if pirates are such evil criminals, why are they only RARELY charged
> > with an actual crime? Most of the time their stuff gets taken under civil
> > forfeiture laws but they never get tried in court for their alledged crimes.
> > Sounds like they're guilty until proven innocent to me.
> >
> > What's next? Maybe burn someone at the stake for having an 'evil eye'?
> > Round up a bunch of minorities and put them in a camp?
> >
> > Do you have any idea how stupid you sound? You basically just said that
> > people who oppose the government should be punished for it.
> >
> > You're completely out of your skull. Like I say, when the FCC pulls your
> > allocations and auctions them off for commercial services don't come crying
> > here. You won't get alot of sympathy.

2963. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: Daniel Troglin <rfi905@indy.net>
Message-ID: <3489700E.728F@indy.net>
Source record: 17435
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Ed G. wrote:
. How meaningful ! Shouldn't take more than about 2 microwatts to
> cover it, though. Ought to be able to squeeze in quite a few

No The Flunked Clown College has stated in some of its legal papers tha
the band wont work with a bunch of lower power stations on it!
There should be 100kw stations only! A few in each state if you beleve
what the fcc has to say!
Big Da Radio Free indianapolis

2964. Test, please do not read, thanks.

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: willcarney@aol.com
Message-ID: <19971206160901.LAA14526@ladder01.news.aol.com>
Source record: 17436

This is a test because my AOL server has not been working properly. It seems to lose my posts to this group.

It's not what you got, it's what you do with it.

Try helping other's instead of hurting them.

Instead of fighting over an inch of ground lets lets move out into space & live in peace.

Home is where the heart is.

2965. * SpaceNews 08-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1208.1997@ampr.org>
Source record: 17437
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1208
* SpaceNews 08-Dec-97 *

BID: $SPC1208

=========
SpaceNews
=========

MONDAY DECEMBER 8, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* 26TH ANNUAL STRAIGHT KEY NIGHT ON OSCAR *
==========
You're most cordially invited to join in the 26th annual Straight Key Night
on OSCAR, sponsored by AMSAT-NA for Amateur Radio satellite enthusiasts
worldwide.

It's entirely unofficial: no rules, no scoring and no need to send in a log.
Just call CQ SKN in the CW passband segment of any OSCAR satellite from 0000
to 2359 UTC on January 1, 1998, or answer a CQ SKN call from another station.
OSCAR Zero (EME) contacts count too. Of course, all SKN operating must be
done with a straight hand key.

Those participating are encouraged to nominate someone they worked for
recognition as having the "best fist." To send in a "best fist" nomination,
please address it via e-mail to <w2rs@amsat.org>, via packet radio to
W2RS @ WA2SNA or W2RS @ GB7HSN (whichever is closer to you), or via
"snail-mail" to W2RS' callbook address. Those nominated will be featured
in a bulletin sent to Amateur Radio publications and posted via ANS to
packet radio and the Internet in early February.

[Info via Ray Soifer, W2RS]

* MARS PATHFINDER NEWS *
==========
After operating on the surface of Mars three times longer than expected and
returning a tremendous amount of new information about the red planet, NASA's
Mars Pathfinder mission is winding down.

Flight operators at NASA's Jet Propulsion Laboratory, Pasadena, CA, made the
announcement November 4th after attempting to reestablish communications with
the spacecraft throughout October. With depletion of the spacecraft's main
battery and no success in contacting Mars Pathfinder via its main or secondary

transmitters, the flight team cannot command the spacecraft or the small rover named Sojourner that had been roving about the landing site and studying rocks.

At the time the last telemetry from the spacecraft was received, Pathfinder's lander had operated nearly three times its design lifetime of 30 days, and the Sojourner rover operated 12 times its design lifetime of seven days.

Since its landing on July 4, 1997, Mars Pathfinder has returned 2.6 billion bits of information, including more than 16,000 images from the lander and 550 images from the rover, as well as more than 15 chemical analyses of rocks and extensive data on winds and other weather factors. The only remaining objective was to complete the high-resolution 360-degree image of the landing site called the "Super Pan," of which 83 percent has already been received and is being processed. The last successful data transmission cycle from Pathfinder was completed at 3:23 a.m. Pacific Daylight Time on Sept. 27, which was Sol 83 of the mission.

The Mars Pathfinder team first began having communications problems with the spacecraft on Saturday, Sept. 27. After three days of attempting to reestablish contact, they were able to lock on to a carrier signal from the spacecraft's auxiliary transmitter on Oct. 1, which meant that the spacecraft was still operational. They locked on to the same carrier signal again on Oct. 6, but were not able to acquire data on the condition of the lander. At that time, the team surmised that the intermittent communications were most likely related to depletion of the spacecraft's battery and a drop in the spacecraft's operating temperatures due to the loss of the battery, which kept the lander functioning at warmer temperatures.

Although the true cause of the loss of lander communications may never be known, recent events are consistent with predictions made at the beginning of the extended mission in early August. When asked about the life expectancy of the lander, project team members predicted that the first thing that would fail on the lander would be the battery; this apparently happened after the last successful transmission September 27.

After that, the lander would begin getting colder at night and go through much deeper day-night thermal cycles. Eventually, the cold or the cycling would probably render the lander inoperable. It appears that this sequence of events has probably taken place. The health and status of the rover is also unknown, but since initiating its onboard backup operations plan two months ago, the rover is probably circling the vicinity of the lander, attempting to communicate with it.

The rover, which went into a contingency mode on Oct. 6, or Sol 92 of the mission, had completed an alpha proton X-ray spectrometer study of a rock nicknamed Chimp, to the left of the Rock Garden, when it was last heard from. The rover team had planned to send the rover on its longest journey yet -- a 50-meter (165-foot) clockwise stroll around the lander -- to perform a series of technology experiments and hazard avoidance exercises when the communications outage occurred. That excursion was never initiated once the rover's contingency software began operating.

Engineering milestones of the mission included demonstrating a new way of delivering a spacecraft to the surface of Mars by way of direct entry into the Martian atmosphere. In addition, Mars Pathfinder demonstrated for the first time the ability of engineers to deliver a semi-autonomous roving vehicle capable of conducting science experiments to the surface of another planet.

The Mars Pathfinder mission is managed by the Jet Propulsion Laboratory for NASA's Office of Space Science, Washington, DC. The mission is the second in the Discovery program of fast track, low-cost spacecraft with highly focused science goals. JPL is managed by the California Institute of Technology, Pasadena, CA.

[Info via NASA/JPL]

* SPUTNIK-40/RS-17 NEWS *
==========
Reception reports of the Sputnik-40/RS-17 continue to be received. Reception verifications are possible through either of the following mail addresses. Cut off date for a card submission is February 98:

Sergej Samburov
PO Box 73
Kaliningrad-10 City
Moscow Area, 14070, Russia

FR5KJ Radio Club
103 rue de la Republique
97489 Saint Denis Cedex
Reunion Island

Envelopes should be well sealed and should not include cash. Send an SASE and an IRC coupon along with your reception report. Do not make any notes on the out side of the envelope with Amateur Radio callsigns visible.

* SpaceNews NEWS *
==========
Due to circumstances beyond control, SpaceNews was not issued last week (01-Dec-97).

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-

2966. AD:Radio Supplier in Pickering

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: Andrew Danby <danby@globalnet.co.uk>
Message-ID: <34899514.D053A1B9@globalnet.co.uk>
Source record: 17438
Cross-posted to: uk.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.dx,rec.radio.amateur.space,alt.ham-radio.marketplace
Body handling: HTML body converted to readable text

Hello everyone,we can supply your radio communications equipment and
also provide installations of aerial towers & large beams,etc.Please
feel free to visit our web site and call should you require
assistance.We have a great deal of experience in large aerial & large
satellite dish installations
Regards,
Andrew Danby G0KGA
Danby Satellite & Aerial Systems

www.danby.co.uk

Hello everyone,we can supply your radio communications equipment and also
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free to visit our web site and call should you require assistance.We have
a great deal of experience in large aerial & large satellite dish installations

Regards,

Andrew Danby G0KGA

Danby Satellite & Aerial Systems

www.danby.co.uk

2967. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: lucyapbt@ix.netcom.com
Message-ID: <3489E864.60C1@ix.netcom.com>
Source record: 17439
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:
>
> Howard and Kelly Lute wrote:
> >
> > Wirehead,
> > He will get sympathy tho'...he will. We'll throw in with his poor folks too and help
> > them out, it's in our blood. They are just plain jealous, they are driven by fear and
> > freedom means nothing to them. Pay them little attention 'til they have a need, then
> > see who they come whinin' to.
>
> I like your attitude. It's much more relaxed than my own.
>
> Hmmm...
>
> Wirehead
>
> > WireHead Prime wrote:
> >
> > > Dave Booth wrote:
> > > >
> > > > **** wrote:
> > > > >
> > > > > WireHead Prime wrote:
> > > > > >
> > > > > > Ken wrote:
> > > > > > >
> > > > > > > >:
> > > > > > > >
> > > > > > > > Are you hams ok in the head? Are you actually ok with the idea
> > > > > > > >that micropower broadcasters are being subject to ARREST and FORFEITURE as
> > > > > > > >tho what they're doing is a serious crime against humanity?
> > > > > > > >
> > > > > > > > ----------
> > > > > > > > If you kids like prison and menial jobs afterward, then by all means
> > > > > > > > go for it. In fact, after reading your post I say *please go for it*!
> > > > > > > > I didn't write the laws and don't like some of them, but I do like
> > > > > > > > to think that outside of prison is more free than *in* prison with the
> > > > > > > > same laws. Let us know when you get out......nah never mind, don't bother.
> > > > > > >
> > > > > > > Ken, (and I think I speak for many) I pity you.
> > > > > > >
> > > > > > You're wrong and you have no courage. I just want you to know that.

> > > > > >
> > > > > > Oh, and by the way, don't call us kids. While you PLAY with your overgrown
> > > > > > walkie talkies with your friends, we're out here genuinely suffering trying
> > > > > > to make America more free, which will benefit you in the end.
> > > > >
> > > > If you saw all the hate and discontent in the alt.radio.pirate against
> > > > the US gov you would understand why they are cracking down on you all.
> > >
> > > Sorry, just can't let this one by:
> > >
> > > Ummmmm...since when is it illegal to hate or be discontented with the
> > > government? And in what way does hating the government or being discontented
> > > with it justify breaking down a guy's door, handcuffing him on the floor
> > > (pointing a gun at his pets and yelling, "freeze or I'll shoot" to be funny or
> > > something) and then taking away everything electronic that he owns?
> > >
> > > And, if pirates are such evil criminals, why are they only RARELY charged
> > > with an actual crime? Most of the time their stuff gets taken under civil
> > > forfeiture laws but they never get tried in court for their alledged crimes.
> > > Sounds like they're guilty until proven innocent to me.
> > >
> > > What's next? Maybe burn someone at the stake for having an 'evil eye'?
> > > Round up a bunch of minorities and put them in a camp?
> > >
> > > Do you have any idea how stupid you sound? You basically just said that
> > > people who oppose the government should be punished for it.
> > >
> > > You're completely out of your skull. Like I say, when the FCC pulls your
> > > allocations and auctions them off for commercial services don't come crying
> > > here. You won't get alot of sympathy.
Un fortunately, some people are afraid of freedom/responsability. Pirate
radio is a freedom of speech issue. I live in the 5TH larest media
market, with approx. 150 stations to select from. The stations are owned
by 5 corprations!!!! Not much selection, all stations sound the same.
Same country music, same rock music, same SYNDICATED talk show host, not
much to choose from. Out of 150 stations.I like the idea of local radio
activity, not some body with family problems in kansas, calling
Dr.Laura! Sad day when certian Americians put down the Idea of freedom ,
after all Who said resticting the airwaves is constitutoinal, I have a
freedom of speech, and a RIGHT to use it in any way, I should not need a
licence to use that right (By the way, licence = money) Thank you for
your time,responses encouraged, after all I would not want to infringe
on you freedom to speech, and I do not recomend puting down any ideas
opposed to mine.

2968. Re: * SpaceNews 08-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <3489C31C.6B21@inreach.com>
Source record: 17440

> Cut off date for a card submission is February 98:
>
> Sergej Samburov
> PO Box 73
> Kaliningrad-10 City
> Moscow Area, 14070, Russia
>
> FR5KJ Radio Club
> 103 rue de la Republique
> 97489 Saint Denis Cedex
> Reunion Island
>
> Envelopes should be well sealed and should not include cash. Send an SASE
> and an IRC coupon along with your reception report. Do not make any notes
> on the out side of the envelope with Amateur Radio callsigns visible.
>

Can anybody tell me what an 'IRC coupon' is?
thanks,
William F. Hagen

2969. Freedom of DX'ing (was Re: Making a Low power FM transmitter)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: "Lou Paris, Jr." <LTParis@worldnet.att.net>
Message-ID: <66crsp$10s@mtinsc02.worldnet.att.net>
Source record: 17441
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Well my $0.02. I agree. I think that for one the FCC should be either reorganized or aboished to some extent. The I idea of goverment charging rediculous fees to give you the right of broadcasting is unconstitutional. Now I could see them regualting so you don't overpower the airwaves with overmodualtion, and carving out a channel in the airwaves for you to DX on, but the fees should be like $25 flat. That's it. But some of these fees or overwhelming.

Also I think that the conglomerates should have to give up the stranglehold on AM/FM/TV stations. In the DC/Baltimore metro area (where I used to live) 4 or 5 companies owned 95% of all the stations. Therefore making them "cookie cutter" stations of the same blandness. If it went back to it essentials, independently owend w/ REAL DJ's (not randomly computer generated tracks). I worked for 98.1 WJJR in Rutland, VT. I wanted to do a slow jam show to compete in the late nite market. They said no because the only "live show" was the morning show. Everything else was controlled by the computer. How lame. Their should be a law against it.

Oh well, I didn't mean to blabber on and on, but I just feel very strong about the subject. This is why I want to put up a Urban Contemporary station in my area (Champlain Valley of NY/VT) since there is no such format in the area. Maybee put a little spice into the blandness. But I don't want to pay hundreds and thousands of dollars getting a liscense.

>Un fortunately, some people are afraid of freedom/responsability. Pirate
>radio is a freedom of speech issue. I live in the 5TH larest media
>market, with approx. 150 stations to select from. The stations are owned
>by 5 corprations!!!! Not much selection, all stations sound the same.
>Same country music, same rock music, same SYNDICATED talk show host, not
>much to choose from. Out of 150 stations.I like the idea of local radio
>activity, not some body with family problems in kansas, calling
>Dr.Laura! Sad day when certian Americians put down the Idea of freedom ,
>after all Who said resticting the airwaves is constitutoinal, I have a
>freedom of speech, and a RIGHT to use it in any way, I should not need a
>licence to use that right (By the way, licence = money) Thank you for
>your time,responses encouraged, after all I would not want to infringe
>on you freedom to speech, and I do not recomend puting down any ideas
>opposed to mine.

2970. MIR SAFEX active?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mafedc3q3.fsf@spinner.ecofe.com>
Source record: 17442

Apparently, the Mir repeater, SAFEX, was on today, as i was able to hear my squelch tail on the 6-Dec-97 01:38-01:48Z pass in the California. I heard another station on, but could not copy, perhaps due to a bad location. (I operate mobile and have power line noise problems in my area.) I'll try the better Mir passes over CM87 in the next few days as long as it still seems to be on.
-- KD6PAG (Networking Old-Timer, RF newbie)

P.S. Skeds invited on AO-27.

2971. sputnik heard (finally)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: dbarillo@texas.net
Message-ID: <66d7q3pbt1@news3.texas.net>
Source record: 17443

after seveal false starts finally copied sputnik around 2355 utc over san antonio tx. Signal s5 using yaesu 726 with preamp and klm cross yagi. when directly overhead also readable on a bearcat scanner connected to a discone antenna. I used the keps for sputnik recently posted by norad; tracking sputnik and mir simultaneously i found that mir isnt close enough to track sputnik by

2972. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-06 00:00:00 UTC
From: Bill <bill@no.net>
Message-ID: <34890B93.8D6@no.net>
Source record: 17444
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

lucyapbt@ix.netcom.com wrote:
> Sad day when certian Americians put down the Idea of freedom ,
> after all Who said resticting the airwaves is constitutoinal, I have a
> freedom of speech, and a RIGHT to use it in any way, I should not need a
> licence to use that right (By the way, licence = money) Thank you for
> your time,responses encouraged, after all I would not want to infringe
> on you freedom to speech, and I do not recomend puting down any ideas
> opposed to mine.

Just what do you think gives you that right? Another one of the current
generation that thinks everthing is "their right". Sorry, it dosen't
work that way, most things are not you right, but a privilege that must
be earned.

2973. DSP-232 With WiSP

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: burgedm@igs.net
Message-ID: <348a05e4.40259229@news.igs.net>
Source record: 17445

Does anyone know how to make an AEA DSP-232 (that's two three two) NOT DSP 2232 work with WiSP?

I'm using the latest version of WiSP available from the ftp site and I have installed the ROM's sent out just as AEA disappeared. The ROMs are labeled "V1.0 L31" and the TNC identifies itself with

Release 06.Nov.96
Ver 1.0b Lot 30

when it powers up.

I'd like to know just what TNC I'm supposed to select when configuring the satellites in WiSP. If I select any TNC other than PK-232 my TNC will not come out of KISS mode without remove battery power. If I set it to PK-232 and mode 14 it initializes to something, what I'm not sure 'cause it certainly isn't decoding anything. The indicator shows a P just like it should however the tuning LED goes out and does not reappear. However it will come out of KISS mode when I exit WiSP however it is set to Radio Port 2 and modem 18 (9600 K9NG).

If I use a terminal program to set it to modem 14 (1200 BPSK) it will receive and decode the Microsats. However if I've been in WiSP I need to send a reset command and then reinitialize the DSP-232 before I can receive any data.

Anybody have any ideas what's going on??

Thanks

Dave - VE3NNW

2974. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: Michael Aust <maust21401@earthlink.net>
Message-ID: <348B044C.605E@earthlink.net>
Source record: 17446
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill wrote:
>
> lucyapbt@ix.netcom.com wrote:
> > Sad day when certian Americians put down the Idea of freedom ,
> > after all Who said resticting the airwaves is constitutoinal, I have a
> > freedom of speech, and a RIGHT to use it in any way, I should not need a
> > licence to use that right (By the way, licence = money) Thank you for
> > your time,responses encouraged, after all I would not want to infringe
> > on you freedom to speech, and I do not recomend puting down any ideas
> > opposed to mine.Sounds like another liberal democrat giving rights of others that
have earned that right. I bet they are for affirmative action, anti
Prop. 209, quota's giving away the earned previleges to those that did
not work for it.
I bet he voted for Senator Ted Kennedy.
Need I say more, this is what keep liberals in business,
Robbin Peter to Pay Paul, Take away my right that are earned,
and give them away free to someone that didn't work for them.

Hmm...

Shades of the Liberal Democrats.....

>
> Just what do you think gives you that right? Another one of the current
> generation that thinks everthing is "their right". Sorry, it dosen't
> work that way, most things are not you right, but a privilege that must
> be earned.

2975. Re: * SpaceNews 08-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: John Charles <jaycee@midmarsh.demon.co.uk>
Message-ID: <wM4laEArMni0EwPz@midmarsh.demon.co.uk>
Source record: 17447

In article <3489C31C.6B21@inreach.com>, Bill <whagen@inreach.com> writes
>> Cut off date for a card submission is February 98:
>>
>> Sergej Samburov
>> PO Box 73
>> Kaliningrad-10 City
>> Moscow Area, 14070, Russia

Has anyone had a card back from the above address yet?
Sent my report with SAE and IRC on the second day it was in orbit.
Nothing seen yet.
>>
>> FR5KJ Radio Club
>> 103 rue de la Republique
>> 97489 Saint Denis Cedex
>> Reunion Island
>>
>> Envelopes should be well sealed and should not include cash. Send an SASE
>> and an IRC coupon along with your reception report. Do not make any notes
>> on the out side of the envelope with Amateur Radio callsigns visible.
>>
>
>Can anybody tell me what an 'IRC coupon' is?

International Reply Coupon - In the UK they are available from all post
offices. It's a coupon you send which the person at the other end can
hand in to their post office in exchange for the necessary postage
stamps. Here they cost 60 pence - don't know how that translates
elsewhere.

73 John M1BTR
--
John Charles jaycee@midmarsh.demon.co.uk

2976. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: vortec@--THE
Message-ID: <66e9e8ais1@news1.channel1.com>
Source record: 17448
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill <bill@no.net> sez:

>Just what do you think gives you that right? Another one of the current
>generation that thinks everthing is "their right".

Yeah,... so? Could just as easily point out that you're one of the
previous generations who thought less and less was "your right"
Thinking in "generational" terms (at least in the present) is pretty
damn stupid anyway.

--Y.R.N.>

2977. Re: * SpaceNews 08-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: Tom@astro.net
Message-ID: <66ea37qan6@news.mhv.net>
Source record: 17449

In article <wM4laEArMni0EwPz@midmarsh.demon.co.uk>, John Charles
<jay$cee@midmarsh.demon.co.uk> wrote:
>In article <3489C31C.6B21@inreach.com>, Bill <whagen@inreach.com> writes
>>> Cut off date for a card submission is February 98:
>>>
>>> Sergej Samburov
>>> PO Box 73
>>> Kaliningrad-10 City
>>> Moscow Area, 14070, Russia
>
>Has anyone had a card back from the above address yet?
>Sent my report with SAE and IRC on the second day it was in orbit.
>Nothing seen yet.

The Rusian post offices are known for their crooks. Good luck getting a
card. I'm going to try but I'm not holding my hand on my butt.

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

2978. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: Squest@cris.com
Message-ID: <66eiid$lg6@examiner.concentric.net>
Source record: 17450
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime (wiredone@raccoon.com) wrote:
: Dave Booth wrote:
: > If you saw all the hate and discontent in the alt.radio.pirate against
: > the US gov you would understand why they are cracking down on you all.
:
: Ummmmm...since when is it illegal to hate or be discontented with the
: government? And in what way does hating the government or being discontented
: with it justify breaking down a guy's door, handcuffing him on the floor
: (pointing a gun at his pets and yelling, "freeze or I'll shoot" to be funny or
: something) and then taking away everything electronic that he owns?

It isn't illegal to be discontent with government, but the
government exists for its own gain, not for OUR benefit, therefore when we
are discontent, they have to move to stifle such unrest, THE VERY SAME WAY
THE KINGS OF OLD DID to put down dissention! We are living in a class
society, and the government is the RULING CLASS!

: And, if pirates are such evil criminals, why are they only RARELY charged
: with an actual crime? Most of the time their stuff gets taken under civil
: forfeiture laws but they never get tried in court for their alledged crimes.
: Sounds like they're guilty until proven innocent to me.

That's because it is NOT a crime to operate a radio transmitter
without a license. Stealing is a crime, murder is a crime, pirate radio
is merely a RULES VIOLATION!

: What's next? Maybe burn someone at the stake for having an 'evil eye'?
: Round up a bunch of minorities and put them in a camp?

That's what they are doing where I live Wirehead. A few years ago
a serial killer came into town and something like 9 black women were found
dead, laid out in various vacant lots and such. No investigation was
performed. I think you know why (predominantly white police force). The
state government here has started selling prisoners to out of state labor
camps, which is A VERY BAD SIGN! Before, it was less likely you would go
to prison because the prisons were overcrowded. Now with slave labor
camps, it is MORE LIKELY you will go to prison because the state gets a
big wad of cash for sending you there. NO incentive to be lenient at all!

: Do you have any idea how stupid you sound? You basically just said that
: people who oppose the government should be punished for it.

That's what he said. I can hear him marching in his jackboots
right now, hand held high, saying Heil Hitler! Death to all who are not

just like me! Death to all who don't THINK the way I do! Yea, I see it.

: You're completely out of your skull. Like I say, when the FCC pulls your
: allocations and auctions them off for commercial services don't come crying
: here. You won't get alot of sympathy.

They came for the Jews, but I did nothing for I wasn't a Jew.
Then they came for the handicapped, and I did nothing for I wasn't
handicapped, then they came for the minorities, then finally came for me!

sq

--
-<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
============================> /_\ no law abridging the freedom
MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

2979. Re: Freedom of DX'ing (was Re: Making a Low power FM transmitter)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: John Lentz <jlentz@execpc.com>
Message-ID: <348AEE26.533@execpc.com>
Source record: 17451
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Lou Paris, Jr. wrote:
>
> Well my $0.02. I agree. I think that for one the FCC should be either
> reorganized or aboished to some extent. The I idea of goverment charging
> rediculous fees to give you the right of broadcasting is unconstitutional.
> Now I could see them regualting so you don't overpower the airwaves with
> overmodualtion, and carving out a channel in the airwaves for you to DX on,
> but the fees should be like $25 flat. That's it. But some of these fees or
> overwhelming.

WOW! $25 is dirt cheap compared to other licensing fees like tavern license fees are $500 per year in Wisconsin, ummm same with dictates of the local government here telling us we no longer can have a septic tank for sewer and we MUST connect to sewer...thus since the demands of the city of Muskego dictates to all the people living in the Lake 101.5 FM listening area have to pay on there own expense to connect to the city sewer system plus also pay for the $500 construction permits to dig a trench to run a pipe from the house to the road, etc....

lesse.... umm radio stations wanting to play music thus have to have a license with BMI/ASCAP, etc that's at least a minimum of $500 annually for each music company. Ummm... WOW! people have to pay through the noise for everything.

Where does all that money go???? apparently someone must be pocketing it.

If Class-D ever comes back, or some sort of licensing for micro-broadcasters (which is just a dream....there won't never be any licensing of low power radio anyways) I doubt a license will cost $25...more like $2500... but anyways if they ever change the laws to allow for low power "Microbroadcasting", transmitters like Panaxis, Veronicas, Ramseys, etc... will still be considered illegal to use because they're not FCC accepted type equipment. LPB, Inc. sells certified FCC type accepted Low Power transmitters, but they are not cheap at all.

If I could set up a Licensed Low Power radio station, I would then feel comfortable about advertising the station and sell commercial time on my station to cover the costs of licensing fees, equipment, etc... and make some money on the long run.

But, that's all a dream.... it won't happen.... FCC isn't gonna bow down to allowing microbroadcasting because I see from what I read in some of these messages in this newsgroup would not impress the FCC to allow issueing licenses to Low Power broadcasters.

-John L.

2980. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: Daniel Pouzzner <douznews@kill-9.ai.mit.edu>
Message-ID: <66er68$j9$1@entertainment-tonight.ai.mit.edu>
Source record: 17452
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

"DavidC" <davidc@bit-net.com> wrote:
"we cannot long survive when selfishness prevails."

Quite the contrary. The trouble is that people are NOT acting selfishly - that is to say, they are not acting in their own interests.

When people act in their own interests ("selfishly"), they are typically seen to be generous, respectful, productive, and creative. It is when people act selflessly that morals decay, nationalistic aggression breaks out, and individual rights are expunged.

America is now a carnival of errors prompted principally by the toxin of greed and the blunder of selflessness. Greed can be seen to be a corruption of selfishness, in the final analysis quite contrary to self-interest.

-Daniel Pouzzner

2981. Radio Meteor Obs. Bull. Nov 1997: Leonids! 1/2

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.152.348B0514@vvs.innet.be>
Source record: 17453

Radio Meteor Observation Bulletin No. 52 December 1997

1. FORWARD SCATTER METEOR OBSERVATIONS

Observer: Enric Fraile Algeciras
Location: Barcelona, Spain (01 59' E, 41 21' N)
Frequency: 48.250 MHz
Transmitter location: most likely Czech television C2 C. Budejovica,
100 kW, horizontal polarisation.
Antenna: 6-element Yagi 617-6B, 14 dBd gain.
Antenna: astronomical azimuth 215 deg (=NE), elevation 0 deg.
Receiver: home made converter 20 dB gain, 1 dB noise and Kenwood TS-830S.
10 dB attenuator in the receiver to reduce direct reception
Sensitivity: 0.25 uV for 10 dB S/N
Observing method: the audio signal of the video carrier is received using
a narrow CW filter (100 Hz) and fed into the PC in real time.
Data sampling system: using a super 14 bits A/D card to PC/XT and
"Data Capture" software with 9 second/18 sampling interval to
store all the > 1.0 s signal increases.

| Nov 1997
UT | 1 2 3 4 5 6 7 8 9
---+-----------------------------------
0 | 1 6 6 2 3 6 1 7 7
1 | 1 7 2 5 7 2 2 3 4
2 | 10 14 9 4 4 12 6 4 1
3 | 3 10 21 13 12 14 7 5 11
4 | 9 10 12 16 13 10 12 14 11
5 | 15 11 19 11 18 10 10 23 11
6 | 7 9 17 12 15 10 7 13 12
7 | 12 12 10 8 18 10 8 10 3
8 | 8 17 7 5 6 14 7 8 3
9 | 11 12 11 4 18 9 8 3 4
10 | 6 12 2 4 9 8 2 16 6
11 | 9 19 5 11 10 12 18 2 5
12 | 5 8 5 2 7 1 5 4 4
13 | 6 14 13 5 3 7 2 5 11
14 | 6 6 3 12 6 5 11 7
15 | 9 13 9 3 7 12 10 10
16 | 7 11 2 2 5 4 5 3
17 | 7 7 5 7 6 3 6 7
18 | 7 9 10 2 4 5 7 2
19 | 5 7 11 11 4 7 7 1
20 | 4 7 4 3 7 5 7 1
21 | 5 7 5 2 5 5 7 8

```
22 | 8 10 5 7 4 4 5 1
23 | 8 1 7 2 2 1 7 4
---+----------------------------------
UT | 1 2 3 4 5 6 7 8 9
| Nov 1997

| Nov 1997
UT | 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+------------------------------------------------------------------
0 | 14 1 4 3 3 1 3 1 15 12 44 15 10
1 | 8 4 13 4 5 1 7 3 6 14 95? 14 17
2 | 13 7 7 4 1 1 5 4 17 33 198? 18 14
3 | 11 6 9 13 5 2 5 6 25 51 76? 49 27
4 | 13 8 20 6 13 7 4 7 22 46 49 34 44
5 | 15 5 8 4 10 6 11 6 22 33 156? 32 37
6 | 13 12 9 6 8 2 10 13 17 23 62? 33 28
7 | 14 7 2 5 6 10 9 4 13 23 60? 21 28
8 | 29 40 13 17 11 24 11 12 9 29 26 44 21 20
9 | 11 30 16 5 6 9 3 15 8 18 22 44 26 31
10 | 17 17 6 4 4 2 7 4 2 28 14 38 30 30
11 | 35 41 3 17 4 7 5 12 9 11 14 60? 26 22
12 | 12 12 3 4 6 10 12 17 16 132? 25 15
13 | 44? 5 7 2 4 12 10 31 27 22 26 19
14 | 45? 6 7 7 6 12 10 21 18 23 35 24
15 | 10 6 11 8 4 9 5 18 17 19 23 12
16 | 6 2 6 6 3 10 11 16 18 13 21
17 | 5 9 5 2 8 10 13 21 20 12 17
18 | 7 3 4 5 7 1 3 8 10 15 12 8
19 | 4 4 8 3 5 2 8 5 13 11 18 14 10
20 | 6 6 7 6 4 2 6 7 17 10 10 19 13
21 | 14 6 17 6 4 2 8 7 14 10 14 29 22
22 | 11 3 6 2 5 3 8 6 14 16 17 20 8
23 | 2 2 2 3 2 1 4 2 5 9 17 14 11
---+------------------------------------------------------------------
UT | 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
| Nov 1997

Notes:
. ? probably affected by sporadic-E, direct reception
. Nov 16, 17 and 18: problems with the UPS, lost information.
During the Leonids of Nov 17, I was active in 144 MHz Meteor Scatter
between 08h00 to 12h00 UT. I had only 6 very long reflections about
2 to 6 minutes long, but NOT a single short reflection!
The stronger reflections were on: 07h00, 08h07, 08h20, 08h27 (lasting
4 minutes), 08h43, 09h25, 10h00 (3 min), 10h40, 11h00 (4 min)

Enric Fraile Algeciras

--------------------------------------------------------------------------
Observer: Michael Boschat
Location: Halifax, Canada (63 36'W, 44 39'N, 58 meters above sea level)
```

Listening Frequency: 83.25 MHz
Receiver: Radio Shack PRO-60 scanner
Antenna : resonant dipole
Antenna Direction: Horizontally polarized with lobes in E-W plane, elev 0 deg
Filter : high-Q bandpass filter between antenna & receiver.
Q is at least 300.
Listening Mode: AM
Recording method: listening by ear

1997 Raw counts Possible
Date UT of Meteors Shower

Nov 6 1545-1645 12
1645-1745 31
1745-1800 27
1800-1900 9
7 1500-1600 19
1600-1700 27
1700-1800 15
8 1500-1600 7
1600-1700 18
1700-1800 13
9 1530-1630 9
1630-1730 16
1730-1830 6
11 1415-1515 18
1515-1615 20
12 1500-1600 16
13 0230-0330 104 Taurids N
13 1519-1619 18
14 0230-0330 29
14 1530-1630 21
1630-1730 22
15 1200-1300 29
1500-1600 12
1600-1700 9
16 0230-0330 28
16 1500-1600 7
17 1415-1515 57 Leonids
1550-1650 38 Leonids
1900-2000 12
18 0100-0200 15
0200-0300 9
0825-0925 45 Leonids
18 1120-1220 42 Leonids
1220-1320 45 Leonids
19 0130-0230 37 Leonids
0230-0330 48 Leonids
19 1140-1240 44 Leonids

20 2300-0000 6
0000-0100 11
0100-0200 19
21 1450-1550 27

Mike Boschat

Observer: Giorgio Bressan, Associazione Friulana di Astronomia e Meteorologia (AFAM)
Location: Remanzacco, near Udine, Italy (13.3 E, 46.1 N)
Antenna: dipole
Frequency: 48.24049 MHz, LSB mode.
Transmitters: TV video carrier in Germany (locator JN39), 24 h operation.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record the audio signal. 20 channels of 2 Hz width are used for meteor identification, pictures with interference are manually rejected.

| Counts of Refl. Counts of Refl. Counts of Refl.
| > 26 seconds > 13 seconds > 0.5 seconds
| Nov 1997 Nov 1997 Nov 1997
UT| 16 17 18 16 17 18 16 17 18
---+------------ ------------ -------------
0| 2 1 2 1 41 41
1| 2 1 4 2 58 58
2| 3 1 7 2 54 51
3| 3 1 4 1 66 42
4| 2 1 6 3 70 59
5| 5 1 11 5 95 48
6| 6 2 8 6 73 53
7| 8 0 23 6 128 67
8| 10 4 13 5 102 68
9| 6 13 114
10| 8 10 40
11| 1 3 41
12| 1 1 38
13| 0 0 24
14| 0. 0. 13
15| 0. 0. 20
16| 0 1 11
17| 0 0 31
18| 0 0 27
19| 0 0 21
20| 0 0 0 0 30 22
21| 0 0 0 0 28 21
22| 0 0 0 1 37 31
23| 0 2 1 4 38 39
---+------------ ------------ -------------
UT| 16 17 18 16 17 18 16 17 18
| Nov 1997 Nov 1997 Nov 1997

Notes:
. FFTDSP data processed and remarks by Werfried Kuneth:
Sporadic-E signatures where only seen for a very short period at 11h UT
on Nov. 17. Despite the location close to Udine (large city), the recording
is free of interference! Several meteor reflections appeared at the same
time in Austria and Italy.
Special thanks to Giorgio Bressan and Giovanni Sostero of AFAM for their
great support.

Giorgio Bressan and Giovanni Sostero / via Werfried Kuneth

Observer: Eisse Pieter (Peter) Bus
Location: Groningen, Netherlands (6 deg 33' E, 53 deg 13' N)
Frequency: 72.11 MHz
Transmitter Location: Wroclaw, Poland, 130 kW, Distance 740 km
Antenna: Yagi, 3 elements, geographical azimuth 106 deg (ESE),
elevation 13 deg
Receiver: Bearcat UBC 860 XLT Scanning Radio, sensitivity: 0.5 uV
Observation method: Listening and counting in 5-minute intervals.

Mean "sporadic" activity of long-duration reflections > 7 s
on 1997 November 2, 8, 9, 12 and 14 starting at UT:

4h 5h 6h 7h 8h 9h 10h 11h 12h 13h
---
3 3 2 2 2 2 2 2 1 1

On November 9, 12 and 14 only a part of the observation period is monitored:
Nov 9: 8-14h UT, Nov 12: 4-6h UT, Nov 14: 6-14h UT.

No long-duration (> 20 s) reflections monitored

Uncorrected counts of long-duration reflections > 7 s
during one hour starting at UT:

UT 15 Nov 16 Nov 17 Nov 18 Nov

5h - - 18 -
6 2 4 19 11
7 2 8 22 12
8 4 7 12 10
9 4 5 13 8
10 2 4 19 5
11 - - 16 -
12 - - 5 -
13 - - 4 -

Uncorrected counts of long-duration reflections > 20 s
during one hour starting at UT:

```
----------------------------------------
UT 15 Nov 16 Nov 17 Nov 18 Nov
----------------------------------------
5h - - 13 -
6 0 0 12 7
7 1 3 10 7
8 1 1 12 1
9 1 0 5 3
10 1 0 8 1
11 - - 6 -
12 - - 1 -
13 - - 1 -
----------------------------------------

Total reflection time of long-duration reflections > 20 s
in seconds during one hour starting at UT:

----------------------------------------
UT 15 Nov 16 Nov 17 Nov 18 Nov
----------------------------------------
5h - - 883 -
6 24 31 1062 638
7 29 436 1124 721
8 65 115 2532 215
9 161 49 678 306
10 47 29 904 65
11 - - 423 -
12 - - 116 -
13 - - 117 -
----------------------------------------

Notes:
. After correction for dead-time and observability function a maximum is
found between 10h30m and 11h15m UT at Solar Longitude 235.16 (2000.0).

For mid-point of the transmitter-receiver path counts:
radiant is rising on November 16 at about 21h30m UT
radiant is setting on November 17 at about 13h40m UT
Most favourable antenna-geometry for detecting Leonids between 5h45m and
7h30m UT.
Unfavourable antenna-geometry after 10h UT.
Very unfavourable antenna-geometry after 12h UT.

Peter Bus

--------------------------------------------------------------------------
Observer: Norman Davis
Location: Shingle Springs, California USA (120.57 W, 38.41 N)
Antenna: 3 element TV Yagi, Radio shack 10db preamp and antenna direction
east, elevation 40 deg.
Receiver: IC-7000 at 67.2499 MHz, USB Mode.
Transmitters: unknown TV channel 4 that could be anywhere between me and
New York.
```

Observing method: automatic setup using FFTDSP42t software by AF9Y to record
the audio signal. Sound card SB AWE-64. 20 channels of 2 Hz width
are used for meteor identification, pictures with interference or
sporadic-E propagation are manually rejected.

| Counts of refl. Counts of refl. Counts of refl.
| > 30 seconds > 8 seconds > 2.5 seconds
|
| Nov 1997 Nov 1997 Nov 1997
UT| 17 18 19 17 18 19 17 18 19
---+------------- ------------ ------------
0| 0 1 14
1| 0. 2. 13
2|
3|
4| 0. 2. 13
5| 0 0 1 0 20 16
6| 1 0 7 1 27 30
7| 2 0 4 2 25 26
8| 1 0 13 2 21 20
9| 8 2 15 5 31 30
10| 10 0 23 3 36 35
11| 10 1 28 6 34 24
12| 15 1 34 4 29 40
13| 16 0 36 4 31 36
14| 18 2 37 5 30 26
15| 18 0 37 2 19 24
16| 11 0 36 6 31 34
17| 0 6 41
18|
19|
20|
21| 0 0 18
22| 0 0 15
23| 0 0 7
---+------------- ---------------- ------------
UT| 17 18 19 17 18 19 17 18 19
| Nov 1997 Nov 1997 Nov 1997

Notes:
. data reduced and remarks by Werfried Kuneth:
during the Leonids shower peak up to 5 TV video carriers showed up a few
100 Hz near each other. Only one TV video carrier was selected for
processing, this one was available for 24 hours. Sporadic-E or direct
reception appeared for 4 hours on Nov 18, after 17h UT, the Leonids peak
was without any sporadic-E signatures. Thanks to Norman Davis for sharing
the FFTDSP data with me.

Norman Davis / via Werfried Kuneth

Observer: Maurice De Meyere
Location: Deurle, Belgium (3 37' E, 51 00' N)
Frequency: 66.51 MHz
Transmitter locations (all stations of more than 10 kW):
66.35 MHz, Klaipeda, Lithuania 12 kW, 05h00-22h00
66.41 Siedlce Poland 39 04h57(Sun05h57)-02h00(Sat03h00)
66.47 Viesintos Lithuania 12 05h00-22h00
66.56 Poznan Poland 56 04h57(Sun05h57)-02h00(Sat03h00)
66.62 Budapest Hungary 100 24hrs
66.68 Valmiera Latvia 20 06h00-22h00
Antenna: crossed Yagi, 4 elements, astronomical azimuth 270 deg (= E),
elevation 27 deg.
Antenna amplifier: 25 dB max level 90 dBmuV
Receiver: commercial, Progresson 447A, TESLA (Bratislava)
The receiver was calibrated with a Marconi TF2008 signal
generator. Sensitivity: 5 muV (modulation frequency
1000 Hz, frequency sweep 38 kHz) at (S+N)/N = 20 dB

Observing method: automated setup, 150 samples/second, 8 bit resolution.
[Time and details of all individual meteor reflections are stored
on file in the University of Ghent format (Prometeos), and are
available for further analysis. Reduction software for DOS and
Windows available].

October 1997

Raw counts of reflections with a duration of at least 0.027 s
during one hour interval starting at UT:

Oct	UT										
1997	20h	21	22	23	00	01	02	03	04	05	06	07
1- 2	35	64	72	62	75	63	68	77	86	111	125
2- 3	47	42	45	46	59	77	90	89	108	99	96
3- 4	27	47	49	59	64	65	68	75	82	120	150
4- 5	45	53	53	62	54	67	76	82	100	99	87
5- 6											
6- 7	21	37	46	55	47	71	69	83	89	57	80
7- 8	30	41	48	49	71	85	91	102	103	78	60
8- 9	21	30	54	70	83	72	105	91	79	125	80
9-10	19	41	58	73	110	93	96	106	64	110	51
10-11	18	38	51	53	60	71	75	58	70	75	58
11-12	24	28	51	49	71	61	60	76	73	78	63
12-13	11	16	23	29	34	38	57	83	42	40	54
13-14	15	27	22	40	38	45	61	54	60	97	44
14-15	12	27	44	58	52	56	68	66	64	48	71
15-16	19	39	32	50	40	75	79	77	83	81	75
16-17	8	27	42	61	63	68	83	68	82	114	57
24-25	31	30	23	31	46	65	67	147	97	177	97
25-26	7	14	25	44	51	59	81	97	88	78	83	84

```
26-27 | 0 28 29 42 56 65 70 68 76 84 95 90
27-28 | 3 17 19 38 29 65 64 88 101 90 130 82
28-29 | 5 21 43 35 44 39 63 73 126 97 90 69
29-30 |
30-31 | 1 18 28 24 45 54 70 76 97 84 58
31-01 | 30 21 48 51 76 62 55 102 101 112 77
------+------------------------------------------------------------
1997 | 20h 21 22 23 00 01 02 03 04 05 06 07
Oct | UT

Nov | UT
1997 | 21h 22 23 00 01 02 03 04 05 06 07 08
------+------------------------------------------------------------
1- 2 | 30 20 36 36 76 64 58 80 75 90 62
2- 3 |
3- 4 | 16 37 36 54 59 86 60 76 93 146 75
4- 5 | 22 26 33 32 56 107 137 65 101 96 58
5- 6 | 22 31 59 47 63 69 91 77 81 96 153
6- 7 | 27 48 57 63 63 70 69 96 88 93 67
7- 8 | 32 33 48 49 75 71 74 72 78 78 68
8- 9 | 40 30 31 46 61 83 69 74 91 102 95
9-10 | 19 31 41 54 66 58 80 93 80 76 82
10-11 | 11 44 31 50 85 91 73 92 103 100 69
11-12 | 29 39 43 55 90 64 125 109 139 129 113
12-13 | 28 46 49 47 50 73 110 98 101 102 97
13-14 | 33 49 58 61 75 57 94 100 92 209 -
14-15 | 25 38 41 59 77 60 87 90 114 89 115 150
15-16 | 22 56 66 81 79 91 69 102 125 145 257 103
16-17 | 29 61 70 147 113 228 253 298 445 571 547 598
17-18 | 23 79 313 87 181 155 122 154 213 307 259 223
18-19 | 36 67 56 80 64 86 141 109 134 148 139
19-20 | 28 51 64 85 97 67 109 119 122 165 125
20-21 | 37 43 64 85 86 97 98 92 107 118 164
21-22 | 34 66 65 81 101 91 106 87 126 108 97
------
26-27 | 38 39 46 53 52 67 82 91 95 117 82
27-28 | 39 40 41 47 72 96 89 107 94 103 97
28-29 | 24 45 57 50 64 92 88 93 83 102 92
29-30 | 25 44 46 84 75 90 93 91 88 101 92
30-01 | 23 27 40 70 72 86 123 139 81 139 84
------+------------------------------------------------------------
| 21h 22 23 00 01 02 03 04 05 06 07 08
```

Notes:
. ? probably affected by sporadic-E, direct reception.
. local time = UT + 2 hours (summer hour) until Oct 25,
local time = UT + 1 hour (winter hour) from Oct 26 onwards.
. Orionids on Oct 24.
. strong Leonids activity between Nov 16-18.

Maurice De Meyere

Location: Astronomical Observatory, University of Ghent, Belgium
(3 42' 32" E, 51 01' 25" N)
Antenna (2x): 4 elements horizontal Yagi, pointed East, elevation= 20 deg
Antenna amplifier: 10 dB gain
Frequency: (1)=66.29 MHz (signal) and (2)=65.3 MHz (interference control)
Receiver (2x): modified commercial FM receiver
Data acquisition: 12 bits PC-based A/D convertor, 250 Hz sampling rate
Interference rejection:
dual setup: receiver (1) tuned at distant transmitter, receiver (2)
tuned at empty frequency. Anti-coincidence measurement rejects
registration of broadbanded spurious signals (lightnings, computers,
ignition motors, etc).
Further information:
see WWW page (additional info + observational data)
http://allserv.rug.ac.be/~hdejongh/astro/meteor/meteor.html
Data format:
results are shown as total reflection time, expressed as
a percentage. The actual number shows 10 times this value.
When no figure is shown, the equipment was either out of service,
or results could have been affected by interference, sporadic-E.

| Nov 1997 | 10x % reflec. time | horiz: day | vert: time |

| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0	22	27	35	38	28	32	28	29	37	58	29	35	25	29	18
1	25	35	40	39	28	26	37	34	50	47	38	34	30	48	50
2	35	40	43	51	51	50	42	41	28	61	48	47	25	46	27
3	52	58	35	38	53	82	59	51	40	57	54	74	61	65	57
4	50	56	62	56	52	76	69	76	52	64	52	66	48	55	57
5	44	93	70	41	70	56	74	61	71	41	66	68	39	50	56
6	32	67	32	33	43	35	53	38	61	51	49	55	46	81	52
7	48	51	41	32	55	64	41	42	61	63	52	37	32	96	42
8	37	26	13	11	15	34	22	48	51	28	45	78	40	36	39
9	39	34	18	11	29	14	23	16	48	49	36	9	19	17	58
10	22	30	20	5	13	25	20	12	53	30	23	14	24	18	33
11	40	26	32	6	7	19	8	32	28	27	28	14	18	34	35
12	32	43	15	13	21	14	17	22	27	20	20	12	21	43	19
13	21	9	15	2	4	3	35	30	15	22	11	17	18	20	9
14	19	14	17	7	6	2	17	16	14	29	22	4	23	4	21
15	25	20	3	10	16	3	13	16	13	38	7	5	5	11	8
16	10	8	3	9	31	13	11	20	16	17	18	15	19	14	21
17	13	11	12	12	12	15	22	17	22	26	14	16	24	14	19
18	14	24	31	16	19	17	36	32	34	22	30	24	20	17	16
19	23	31	23	20	29	41	30	41	34	30	20	21	25	29	23
20	41	33	29	33	29	41	52	42	49	36	43	28	33	33	30
21	43	54	49	49	42	46	81	46	55	57	42	45	62	56	39
22	42	52	37	38	41	40	54	49	58	37	43	48	42	40	
23	27	33	30	27	31	39	35	40	40	36	38	33	37	28	25

```
---+-------------------------------------------------------
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

-----------------------------------------------------------
| Nov 1997 | 10x % reflec. time | horiz: day | vert: time |
-------------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
---+---------------------------------------------------------
0 | 29 89 38 46 30 30 36 25 29 37 18 26 33 26 37
1 | 32 63 59 39 37 28 54 26 42 32 24 28 32 34 34
2 | 32 56 79 48 64 34 26 31 30 31 24 29 62 29 48
3 | 52 219 113 67 60 32 49 56 67 43 36 40 47 48 36
4 | 68 236 105 76 53 49 74 79 79 45 40 44 84 54 56
5 | 88 318 98 72 59 68 59 62 41 61 29 36 53 48
6 | 123 367 154 77 39 53 52 73 45 43 53 40 75 48
7 | 154 368 104 71 62 89 58 71 49 26 26 34 46 45
8 | 77 329 61 42 31 39 45 88 52 18 20 22 51 42 39
9 | 57 191 33 35 55 26 32 43 35 26 31 34 25 38 55
10 | 39 242 28 22 50 38 26 33 17 28 31 34 32 40 43
11 | 34 135 7 24 17 23 28 29 27 24 27 13 25 24 29
12 | 28 58 4 9 26 16 22 33 21 18 8 18 20 23 26
13 | 17 90 3 16 21 8 15 45 8 14 9 11 29 28 15
14 | 17 5 13 16 7 16 13 24 15 10 6 7 10 51 21
15 | 15 7 6 12 10 20 12 21 10 6 4 7 17 41 25
16 | 17 19 20 14 15 12 14 13 12 20 15 11 6 12 9
17 | 16 10 9 20 26 12 10 24 10 13 11 14 13 40 14
18 | 17 19 12 19 20 20 12 36 7 18 8 24 11 24 22
19 | 20 27 23 26 32 21 29 65 15 20 17 22 26 34 25
20 | 37 33 39 35 34 37 29 34 29 30 28 39 41 24 34
21 | 32 27 65 36 42 47 33 38 33 28 36 43 53 42 40
22 | 52 36 46 34 43 55 35 43 34 34 35 52 45 56 47
23 | 49 31 27 47 37 30 28 41 27 30 32 43 38 32 39
---+---------------------------------------------------------
| 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
```

Notes:
. no alpha Monocerotids (Nov 22)
. good Leonid activity between Nov 16-18, comparable to last year
. local time = UT + 1 hour
. little interference during the month of November 1997

Pierre De Groote

Observer: Werfried Kuneth
Location: Ferndorf, Austria (13 37' E, 46 45' N)
Antenna: 3 element Yagi, direction south, elevation 65 deg
Receiver: IC-706 at 53.76060 MHz, CW-R mode, 500 Hz CW filter, fast AGC.
Transmitters: 1) 30 kW TV video carrier from Bari, Italy, distance 700 km,
direction south 2) a 30 kW TV video carrier from Sicilia,
Italy, distance 900 km, south. Both transmitters are processed

within the same 40 Hz virtual receiver channel.
Observing method: automatic setup using FFTDSP42t software by AF9Y to record the audio signal. 20 channels of 2 Hz width are used for meteor identification, pictures with interference, sporadic-E, E-layer and FAI propagation are manually rejected.

All meteor counts below are corrected for a full hour observing time. If the recording duration is 20-40 minutes, a dot is shown after the value. Data for less than 20 minutes observing time are not shown here.

Counts of reflections longer than 6.5 seconds: assumed to be overdense.

| Nov 1997
UT| 1 2 3 4 5 6 7 8 9 10 11 12 13 14
---+--
0| 4 2. 2 2 4 3 0 6 0 5 5 3 0 0
1| 2 2 3 2 2 3 1 10 3 3 1 1 1 2
2| 3 1 1 5 7 1 1 4 5 3 1 2 1
3| 2 2. 4 4 2 0 4 3 7 4 2 0 1 5
4| 1 1 3 2 4 1 3 4 2 2 6 0 2 7
5| 1 1 7 0 6 0 2 4 3 3 1 1 4 2
6| 5 4 7 4 10 0 2. 2 6 0 1 0. 7 15
7| 3 5 2 2 5 7 1 3 2 3 2 6 3 6
8| 8 6 3 5 5 2 3 1 4 2 3 2 2 7
9| 1 7 7 5 8 1 5 8. 3 5 1 2 3 2
10| 5 5 4 0 3 2 2 2. 0 1 4 1 7 4.
11| 2 0 0 2 2 2 3 1 2 0 0 1 1
12| 2 3 1 3 3 0 0 2 1 1 0 5 3.
13| 0 1 3 3 1 2 1 0 2 0 3 5 2
14| 0 0. 1 3 0 0 1 4 3 2 0 0 4
15| 0 0 1 0 0 1 2 1

2982. Radio Meteor Obs. Bull. Nov 1997: Leonids! 2/2

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: steyaert@vvs.innet.be
Message-ID: <steyaert.154.348B059D@vvs.innet.be>
Source record: 17454

```
Counts Counts Counts
> 13 seconds > 3.5 sec. > 0.5 sec
| Nov 1997 Nov 1997 Nov 1997
UT| 16 17 18 16 17 18 16 17 18
---+------------ ------------ ------------
0| 0 6 3 11 20 14 341 260 265
1| 1 7 4 15 37 24 356 317 261
2| 2 8 6 21 27 25 366 349 284
3| 4 10 5 16 36 31 361 379 368
4| 3 10 8 15 45 35 359 395 324
5| 4 22 9 16 51 28 283 295 244
6| 5 27 13 23 50 39 314 311 274
7| 1 24 9 9 57 24 259 248 249
8| 2 20. 4 18 70. 11 243 368.218
9| 3 2 17 13 214 202
10| 1 1 14 13 226 190
11| 0. 0 7. 8 202. 133
12| 2. 0 10. 6 176. 170
13| 2 3 1 6 13 6 147 165 119
14| 0 0 0 4 3 7 103 141 93
15| 0 0. 0 4 5. 8 90 131.111
16| 0. 0. 0. 3. 142. 90
17|
18| 0. 8. 146.
19| 0 0. 5 8. 193 190
20| 0 0 0 6 7 7 197 214 195
21| 2 0 0 9 4 9 229 202 216
22| 0 0 2 11 6 8 232 226 177
23| 1 2 2 11 7 9 232 227 187
---+------------ ------------ ------------
UT| 16 17 18 16 17 18 16 17 18
```

Notes:
. blank value means either few or no data available, interference,
sporadic-E or FAI propagation, or offline.
. local time conversion: 1 hour ahead of UT (05h00 UTC is 06h00 local)

. Joint report of FFTDSP observers for the Leonids 1997:

A: Austria: Werfried Kuneth, 53.7600 MHz, transmitter in south direction.
B: Italy: Giorgio Bressan (AFAM, 48.24049 MHz, transmitter in NW direction
C: California: Norman Davis, 67.2499 MHz, transmitter direction east?

The data was processed by Werfried Kuneth. I received the recordings from
three different locations, all with a similar setup for a TV video carrier.

All observers used FFTDSP42 (by AF9Y) for recordings during the Leonids
peak on November 17, 1997.
All of these recordings have been inspected using the same manual procedure
to skip images with interference and non-meteor propagation modes, and the
same software to count the individual reflections.

Observatory C: used a different integration level (5), which gave a low number
of underdense reflections. Due to this integration level I found only one
duration level that matches all observatories (making them somewhat
comparable): A: and B: counts are of reflections longer than 13 seconds, and
C: counts longer than 16 seconds. Fortunately, this count displays the
Leonid peak very well:

```
Station A Station B Station C
Austria Italy N.California
>13 seconds >13 seconds >16 seconds
| Nov 1997 Nov 1997 Nov 1997
UT| 16 17 18 16 17 18 17 18
---+------------- ------------ ---------
0| 0 6 3 2 1
1| 1 7 4 4 2
2| 2 8 6 7 2
3| 4 10 5 4 1
4| 3 10 8 6 3 0.
5| 4 22 9 11 5 0 0
6| 5 27 13 8 6 1 0
7|. 1 24 9 23 6 3 0
8| 2 20. 4 13 5 7 0
9| 3 2 13 13 4
10|. 1 1 10 13 0
11| 0. 0 3 16 2
12| 2. 0 1 28 2
13| 2 3 1 0 25 2
14|. 0 0 0 0. 30 4
15| 0 0. 0 0. 25 1
16| 0. 0. 1 21 1
17| 0 2
18| 0. 0
19| 0 0. 0
20| 0 0 0 0 0
21| 2 0 0 0 0 0
22| 0 0 2 0 1 0
23| 1 2 2 1 4 0
---+------------- ------------ ---------
UT| 16 17 18 16 17 18 17 18
| Nov 1997
```

There was no distinct peak visible, just the fireballs each hour.
Observatory C saw more, while there was a little bit more time between
meteors in Europe. Based upon these observations, the Leonids appeared as a
shower of very strong, long-duration meteor events, lasting for 14 (or more?)

hours, a population which is quite different to other meteor showers.

It is interesting that during the last 3 years it was shown that visual observers do not see this number of fireballs (over horizon?).
In contrast to the very bright "fireball" end of the spectrum, the Leonids seemed to show only little enhanced rates of "usual" meteors (positive magnitudes) and faint meteors (> mag 6) in the years 1995, 1996 and 1997. Detection of the Leonids was best with the radiant at more than 20 degrees elevation. No indication of reduced numbers of events occurred with the radiant overhead.

Special thanks to all who helped in this observation campaign.

Werfried Kuneth

Observer : Kimio Maegawa JA9BOH
Transmitter : HAM beacon (JA6YBR) (50 W Morse coded , 50.017 MHz) by Miyazaki-University Ham Club.
Antenna: 1 lambda crossed loop, Az Omni 20 m H
Location: Miyazaki city (131.43 E, 31.82 N) NE-SW path 650 km
Receiver : IC706mk2 with high stability quartz option.
Sensitivity: -150 dBm or lower, detect 3 dB galaxy noise variation
Antenna: 4 element Yagi (10 dBi) 2 m above the ground, 0 deg elev.
Location: Sugiyama Meteor Observatory, Japan (136.1E, 35.9N) 320 m ASL
Observing method:Automatic Duty Cycle measurement every minutes by Audimate software by Mr. Mallama of AMS above -125 dBm threshold.
[see RMOB9707 for an announcement about this software]

Time | Duty cycle(%) one hour average
JST UT | Nov 17 Nov 18 Nov 19
--------+--------------------------------
00 15 | 0.3 0.5 0.2
01 16 | 0.7 2.4 0.8
02 17 | 0.9 3.4 0.5
03 18 | 1.8 3.5 0.7
04 19 | 1.6 5.0 1.2
05 20 | 1.0 4.7 1.3
06 21 | 2.5 6.8 0.7
07 22 | 1.7 4.7 1.1
08 23 | 2.0 2.6 0.8
09 00 | 3.3 4.6 1.8
10 01 | 1.7 10.5 27.2
11 02 | 1.1 1.8 8.5
12 03 | 1.3 n/a 0.6
13 04 | 0.5 0.3 0.1
14 05 | 0.2 0.2 0.1
15 06 | 0.2 0.2 0.4
16 07 | 0.2 0.1 0.1
17 08 | 0.1 0.2 0.2
18 09 | 0.1 0.2 0.2
19 10 | 0.2 0.2 0.2

```
20 11 | 0.3 0.2 0.5
21 12 | 0.2 0.5 0.3
22 13 | 0.3 0.4 0.4
23 14 | 0.6 0.3 0.6
--------+--------------------------------
JST UT | Nov 17 Nov 18 Nov 19
```

Notes:
. local time = JST = UT + 9 hours
. Leonids Peak seemed to occur at around 6h JST or 10h JST on Nov 18.
(21h UT on Nov 17, 01h UT on Nov 18) from my observation.
. long echoes were detected from Nov 16 to 19 between 6h JST and 12h JST.
. More information on HRO (Ham band Radio meteor Observation) is available at
http://www.tcp-ip.or.jp/~kaze/rmd.htm
http://www.fukui-nct/~kmaegawa
. Duty Cycle Graph can be found at
http://www.fukui-nct.ac.jp/~kmaegawa/hro/hro.html

Kimio Maegawa

Observer: John Meyer
Location: Van Andel Creation Research Center, Chino Valley, AZ, USA
(112 29' 50" W, 34 50' 50" N). Elevation 1347 m above sea level.
Frequencies: 88.5, 91.1 and 91.3 MHz for signal FM receivers;
87.9 MHz (currently an unused FM frequency) for noise FM receiver.
Transmitter locations: many possibilities including San Francisco (CA),
El Paso (TX), Carson City (NV) and Tijuana (Mexico).
Antenna: 6-element FM Yagi pointed East at 40 deg elevation.
Driven element 1.2 m above a 3.5 m square wire mash ground plane.
Antenna Amplifier: 10 dB, coax cable: 150 m of RG-8.
Receiver inputs: 10 dB pre-amplifier driving a 4-way splitter with outputs to
each receiver.
Receivers: Four OPTIMUS STA-800 FM receivers modified to 10 kHz band
width using IF amplifiers with 80 dB dynamic range signal
strength output voltages.
Data Acquisition: DATAQ type DI-190 2-channel module connected to computer
serial input port. 40 samples per second each channel.
Channel 1 is combined peak signal amplitudes from the three
signal receivers. Channel 2 is signal strength from noise
receiver. Data stored only when signal strength at antenna
exceeds -121 dBm. Storage continues for one second after signal
drops below -121 dBm. Interference rejection: data storage
inhibited if interference at noise receiver's frequency exceeds
-122 dBm at antenna. Inhibiting continues for three seconds after
noise level drops back below -122 dBm.
Data Reduction: currently semi-manual, plan to increase automation soon.
Data Format: Results are shown as total reflection time each hour,
expressed as a percentage. The actual number shows 10 times
this value. When no figure is shown, the equipment was either out
of service, or results could have contaminated by sporadic-E or

interference.
Further technical information: contact Jack Meyer (e-mail below)

```
-------------------------------------------------------------
| Nov 1997 | 10x reflect. time | horiz: day | vert: time |
-------------------------------------------------------------------------
MST| UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
---+----+--------------------------------------------------------------
0 | 7 | 83 31 29 10 23
1 | 8 | 102 32 25 38 29
2 | 9 | 254 58 29 26 46
3 | 10 | 459 43 54 47 37
4 | 11 | 322 61 43 54 54
5 | 12 | 404 101 55 50 72
6 | 13 | 520 55 75 53 66
7 | 14 | 581 100 98 64 83
8 | 15 | 616 120 122 79 53
9 | 16 | 458 94 70 54 58
10 | 17 | 295 69 75 43
11 | 18 | 166 94 167* 51
12 | 19 | 67 74 598* 48
13 | 20 | 44 35 270* 50
14 | 21 | 52 43 63 21
15 | 22 | 40 44 77 46
16 | 23 | 13 35 17 13
17 | 0 | 15 25 30 22 36
18 | 1 | 27 18 22 23 32
19 | 2 | 29 58 39 45 34
20 | 3 | 30 29 41 22 39
21 | 4 | 23 34 35 43 22
22 | 5 | 10 16 26 15 23
23 | 6 | 21 17 40 25 36
---+----+--------------------------------------------------------------
MST| UT | 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
```

Notes:
. system went into operation in current form at 1700 MST November 16.
. * increase in count Nov 19 at 1800 to 2000 UT may be sporadic-E.

John Meyer

Observer: Sadao Okamoto
Location: Damine Meteor Observatory, Japan (137.53 E, 35.07 N)
Transmitter: HAM beacon (JA9YDB) for RMO (50 W CW, 53.7500 MHz) by
JA9BOH Kimio Maegawa. No modulation except for identification.
Antenna: 2 element Cross Yagi 4 dBi aiming to Zenith. Omnidirectional
in azimuth and elevation above 15 deg elevation.
Location: Fukui-NCT at Sabae city (136.2 E, 35.9 N)
At present time about 10 observer are listing for
Kimio Maegawa's 53.75 MHz beacon.

Receiver: IC575 (CW mode 500 Hz IF filter)
Antenna: 2 element Yagi, pointed to the zenith
Observing method: FFTDSP software,automatic data saving and manual count.

Notes:
-: lost counts because of high noise level or machine failure.
@: Hourly rate estimated by effective observation time less than 60 min.
n: Contamination due to interference.
e: Contamination due to sporadic E opening.
f: No data available due to TX failure or maintenance
JST = UT + 9 h

Hourly echoes over 10 dB SNR (about -135 dBm)

1997

Nov	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	JST
Nov	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	UT
01	37	29	48	35	32	44	37	28	27	n	n	n	n	n	n	n	n	7	f	f	f	f	f	f	
02	31	51	54	59	47	58	49	32	26	25	29	21	15	21	11	9	10	13	14	17	27	35	34@35		
03	30	33	40	55	52	42	52	35	43	29	27	19	16	13	17	9	15	13	9	12	21	28	40@35		
04	36	45	56	54	54	38	43	41	32	28	20	13	13	5	5	11	14	13	8	9	25	30	36@35		
05	39	40	61	56	49	44	51	34	37	28	11	15	n	n	12	8	15	10	13	13	26	33	39@28		
06	32	39	52	58	52	48	57	49@34	n@18	28	23	11@10	9	10	12	10	18	24	37	42@28					
07	30	37	52	54	45	46	48	39	26	37	21	23	21	17	14	16	12	11	13	20	19	38	43	n	
08	42	34	60	49	60	44	45	36	52	45	26	n	18	22@21@17	18	8	15	18	24	44	32@40				
09	47	34	66	48	49	52	38	38	42	25	18@20@12	6	--	10	16	8	15	24	29	41	37	--			
10	38	42	50	39	55	45	59	49	36	37	25	19	20	20	18	15	14	14	10	14	16	32	41@31		
11	38	34	47	41	55	48	43	49	32	33	29	n	17	n	8	7	7	14	14	22@29	34	30@43			
12	37	47	53	50	56	61	59	49	39	26	19	28	21	15	12	13	20	12	11	14	24	35	36@30		
13	30	39	45	37	39	42	39	41	32	31	26	23	23	18	14	11	11	13	9	13	19	31	28@25		
14	22	25	40	38	45	49	43	32	40	32	32	24	22	13	20	12	16	13	12	13	17	30	30@31		
15	26	22	39	36	51	54	47	27	34	34	28	24	20	30	16	15	10	17	18	11	21	29	30@26		
16	26	37	48	36	45	49	35@36	37	33	25	25	18	11	22	12	16	15	15	15	18	26	27			
17	29	37	33	33	36	34	34	28	22	27	28	23	14	9	14	12	8	15	6	12	22	25	24@20		
18	27	n	n	n@54	44	46	41	38	32	29	23	11	21	11	10	12	11	9	10	--	38	32@43			
19	n	n	n	n	n	n	44	39	46	21	n@22	17	11	7	9	12	13	13	12	25	28	35@21			
20	28	29	51	43	44	39	42	32	48	34	19	27	19	19	14	12	13	9	16	12	13	25	29@25		
21	23	28	34	54	52	24	36	39	44	35	22	32	24	16	12	17	9	10	8	10	16	28	36@31		
22	29	35	47	47	41	56	35	33	31	43	36	26	20	--	12	16	10	15	16	23	35	30	47	--	
23	23	39	48	49	67	53	44	48@37@38	n	n	n	n	n	n	n	11	17	n	23	n	n	n			
24	n@48	47	71	49	48	53	50	33	20	27	20@16	n	15	9	8	11	11	15	22	29	32	--			
25	40	47	55	65	57	58	50	48	45	27	24	40	22	21	15	18	19	16	18	17	16	28	40@40		
26	46	45	59	53	48	59	46	40	38	32	41	22	31	32	22	19	14	13	14	9	15	25	40@38		
27	37	35	40	66	61	68	64	55	43	30	28	28	23	21	13	9	13	11	20	18	26	38	47@37		
28	46	47	46	53	67	64	60	39	30	27	29	34	24	27	15	18	13	14	9	14	26	31	43@30		
29	26	55	53	65	60	60	65	47	40	33	39	30	26	32	23	24	13	9	@7	13	26	28	36@34		
30	38	32	43	71	61	50	58	40	36	41	21	32	17	24	22	20	13	8	7	14	27	36	40@49		
Nov	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	UT
Nov	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	JST

1997

Echoes with duration > 5 s

1997
Nov|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
Nov|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 UT
---+---
01 | 1 2 1 3 1 3 1 3 1 1
02 | 3 4 1 2 1 3 2 2 1 1 3 2
03 | 2 1 4 3 1 1 2 4 1 1 2 3 1 1 1
04 | 2 2 1 2 1 2 3 1 2 1 2 2 5
05 | 1 3 2 3 3 5 1 2 1 2 2 1 1 1
06 | 3 1 4 1 1 2 2 1 1 1 1 1
07 | 5 1 1 1 2 1 1 3 1 1 1 1 2
08 | 1 2 1 1 1 6 1 2 2 2 2 2 1 2 2 1 1
09 | 1 2 5 3 4 1 1 1 3
10 | 2 1 2 5 1 2 6 3 1 2 2 2 1 1 1
11 | 2 2 3 1 2 3 3 4 1 2 1 1 1 1 1 1
12 | 1 1 2 5 10 2 1 4 1 1 1 1 1 1 2
13 | 1 2 1 4 3 2 2 1 1 1 1 1
14 | 2 3 1 1 3 1 4 1 1 1 2
15 | 3 2 3 2 2 3 1 2 1 1 2
16 | 2 3 3 2 1 1 2 2 3 1 2 1 2
17 | 1 1 2 3 3 4 4 2 1 7 1 2 1
18 | 2 4 5 9 9 16 17 11 8 6 3 1 3 3 4 4
19 | 3 1 3 1 2 1
20 | 1 1 1 4 4 1 3 1 2 1 1 1 1
21 | 3 3 3 1 3 4 2 2 3 2 2 2
22 | 1 1 1 1 1 1 1 1 1 1
23 | 2 1 4 2 3 1
24 | 2 1 1 1 1 1 1 3 4 1
25 | 2 1 8 1 1 3 2 3 2 1 1
26 | 1 1 2 1 4 3 1 2 2 2 2 1 1 1 1
27 | 3 3 2 3 2 4 5 1 2 1 2 1 1 1
28 | 3 2 2 3 1 2 1 1 3
29 | 1 2 5 7 4 2 2 1 2 1
30 | 1 2 4 6 2 1 1 1 2
---+---
Nov|15 16 17 18 19 20 21 22 23 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14UT
Nov|00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 JST
1997

Daily rate of long echoes (T > 20 s)

Nov 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Rate 2 1 2 4 4 1 0 3 0 2 1 2 0 4 5

Nov 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Rate 6 13 41 2 3 7 1 0 3 2 3 0 2 3 0

Sadao Okamoto / via Kimio Maegawa

Observer: Chikara Shimoda
Location: Asahi, Nagano, Japan (137 51' E, 36 07' N)
Frequency: 81.4 MHz
Transmitter Location: FM-Japan 81.3 MHz, 10 kW, distance 180 km
Antenna: 5 element Yagi directed to the zenith.
Receiver: AM-FM Tuner (TRIO KT-1100)
Observing method: Meteor echoes output from center-tuning meter were
recorded on a pen-recorder chart.

Nov	UT												
1997	11	12	13	14	15	16	17	18	19	20	21	22	*(1) **(2)
1	13	20	26	21	26	20	23	23	23	21	35	22	21.0 24.5
2	16	22	18	23	21	18	25	34	21	31	31	25	19.7 27.8
3	17	19	23	19	23	15	30	30	27	25	24	27	19.3 27.2
4	10	22	20	16	18	21	31	26	34	28	27	32	17.8 29.7
5	16	26	29	16	16	19	30	27	24	28	29	24	20.3 27.0
6	22	29	25	18	18	24	38	24	27	37	30	21	22.7 29.5
7	11	21	20	17	23	22	27	21	22	22	20	21	19.0 22.2
8	23	16	25	21	24	30	22	26	34	33	25	19	23.2 26.5
9	13	16	17	15	22	24	24	27	23	30	31	23	17.8 26.3
10	17	15	23	19	23	19	22	27	22	22	28	26	19.3 24.5
11	22	22	17	25	29	27	26	19	28				20.3 25.7
12	15	17	23	19	11	15	24	26	27	30	28	35	16.7 28.3
13	15	14	22	20	23	20	19	28	30	30	27	22	19.0 26.0
14	21	20	26	22	19	16	19	27	31	34	23	31	20.7 27.5
15	18	30	15	21	22	33	33	28	34	32	37	28	23.2 32.0
16	25	27	22	24	34	31	39	28	35	35	31	35	27.2 33.8
17	16	15	21	15	18	27	32	46	42	33	25	33	18.7 35.2
18	23	26	27	24	20	24	31	29	24	35	34	32	24.0 30.8
19	20	18	24	24	16	22	28	23	30	22	23	16	20.7 23.7
20	18	22	20	16	24	16	22	22	23	26	30	21	19.3 24.0
21	17	21	21	18	15	24	24	23	27	37	29	25	19.3 27.5
22													
23	14	24	36	33	21	29	27						14.0 28.3
24	11	19	25	18	15	22	32	42	23	32	27	25	18.3 30.2
25	16	23	23	26	17	14	33	25	29	34	31	23	19.8 29.2
26	8	22	24	25	24	25	34	31	38	22	30	26	21.3 30.2
27	11	17	21	15	20	18	19	25	25	31	25	20	17.0 24.2
28	17	13	28	23	14	22	17	32	35	32	28	22	19.5 27.7
29	10	17	20	31	30	23	21	26	28	23	18	27	21.8 23.8
30	11	17	16	27	24	19	18	19	31	27	30	26	19.0 25.2
1997	11	12	13	14	15	16	17	18	19	20	21	22	*(1) **(2)
Nov	UT												

* (1) average hourly rate between 11h -17h UT
**(2) average hourly rate between 17h -23h UT

. local time = JST = UT + 9 hours

Chikara Shimoda

Observer: Ilkka Yrjola
Location: Finland (26 35' E, 60 54' N)
Frequency: 87.360 MHz
Receiver: Salora SRP-22 modified, narrow band FM (B=15 kHz).
detected signal level >-122 dBm.
FM detection, no pulse noise rejection required.
Antenna: 2 element Yagi with 4 dBd gain to SW, azimuth 45 deg (SW)
Data sampling system: threshold triggering, sampling rate 64 ms.
Computer logs total hourly elapsed reflection time, number of
threshold crossings for the hour, the longest time the signal was
continuously above detection level for the hour.
Data stored in the Compact MS-Soft format. Software for viewing available
from FTP.FUNET.FI pub/ham/vhf-work/mssoft43.zip (420 K, new version!)
I have completed the facelift upgrade with the Compact MS-Soft and you may
now download the V5.0 software package from my homepage www.sci.fi/~oh5iy

Meteor counts in one hour intervals starting at:

Leonids 1997

UT	16 Nov	17 Nov	18 Nov	19 Nov
0	231	288	418	344
1	237	468	394	379
2	289	524	418	387
3	304	556	550	407
4	310	817	371	442
5	275	744	406	341
6	280	970	464	411
7	444	692	317	316
8	236	1241	376	271
9	216	825	263	240
10	278	724	356	253
11	333	392	232	222
12	193	182	218	224
13	168	186	187	229
14	142	188	178	209
15	125	123	215	205
16	191	154	192	225
17	138	174	218	200
18	203	224	202	241
19	219	221	222	287
20	209	244	321	312
21	223	286	322	357
22	321	308	356	350
23	332	271	351	264
UT	16 Nov	17 Nov	18 Nov	19 Nov

Ilkka Yrjola

Observer : W.T. Zanstra
Location : Appingedam, Netherlands (6 50' E, 53 19' N)
Frequency: 72.11 MHz
Transmitter Location:
Wroclaw (16 43' E, 50 52' N), Poland, 135 kW, distance 735 km
Antenna : Yagi, 5 elements, geographical azimuth 110 deg (ESE),
elevation 12 deg
Receiver : Bearcat UBC 177XLT Scanning Radio, sensitivity 0.3 uV
Observing method: listening

Forward scatter observations of Leonids and sporadic meteors in
November 1997.

Raw counts of reflections (corrected for dead time) during one
hour intervals starting at:

| November 1997 | mean sporadic background
UT | 15 16 17 18 | during 1995 and 1996
----+---
00 | 65 57 | 81
01 | 59 | 86
02 | 75 | 90
03 | 61 | 92
04 | 74 | 93
05 | 88 | 92
06 | 89 | 88
07 | 78 | 85
08 | 52 61 72 53 | 80
09 | 43 56 47 59 | 73
10 | 40 37 51 43 | 67
11 | 45 | 60
12 | 42 | 52
13 | 31 | 46
| |
20 | 58 | 55
| |
22 | 55 68 | 68
23 | 68 62 | 75
----+---

Note:
. during the Leonids the sporadic rate is higher than the rate of the Leonids,
including the sporadics. This is caused by the loss of the weaker signals
during the Leonids.

Wim Zanstra / via Ton Schoenmaker

2. ABOUT THE RMOB

The RMOB is an independent initiative of some workers in the field of radio
meteor scatter observations and data reduction. It started in August 1993 in

order to spread rapidly the Perseid results via E-mail. Since then, it has appeared monthly, and it has gradually been expanded. In regularly publishing summaries of observations, potential radio observers are kept up to date of existing installations, possibilities and limitations of radio meteor observations. In the long run, there should be sufficient observing stations to cover the whole globe, allowing to detect stream outbursts which may remain unnoticed visually.

RMOB contains typically: summaries of recent observations, equipment data, first results of stream activity by radio methods, relations between radio and optical meteors, references to other publications in the field of meteor astronomy and radio scatter techniques, announcements of meetings, short questions and answers, non-commercial (second hand) sale of radio equipment, available software.

Contributors are mentioned, and interested persons are asked to contact them directly.

RMOB can be copied freely in unabridged and unmodified form. Extracts should indicate the source (Radio Meteor Obs Bulletin, month and year).

If you want to subscribe (or un-subscribe) to the E-mail distribution list, please send a message to C. Steyaert.
Those not having access to E-mail can obtain a printed copy free of charge from J. Van Wassenhove (current or back-issues).

3. CONTRIBUTORS / USEFUL ADDRESSES

Enric Fraile Algeciras (EA3BTZ)
Frederic Corominas 58, Torrelles de llobregat, E-08629 Barcelona
E-mail: EA3BTZ@mx3.redestb.es
http://www.redestb.es/personal/ea3btz (in Spanish)

Michael Boschat
6306 Cork St., Apt.512, Halifax, Nova Scotia, Canada
E-mail: andromed@atm.dal.ca

Eisse Pieter Bus
Groningen, Netherlands
E-mail: epbus@worldaccess.nl

Norman Davis WB6SHI
Shingle Springs, Ca, USA
E-mail: normd@directcon.net

Maurice De Meyere
Hullekensstraat 24, B-9831 Deurle, Belgium
tel: +32 (9) 282 35 26
Call: ON4NU, packet: on4nu@on1ced
E-mail: via Chris Steyaert

University of Ghent, Astronomical Observatory
Krijgslaan 281(S9), B-9000 Gent, Belgium
E-mail contact: Paul.Vauterin@oma.be, Pierre.DeGroote@rug.ac.be

Werfried Kuneth
Ferndorf, Austria
Call: OE8FNK
E-mail: kuneth@net4you.co.at

Kimio Maegawa
Fukui National College of Technology, Electro-Information Course
Geshi, Sabae Fukui 916 JAPAN
Call:JA9BOH,JA9YDB
E-mail: kmaegawa@fukui-nct.ac.jp and/or HAG00032@niftyserve.or.jp
http://www.fukui-nct.ac.jp/~kmaegawa/hro

Alastair McBeath
IMO: International Meteor Organization
12A Prior's Walk, Morpeth, Northumberland, NE61 2RF, England, U.K.
E-mail: via Chris Steyaert

John Meyer
AZ, USA
E-mail: jrmeyer@POP.erols.com

Sadao Okamoto
E-mail: okamoto@jim.sugiyama-u.ac.jp

Chikara Shimoda
178, Hario, Asahi-mura, Higashitikuma-gun Nagano, Japan
Fax: +81-263-99-3532
E-mail: c-shimo@mtd.biglobe.ne.jp

Giovanni Sostero
Associazione Friulana di Astronomia e Meteorologia (AFAM)
E-mail: Giovanni.Sostero@elettra.trieste.it

Chris Steyaert, VVS
Kruisven 66, B-2400 Mol, Belgium
tel: +32 (14) 31 51 04
E-mail: steyaert@vvs.innet.be
Compuserve: 72650,3513

Jeroen Van Wassenhove, VVS
's Gravenstraat 66, B-9810 Nazareth, Belgium
tel: +32 (9) 385 61 09
E-mail: 100101.734@compuserve.com

Ilkka Yrjola
Jukolantie 16, FIN-45740 Kuusankoski, Finland
E-mail: upm20.ky.yrjolil@elvi.vtkk.fi
http://www.sci.fi/~oh5iy/
Call: OH5IY, packet radio: OH5IY@OH5RBG.#KVL.FIN.EU

W.T. Zanstra
Spijkerlaan 13, 9903 BB Appingedam, Netherlands
tel: +31 (0)596 625617
Email: via tonsch@nfra.nl

--
Christian Steyaert (RMOB9711) 7 December 1997
--

2983. ANS-341 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <66f9vh$7if$1@news3.mr.net>
Source record: 17455

BJ Arts, WT0N Amsat News Service editor
Daniel (Dan) James, NN0DJ,
Amsat News Service Assistant Bulletin editor

SB SAT @ AMSAT $ANS-341.01
ISS CREWS NAMED

HR AMSAT NEWS SERVICE BULLETIN 341.01 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.01

NASA recently named the first team members to live and work aboard the International Space Station, and four crew members already hold ham tickets. In addition, several of the crew members are studying for their licenses.

The first crew will consist of American astronaut William M. Shepherd, as the expedition commander. Shepherd is currently studying for his ticket. He'll be accompanied by Russian cosmonauts Yuri Gidzenko and Sergei Krikalev, U5MIR. The crew is training for an early 1999 launch and a planned five-month mission on the ISS.

The second crew, headed by Russian cosmonaut Yuri Usachev, R3MIR, will include US astronauts Susan Helms, KC7NHZ, and James S. Voss, who's indicated an interest in getting his ham ticket.

No licensed hams are among the third crew, which will be headed by astronaut Kenneth Bowersox and will include Russian crewmates Vladimir Dezhurov and Mikahil Turin. Bowersox also has said he'd like to get his ham license.

Russian cosmonaut Yuri Onufrienko will head the fourth crew. US astronauts Carl Walz, KC5TIE, and Daniel Bursch will accompany him.

AMSAT-NA's VP of Manned Space, Frank Bauer, KA3HDO, reports that the international team developing the ISS ham radio station is now working hard to incorporate a transportable ham station for ISS, and deliver this equipment to the Johnson Space Center in Houston, Texas for flight certification in June, 1998. Initially, ISS crews will inhabit the service module, which will include a ham radio antenna, with ham gear scheduled to be delivered aboard the STS-96 shuttle flight. Microsat/repeater payloads are tentatively scheduled to arrive in early 2002, expanding ham radio capability aboard the station.

Stay tuned to ANS for more information on ham radio's planned presence on ISS as it develops.

[ANS thanks the ARRL, NASA and Frank Bauer, KA3HDO, for
this information]

/EX

SB SAT @ AMSAT $ANS-341.02
PHASE 3D UPDATE

HR AMSAT NEWS SERVICE BULLETIN 341.02 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.02

Phase 3D Project Leader Karl Meinzer, DJ4ZC, recently visited the Phase 3D Integration Lab in Orlando for a top-to-bottom review of Phase 3D's status. The Phase 3D satellite was to have been aboard the Ariane 502 flight October 30, but ESA's revision of launch environments, and the consequent structural modifications to the satellite's spaceframe made it impossible for Phase 3D to meet the 502 flight schedule.

According to AMSAT-NA President Bill Tynan, W3XO, the structural work is now essentially complete and the crew at the Orlando Lab are beginning to re-install electronic modules and other equipment which had to be removed so that the structural work could proceed. Following this tests will be conducted to confirm satisfactory interoperability of all of the Satellite's various sub-systems and then environmental testing will take place.

Tynan further stated that he doesn't expect any new information concerning a launch date and vehicle for Phase 3D until well after European space authorities determine the root cause of the early engine shutdown that took place on the recent Ariane 502 flight.

Keith Baker, KB1SF, AMSAT-NA's Executive Vice President noted that according to the original schedule, the next Ariane 5 vehicle (503) is due to lift off in May, 1998, for the final qualification flight of the Ariane 5 program. The first Ariane 5 commercial launch (L504) is currently planned for the second half of 1998.

[ANS thanks Karl Meinzer, DJ4ZC, Keith Baker, KB1SF, and Bill Tynan, W3XO,
for this information]

/EX

SB SAT @ AMSAT $ANS-341.03
DOVE QSL UPDATE

HR AMSAT NEWS SERVICE BULLETIN 341.03 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.03

Jim White, WD0E, reports strong requests for Dove (DO-17) QSL cards.
To receive a DOVE QSL, receiving stations need to send a request

indicating the date, time and frequency the satellite was received. Jim reports that it is not necessary to send a breakdown of the satellite telemetry or a printout of received data. Include a self addressed stamped envelope (SASE) or an addressed envelope with an International Reply Coupon (IRC) with your request. Reception reports should be sent to;

Dianne White N0IZO
45777 Rampart Road
Parker, Colorado 80138-4316
USA

Jim also notes that for those stations that would like to decode the DO-17 data, several programs are available to decode the telemetry from DOVE. Some shareware decoders can be found on Compuserve and America On Line. Also the decoder TLMDCII, which includes an extensive .DOC file of information about Microsat telemetry (including DOVE), is available from AMSAT-NA.

[ANS thanks Jim White, WD0E, for this update]

/EX

SB SAT @ AMSAT $ANS-341.04
KB5YSQ TO COMMAND SHUTTLE

HR AMSAT NEWS SERVICE BULLETIN 341.04 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.04

NASA has announced that astronaut Charles Precourt will command the final space shuttle/MIR docking mission scheduled for May of 1998. Precourt holds the amateur call KB5YSQ.

The May mission, designated as STS-91, will be aboard the shuttle Discovery. Precourt has visited the Russian space station twice before. NASA also announced that the flight crew will include Wendy Lawrence, KC5KII.

The May mission will retrieve US astronaut Andy Thomas, KD5CHF, from the MIR station. Thomas is scheduled to travel to MIR in January.

[ANS thanks NASA and the ARRL for this information]

/EX

SB SAT @ AMSAT $ANS-341.05
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 341.05 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.05

MIR
Dave Wolf has stated that powering up the radio is "On his
List" and it is hoped that Mir will be back on the air soon.

As part of ongoing frequency experiments to improve Amateur Radio operations on board MIR, and to better understand how these frequencies will be effective on the International Space Station, MIR will begin a 2-phase frequency experiment beginning December 1, 1997 and ending on May 31, 1997.

For phase 1, a 70cm/2m crosslink experiment will operate for a 3 month period from December 1, 1997 up to March 1, 1998.

On December 1, 1997 the MIR operating frequencies will change to:

Uplink: 437.850 MHz Downlink: 145.800 MHz

Phase 2 of this experiment will use a 2 meter-only set of uplink and downlink frequencies. This phase of the experiment will begin on March 1, 1998 and will also be of 3 months duration.
[ANS thanks the MIREX team for this information]

SAFEX, MIR 70cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
The SAFEX activity very intermittent.
[ANS thanks the MIREX team for this information]

RS-10
(Uplink 145.865-145.905 MHz CW/SSB, Downlink 29.36-29.4 MHz CW/SSB)
Not operational at this time.

RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz)
Operational, now in mode A.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.

RS-16
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 and 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

RS-17
Operational. 145.820 MHz
Sputnik RS-17 is still going strong. Its 250 mw beacon has been head around the world. Sputnik has a tentative life expectancy of 3-6 weeks on batteries. There are no solar panels on Sputnik. Since it was launched on

November 3, 1997, it is expected to last until the December time frame
(your actual mileage will vary). Attitude
Sputnik is now flying ahead and BELOW the Mir Space Station.

QSL Information is as follows:

Sergej Samburov (or) FR5KJ Radio Club
PO Box 73 College Jules Reydellet
Kaliningrad - 10 City 103 Rue de la Republique
Moscow Area 10470 97 489 Saint Denis Cedex
Russia Reunion Island , France
[ANS thanks the MIREX team for this information]

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational. Stacey Mills, W4SM, would appreciate any perigee
observations of AO-10's beacon or transponder during the next several
weeks until conditions begin to improve. If his orientation figures are
correct, AO-10 should be down to a solar angle of -84 degs with only 11%
illumination. Send reports to w4sm@amsat.org
[ANS thanks Stacey Mills, W4SM, for this report]

AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational with lots of activity including QRP stations heard over
North America. The control ops have programmed AO-27 to start earlier in
its pass.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational. FO-29 was in JA mode on December 5th, 1997.
5 Dec. JA
12 Dec. 08:11z JD 9600
19 Dec. 08:49z Digi-talker
26 Dec. 07:42z JA
9 Jan. 07:14z JD 1200
16 Jan. 07:52z JD 9600
23 Jan. 08:30z JA
30 Jan. 07:24z JD 1200

[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX

SB SAT @ AMSAT $ANS-341.06
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 341.06 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 07, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-341.06

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK)
KO-23 downlink efficiency is near zero percent.

Stacey Mills, W4SM, has estimated the keps show that KO-23 will not experience an eclipses again until December 12th. During the orbits of that day, eclipses rapidly increase in duration from 2 to 11 minutes. Eclipse length will then continue to increase, peaking at 35 minutes per orbit in the December 28th thru January 4th time period. Eclipse length will then begin slowly decreasing again. KO-23's download efficiency has dropped dramatically due to the increasing heat and its affects on the signal deviation.
[ANS thanks Stacey Mills, W4SM, and Jim Weisenberger, AA7KC,
for this report]
KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally. During the period of October 14th through November 16th this satellite has continued to provide good signals on its 145.826 MHz beacon.

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and delivering half power. This beacon is a useful test source for those testing mode-S converters, prior to the launch of P3-D. It is considerably weaker than DOVE, which should be used for initial testing. Any reports of

reception on 2401.00 MHz would be most welcome. Please e-mail reception reports to g3cwv@amsat.org.

The 435.025 MHz beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, (i.e. within range of Guildford, UK). When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit the G3CWV web site. It contains some software for capturing data, and decoding ASCII telemetry and the WOD survey. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded, as new data is captured.
The URL is - http://www.users.zetnet.co.uk/clivew/
[ANS thanks Clive Wallis, G3CWV, for this information]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
Uptime is 1175/05:55:02. Time is Sat Dec 06 11:22:49 1997
Bat 1 Temp 9.680 D
Bat 2 Temp 4.839 D Baseplt Temp 5.444 D
RC PSK BP Temp 1.209 D RC PSK HPA Tmp 1.814 D
+Y Array Temp 1.814 D PSK TX HPA Tmp 0.603 D
+Z Array Temp 6.654 D
RC PSK TX Out 0.599 W

Total Array C= 0.435 Bat Ch Cur=-0.046 Ifb= 0.024 I+10V= 0.358
TX:010C BCR:84 PWRC:59F BT: A WC:25 EDAC:23

Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
DOVE transmits on 145.825 MHz and 2401.220 MHz. It is presently sending 1200 baud AX.25 (standard packet) ASCII telemetry about every minute on two meters. On S band it transmits PSK flags continuously and also the same data as is sent on 2 meters.
[ANS thanks Jim White, WD0E, for this update]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
No report available at this time.

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88, 145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)
Operating normally.
uptime is 899/20:55:24. Time is Sat Dec 06 11:00:34 1997

Bat 1 Temp 2.374 D
Bat 2 Temp 6.301 D Baseplt Temp 1.813 D
RC PSK BP Temp -1.552 D RC PSK HPA Tmp -0.991 D
+Y Array Temp 0.131 D PSK TX HPA Tmp -2.113 D
+Z Array Temp -7.722 D
RC PSK TX Out 0.847 W

Total Array C= 0.379 Bat Ch Cur= 0.058 Ifb=-0.006 I+10V= 0.233
TX:019 BCR:80 PWRC:36E BT:3C WC: 0

General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK)
UO-22 is operating normally.
Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.
In the old task, once an upload was complete, the spacecraft had to
perform the checksum on the complete file. Depending on the file
length, this could take quite a long time. With the new task, the
checksum is computed on the fly - while the data is actually being
uploaded. Thus there is no need to recompile at the end of the
transfer and this checksum delay is then removed.
However, all files that were started before Chris loaded the task
will receive a corrupt body checksum error when the upload is completed.
If anyone gets persistent body checksum errors while uploading files to
UO-22 would they please let Chris Jackson know as soon as possible
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and
Operations Manager of UO-22, for this report]

IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz
SSB, 1200 Baud PSK)
IY2SAT-1>AMSAT <UI>:
12th November 1997
All sub-systems are OK.
Loading in progress.
Please don't tx on uplink. Stay tuned for further news!
Best wishes from the ITAMSAT team.
[ANS thanks Daniele, IK2XRO, and Piercarlo, IW2EGC,
ITMSAT Command Station for this report]

[Please send your Satellite or News reports to ANS Editor BJ Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

2984. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-07 00:00:00 UTC
From: Ken Fowler <kenfowkr@pop.flash.net>
Message-ID: <348B8D78.1741@pop.flash.net>
Source record: 17456
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Boy, Are you going to get flamed. You got to watch those observations
of truth. 73. Glad you said it.
-ken-

DavidC wrote:
>
> The slow, but steady drift towards anarchy continues.
>
> We are cursed with a President who rejects all standards (legal and moral)
> that have applied to all previous presidents, and a citizenry who now
> believe they may freely make their own rules.
>
> I guess it has been a pretty good "run", this great experiment, America.
> Count the days - we cannot long survive when selfishness prevails. Such
> was not the nature of the foundational expectations of our founders - our
> system will not tolerate pervasive lawlessness.
>
> Too bad too, this is the best system ever implemented in the history of
> humanity. I pray that the completion of the disintegration may be stalled
> until my children are old enough to cope better. :-(DavidC

2985. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: Martin Spencer <qp52@dial.pipex.com>
Message-ID: <348BBB2B.5B97@dial.pipex.com>
Source record: 17457
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Steve Quest wrote:
>
> WireHead Prime (wiredone@raccoon.com) wrote:
> : Dave Booth wrote:
> <big snip>

FOR CHRIST SAKE YOU GUYS, SOME OF YOU SOUND HALF INTELLIGENT AT LEAST,
STOP THIS RIDICULOUS CROSS POSTING OR THE NGS ARE GOING TO GRIND TO
A HALT.

If I go away for the weekend, I come back and have to sift thru 200 to
300 posts per group, half of which are of no interest and wildly off
topic.

Posting to 4 or more groups simultaneously is idiotic. I'm doing it
this once (ONLY) to get through to you all.

It's getting to the stage where useful people are going to leave cos
there's TOO MUCH NOISE ON THE CHANNEL.

NG USERS WHO AGREE, BACK ME UP!

Martin.

2986. Satellite Cyberposts Available at http://www.sarrio.com

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: wb6siv@cyberg8t.com
Message-ID: <wb6siv-0712971841000001@host11.clr.cyberg8t.com>
Source record: 17458

Use the WWW to announce your interest in working hams all over the world
by satellite. Below are two examples of such posts that have been added to
my Cyberpost web page. I provide an e-mail link to the posting station, so
schedules can be easily arranged or changed if neccessary.

Post your contact needs and prepare to have those needs quickly met with
the help of the Web. 73's Ray

Station: N2QXF

Name: Nick
QTH: New Jersey
Mode:Satellite
Comments: Need to get asked for RS-10 and or RS-15 Mode A for Alaska and
Hawaii for WAS
Satellite.......time flexible.
Equip.
13el beam w/ 180 watts SSB/or CW uplink
Rotatable Dipole @ 40ft for dwnlink
FT-290RII plus amp uplink
IC-736 Downlink
Skeds by email or call 24hr beeper 917 738 7602
Will get on the air for stations needing NJ and/or FN21 on sat.
Nick
Post Date: Sept. 6, 1996

Station: NY1F

Name:Burt Eldridge
QTH: Vermont, USA
Grid: FN32ru
Comments: Satellite skeds stations outside No. America.
All satellites LEO's or AO-10/13
Post Date: 8/21/96
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located
at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount
CD-Roms!

2987. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348BCF28.111F@raccoon.com>
Source record: 17459
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill wrote:
>
> lucyapbt@ix.netcom.com wrote:
> > Sad day when certian Americians put down the Idea of freedom ,
> > after all Who said resticting the airwaves is constitutoinal, I have a
> > freedom of speech, and a RIGHT to use it in any way, I should not need a
> > licence to use that right (By the way, licence = money) Thank you for
> > your time,responses encouraged, after all I would not want to infringe
> > on you freedom to speech, and I do not recomend puting down any ideas
> > opposed to mine.
>
> Just what do you think gives you that right? Another one of the current
> generation that thinks everthing is "their right". Sorry, it dosen't
> work that way, most things are not you right, but a privilege that must
> be earned.

So said the Royalty of England to the colonists.

Wirehead

2988. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348BCEE4.73DE@raccoon.com>
Source record: 17460
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

DavidC wrote:
>
> The slow, but steady drift towards anarchy continues.
>
> We are cursed with a President who rejects all standards (legal and moral)
> that have applied to all previous presidents, and a citizenry who now
> believe they may freely make their own rules.
>
> I guess it has been a pretty good "run", this great experiment, America.
> Count the days - we cannot long survive when selfishness prevails. Such
> was not the nature of the foundational expectations of our founders - our
> system will not tolerate pervasive lawlessness.
>
> Too bad too, this is the best system ever implemented in the history of
> humanity. I pray that the completion of the disintegration may be stalled
> until my children are old enough to cope better.

Well boo hoo.

White christian conservative men have had a pretty good run what with killing most of the native Americans, using slave labor for a couple hundred years, raping and pillaging the landscape, sucking up most of the money so only their white christian conservative sons can get even wealthier. Takes money to make money dontcha know.

At any rate, if all it took was hard work (IE earning) to become wealthy and powerful, why are there more white collar criminals than blue collar millionaires?

Wirehead

2989. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348BD52C.93F@raccoon.com>
Source record: 17461
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Michael Aust wrote:
>
> Bill wrote:
> >
> > lucyapbt@ix.netcom.com wrote:
> > > Sad day when certian Americians put down the Idea of freedom ,
> > > after all Who said resticting the airwaves is constitutoinal, I have a
> > > freedom of speech, and a RIGHT to use it in any way, I should not need a
> > > licence to use that right (By the way, licence = money) Thank you for
> > > your time,responses encouraged, after all I would not want to infringe
> > > on you freedom to speech, and I do not recomend puting down any ideas
> > > opposed to mine.

Sounds like another liberal democrat giving rights of others that
> have earned that right. I bet they are for affirmative action, anti
> Prop. 209, quota's giving away the earned previleges to those that did
> not work for it.
> I bet he voted for Senator Ted Kennedy.
> Need I say more, this is what keep liberals in business,
> Robbin Peter to Pay Paul, Take away my right that are earned,
> and give them away free to someone that didn't work for them.

> Shades of the Liberal Democrats.....

Blah blah blah.

Liberal this democrat that. Earned this. Angry about that.

You're living on a few million square miles of land you didn't earn.
You're living off the fat of a couple hundred years of slave labor
that you didn't earn.
You're speaking freely due to rights that YOU didn't earn...but were
fought for by someone who didn't care if you were liberal or
conservative.

So pretty much...you've earned NOTHING that wasn't given to YOU by
someone else.

As for "liberals" (using the current definition of the term)...

Liberals didn't blow up a Federal building on Oklahoma City,
killing innocent women and children
Liberals didn't blow up and open fire at "abortion clinics"
at least attempting to murder innocent women, who may have been
there simply because they couldn't afford medical care or for

obstetric or other exams
Liberals didn't assassinate Abraham Lincoln, John F Kennedy,
Martin Luther King Jr or Malcolm X (Thou shalt not kill)
Charles Manson, Ted Bundy and countless other serial killers were
not Liberals
Liberals did not break into Democrat National HQ in order to
help Nixon illegally win a campaign
Liberals have fought right along with everyone else in every war
this country has ever fought
Liberals did not perpetrate a meaningless and unconstitutional
witch hunt against ALLEDGED communists, who under our constitution,
are guaranteed the right the hold whatever political or economic
views they choose anyway
The Heavensgate and other suicide cults were not Liberals

He who lives in a glass house should not throw stones. So before you
get that special feeling way down low by calling names, perhaps you
should look at your own worldview and the destruction and suffering it
has wrought, not to a few angry hams, but to MILLIONS all over the
globe.

Wirehead

2990. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <348C7D00.5CD7@trader.com>
Source record: 17462
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill wrote:
> lucyapbt@ix.netcom.com wrote:
>>...freedom of speech, and a RIGHT to use it...
>
> Just what do you think gives you that right? Another one of the current
> generation that thinks everthing is "their right". Sorry, it dosen't
> work that way, most things are not you right, but a privilege that must
> be earned.

What worries me is the "my due" attitude. Rights, OTOH, _are_ inherent
(i.e. "yours"). Exercising them, without paying a heavy price, _is_ a privilege.

In the courts, so far, the little guy has lost the Federal vs. State argument
with respect to low power transmission. Outside the courts, the little guy
has already won, due in part to cheap technology. I know of five <5 Watt FM
stations on my side of Indy. THEY co-ordinate frequencies (you know, like the
FCC allows amateur groups to co-ordinate repeaters).
The majority of ordinary people know about the station nearest to my QTH, and
even if they don't listen, by their group inaction to do anything about it,
have shown how they feel about what the Federal Courts believe. "They're not
hurting anybody, so who cares?"
For better or worse, that's the way this country works.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

2991. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: mike lamet <mikel@tir.com>
Message-ID: <348C9EE1.1B9B@tir.com>
Source record: 17463
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WHY DONT YOU ALL JUST SHUT UP OR PUT THIS CRAP ON A NEWS GROUP THAT CARES!!!!!!!

2992. Re: 10M downlink antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: kc4ejv@mindspring.com
Message-ID: <348c6db4.4673587@news.mindspring.com>
Source record: 17464

On Thu, 04 Dec 1997 10:35:26 -0500, Jeff Griffin <kb2wqm@amsat.org>
wrote:

>I'm currently using a 1/4 wave vertical (radiator angled 30 degrees'),
>and a 1/4 wave crossed dipole for 10 meter downlink receive. Switch
>selectable. Does anyone have something that would have more gain,
>perhaps several 1/4 wave verticals phased together? I would like to
>improve my downlink signal somewhat, but have run out of ideas. Any
>input from anyone that is using anything different I would like to hear
>from.
>
>Jeff kb2wqm FM29pe
>
I am currently using a verticle dipole stuck on a side of tree very
much like a cell tower antenna but I am not very happy with it. For
HF, I have a full-wave 40 meter horizontal loop and I am still
astounded how quiet it is. So, my next 10 mtr downlink I think is
going to be a full-wave loop. The dimensions I believe are 16 feet
per side or 64 feet total length.

Brand P.Hunt KC4EJV

2993. NORAD Two-Line Orbital Element Sets (TLE107)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <66i003$nj1$1@blackbird.afit.af.mil>
Source record: 17465

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #107 -
Alouette 1
1 00424U 62049A 97338.92545463 .00000040 00000-0 36094-4 0 3364
2 00424 80.4651 115.1211 0023966 95.6275 264.7603 13.67910153755582
ATS 1
1 02608U 66110A 97335.24925013 .00000078 00000-0 10000-3 0 487
2 02608 14.4115 347.0931 0007147 128.1557 231.8994 1.00327427 30206
ATS 3
1 03029U 67111A 97340.27029157 -.00000113 00000-0 10000-3 0 7253
2 03029 14.8450 353.9960 0012807 276.2791 156.7708 1.00272697110151
Starlette
1 07646U 75010A 97341.17803931 -.00000089 00000-0 40735-4 0 1063
2 07646 49.8255 185.7050 0205693 207.3902 151.6023 13.82194106153374
LAGEOS
1 08820U 76039A 97339.55561345 .00000007 00000-0 00000+0 0 3370
2 08820 109.8171 209.7403 0044449 13.1735 347.0205 6.38664555248088
GOES 2
1 10061U 77048A 97341.60481066 .00000052 00000-0 10000-3 0 9248
2 10061 13.0185 31.0785 0009909 153.7110 293.2560 1.00288447 19840
IUE
1 10637U 78012A 97337.09180135 -.00000127 00000-0 10000-3 0 4193
2 10637 36.3265 75.1425 1382862 71.4468 302.9543 1.00083250 25280
GOES 3
1 10953U 78062A 97342.22055729 -.00000087 00000-0 00000+0 0 8813
2 10953 12.0505 34.1659 0004369 214.2088 159.1490 1.00277102 24463
SeaSat 1
1 10967U 78064A 97338.39688235 .00000061 00000-0 64334-4 0 6237
2 10967 107.9984 202.3382 0002534 246.9357 113.1520 14.38211805 18390

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Nimbus 7
1 11080U 78098A 97339.52859446 -.00000027 00000-0 12710-4 0 7157
2 11080 98.8798 179.7868 0009125 326.8078 33.2505 13.83676907965343
GOES 5
1 12472U 81049A 97340.12022154 -.00000269 00000-0 10000-3 0 340
2 12472 9.0178 44.9899 0004645 116.3047 243.7022 1.00308913 18483
Cosmos 1383
1 13301U 82066A 97339.26659819 .00000030 00000-0 17291-4 0 6317
2 13301 82.9300 100.7390 0026662 200.3634 159.6465 13.68089083770671
LandSat 4
1 13367U 82072A 97341.23032960 -.00000093 00000-0 -10848-4 0 1203
2 13367 98.0027 19.4611 0005976 271.8202 88.2309 14.57218571818894
DMSP B5D2-1
1 13736U 82118A 97341.18464347 .00000097 00000-0 58902-4 0 3685
2 13736 98.6172 166.8533 0007624 258.7172 101.3148 14.25879067777736
IRAS
1 13777U 83004A 97342.08018759 .00000343 00000-0 26589-3 0 8490
2 13777 98.9730 162.3575 0013656 51.8406 308.3985 13.99288464428731
Cosmos 1447
1 13916U 83021A 97339.77409948 .00000059 00000-0 46231-4 0 7254
2 13916 82.9444 154.1607 0039144 95.8270 264.7344 13.74363837737449
TDRS 1
1 13969U 83026B 97340.21867808 -.00000293 00000-0 10000-3 0 8167
2 13969 9.7202 38.6191 0002052 226.9851 199.2324 1.00274185 26770
GOES 6
1 14050U 83041A 97342.22800288 .00000020 00000-0 10000-3 0 7591
2 14050 7.8976 48.7590 0002937 161.7436 183.0321 1.00311462111594
AO-10
1 14129U 83058B 97333.64124932 -.00000024 00000-0 10000-3 0 5185
2 14129 26.4589 114.5142 6027450 172.1079 205.2863 2.05880955 80794
LandSat 5
1 14780U 84021A 97342.22225524 .00000196 00000-0 53744-4 0 6668
2 14780 98.2643 43.7815 0003468 60.6315 299.5228 14.57086000732453
UO-11
1 14781U 84021B 97341.99694386 .00000270 00000-0 53339-4 0 216
2 14781 97.8538 316.4705 0011541 161.7578 198.4044 14.69630969736780
Cosmos 1574
1 15055U 84062A 97339.71827055 .00000040 00000-0 26933-4 0 9252
2 15055 82.9601 210.2373 0026624 290.3298 69.4995 13.73657563674640
Cosmos 1602
1 15331U 84105A 97341.01126349 .00000560 00000-0 62647-4 0 6088
2 15331 82.5328 329.0717 0020184 336.6986 23.3318 14.85006183712789
ERBS
1 15354U 84108B 97342.20701166 .00000025 00000-0 23911-4 0 3235
2 15354 56.9953 23.8564 0009723 101.6103 258.5981 14.95115560717457
NOAA 9
1 15427U 84123A 97341.82894832 .00000077 00000-0 63920-4 0 3863
2 15427 98.8822 51.1483 0014248 225.1376 134.8639 14.13901949669742
Mir
1 16609U 86017A 97342.15004838 .00009640 00000-0 11741-3 0 8342
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2 16609 51.6598 291.1340 0007993 65.4074 294.7698 15.61230604674181
SPOT 1
1 16613U 86019A 97341.26775239 -.00000044 00000-0 00000+0 0 1435
2 16613 98.7712 52.4421 0001370 111.6873 248.4449 14.20002319296676
Cosmos 1766
1 16881U 86055A 97339.50220405 .00000426 00000-0 48248-4 0 5232
2 16881 82.5202 28.0228 0020183 11.9350 348.2339 14.83938417613370
EGP
1 16908U 86061A 97339.90702595 -.00000083 00000-0 10000-3 0 2284
2 16908 50.0108 146.8941 0011451 299.2622 60.7067 12.44417951183238
NOAA 10
1 16969U 86073A 97341.88237344 .00000061 00000-0 44156-4 0 3151
2 16969 98.5569 330.4903 0012098 219.8073 140.2221 14.25072508583324
MOS-1
1 17527U 87018A 97341.20868314 -.00000043 00000-0 00000+0 0 6109
2 17527 98.8626 35.3212 0018984 280.9109 78.9917 14.00447981550298
GOES 7
1 17561U 87022A 97342.25248427 -.00000140 00000-0 10000-3 0 4274
2 17561 4.1009 65.8313 0002214 214.0656 150.0685 1.00268616 22712
Kvant-1
1 17845U 87030A 97341.89399042 -.00000476 00000-0 66865-6 0 2270
2 17845 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036608251
DMSP B5D2-3
1 18123U 87053A 97341.73310221 .00000039 00000-0 42364-4 0 1460
2 18123 98.7615 168.9667 0014306 153.8067 206.3831 14.15502969540688
RS-10/11
1 18129U 87054A 97338.84651434 .00000036 00000-0 22713-4 0 4319
2 18129 82.9231 112.5941 0012683 103.4937 256.7640 13.72386564523643
Meteor 2-16
1 18312U 87068A 97342.17119220 .00000081 00000-0 59536-4 0 6091
2 18312 82.5527 284.5562 0012712 141.3762 218.8312 13.84109459520731
Meteor 2-17
1 18820U 88005A 97341.12289819 .00000019 00000-0 39726-5 0 4328
2 18820 82.5415 339.1628 0015341 213.1561 146.8617 13.84786597497978
DMSP B5D2-4
1 18822U 88006A 97342.06016212 .00000110 00000-0 66714-4 0 6858
2 18822 98.3914 154.5536 0005432 226.4200 133.6529 14.23254810511226
Glonass 34
1 19163U 88043A 97339.42188022 -.00000017 00000-0 10000-3 0 2379
2 19163 65.4895 67.7705 0007433 165.2637 194.8063 2.13102375 73665
Glonass 36
1 19165U 88043C 97337.60301689 -.00000009 00000-0 10000-3 0 6426
2 19165 65.4711 67.7872 0001283 307.9971 52.0385 2.13101630 74242
METEOSAT 3
1 19215U 88051A 97327.54102632 -.00000152 00000-0 10000-3 0 3527
2 19215 4.2943 64.9659 0008025 149.4679 210.3628 0.96948950 22260
OKEAN 1
1 19274U 88056A 97338.25794208 .00000567 00000-0 67151-4 0 2228
2 19274 82.5121 130.6815 0019915 158.5896 201.6158 14.82727529508659
Meteor 3-2
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1 19336U 88064A 97338.07727606 .00000051 00000-0 10000-3 0 6204
2 19336 82.5401 147.9285 0017418 342.2718 17.7788 13.16984831449883
Glonass 39
1 19503U 88085C 97338.10316107 -.00000002 00000-0 10000-3 0 5247
2 19503 65.3530 306.6401 0007739 151.6201 208.4177 2.13101926 71747
NOAA 11
1 19531U 88089A 97341.84130665 .00000069 00000-0 61501-4 0 2040
2 19531 99.1338 18.5963 0011839 164.6238 195.5291 14.13157425474525
TDRS 3
1 19548U 88091B 97340.60061786 -.00000180 00000-0 10000-3 0 3189
2 19548 3.5450 68.8562 0005198 175.2140 132.0553 1.00263092 20918
Glonass 40
1 19749U 89001A 97341.42566911 -.00000036 00000-0 10000-3 0 7437
2 19749 65.4559 67.1924 0006137 257.0681 102.8928 2.13101395 69326
Glonass 41
1 19750U 89001B 97341.47996714 -.00000037 00000-0 10000-3 0 6500
2 19750 65.4676 67.2828 0009114 257.4942 102.4330 2.13101833 69346
GPS BII-01
1 19802U 89013A 97341.61174538 -.00000014 00000-0 00000+0 0 5014
2 19802 55.6155 89.1881 0020630 171.0222 189.0091 2.00556028 64512
Akebono
1 19822U 89016A 97341.86031948 .00008581 00000-0 43773-3 0 506
2 19822 75.0514 168.3222 3692722 55.7873 333.9909 8.02283797209593
Meteor 2-18
1 19851U 89018A 97341.13351307 .00000080 00000-0 58741-4 0 6069
2 19851 82.5223 212.1353 0013098 269.5960 90.3702 13.84445112443266
MOP-1
1 19876U 89020B 97336.88971165 -.00000066 00000-0 00000+0 0 3001
2 19876 3.0619 70.4214 0015697 282.3850 77.0129 0.97109527 11802
TDRS 4
1 19883U 89021B 97338.38770390 -.00000260 00000-0 10000-3 0 3746
2 19883 0.9712 85.4870 0004527 191.0706 255.2681 1.00267719204473
GPS BII-02
1 20061U 89044A 97340.95389363 -.00000031 00000-0 10000-3 0 4829
2 20061 53.8532 264.1617 0170718 227.3394 131.2435 2.00563503 62245
Nadezhda 1
1 20103U 89050A 97342.20999767 .00000015 00000-0 29711-7 0 1728
2 20103 82.9549 71.1476 0038243 354.2691 5.8021 13.73884583422690
GPS BII-03
1 20185U 89064A 97340.65296795 -.00000004 00000-0 10000-3 0 5091
2 20185 55.4118 89.6039 0017971 15.8436 344.1702 2.00570705 60811
GMS 4
1 20217U 89070A 97336.64868853 -.00000357 00000-0 10000-3 0 6797
2 20217 2.8450 72.4740 0001441 272.8897 79.3826 1.00258580 30760
INTERCOSMOS 24
1 20261U 89080A 97339.91123117 .00000290 00000-0 90503-4 0 6373
2 20261 82.5956 287.8629 1239772 261.1055 84.8017 12.47489277372822
GPS BII-04
1 20302U 89085A 97336.82795969 .00000062 00000-0 00000+0 0 5252
2 20302 53.1955 203.8984 0184483 219.7418 138.3068 2.00559317 59534
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Meteor 3-3
1 20305U 89086A 97340.88503169 .00000044 00000-0 10000-3 0 9536
2 20305 82.5403 112.8166 0007306 56.5738 303.6070 13.04425291388301
COBE
1 20322U 89089A 97341.05946174 -.00000235 00000-0 -12206-3 0 3566
2 20322 98.9234 352.6550 0009599 343.6999 16.3856 14.03467289412377
Kvant-2
1 20335U 89093A 97341.89399042 -.00000476 00000-0 66865-6 0 929
2 20335 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036457262
GPS BII-05
1 20361U 89097A 97339.34095613 -.00000057 00000-0 00000+0 0 2925
2 20361 56.2771 32.1408 0099489 148.6146 212.0399 2.00567589 49066
COSMOS 2054 (Altair-1)
1 20391U 89101A 97336.04687096 -.00000205 00000-0 10000-3 0 5619
2 20391 4.8176 60.1543 0003838 147.8407 211.9314 1.00240533 29342
SPOT 2
1 20436U 90005A 97341.24885172 -.00000044 00000-0 00000+0 0 3048
2 20436 98.7117 53.4356 0000748 104.6596 255.4663 14.20035988408201
UO-14
1 20437U 90005B 97340.15829438 .00000088 00000-0 50615-4 0 3163
2 20437 98.5068 58.0058 0012001 60.1942 300.0437 14.29986335410794
AO-16
1 20439U 90005D 97338.20826173 .00000067 00000-0 42816-4 0 1115
2 20439 98.5284 59.4269 0012361 68.0186 292.2319 14.30030378410533
DO-17
1 20440U 90005E 97338.24712855 .00000052 00000-0 36895-4 0 1093
2 20440 98.5330 60.4470 0012433 67.7837 292.4664 14.30174180410571
WO-18
1 20441U 90005F 97341.25735591 .00000082 00000-0 48192-4 0 1176
2 20441 98.5308 63.2735 0012820 59.2614 300.9824 14.30141087411003
LO-19
1 20442U 90005G 97341.28055249 .00000097 00000-0 54080-4 0 1152
2 20442 98.5331 64.0643 0013501 59.4880 300.7633 14.30259144411034
GPS BII-06
1 20452U 90008A 97341.73058297 .00000091 00000-0 10000-3 0 4062
2 20452 54.0649 144.8039 0067498 97.3904 263.3659 2.00574072 57618
MOS-1B
1 20478U 90013A 97341.23842312 -.00000044 00000-0 00000+0 0 970
2 20478 99.0723 48.4274 0005378 214.2940 145.7875 13.93984743319514
DEBUT
1 20479U 90013B 97341.81241539 -.00000025 00000-0 21987-4 0 1072
2 20479 99.0670 271.1891 0540397 343.5897 14.8290 12.83361773366999
FO-20
1 20480U 90013C 97342.20794080 -.00000023 00000-0 24764-4 0 154
2 20480 99.0673 271.2226 0540626 343.4965 14.9115 12.83241398367029
MOS-1B R/B
1 20491U 90013D 97341.55431768 .00000538 00000-0 10680-2 0 4024
2 20491 99.0160 351.2925 0470514 112.6840 252.4704 13.03028292371974
LACE
1 20496U 90015A 97341.47105902 .00004477 00000-0 12529-3 0 8159
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2 20496 43.1024 6.5719 0012035 322.4635 37.5379 15.37845585436638
Nadezhda 2
1 20508U 90017A 97339.71390649 .00000020 00000-0 61274-5 0 1722
2 20508 82.9546 207.3858 0044314 314.4117 45.3404 13.73530625389545
OKEAN 2
1 20510U 90018A 97341.28707965 .00000401 00000-0 51331-4 0 6410
2 20510 82.5247 85.8190 0018938 5.7053 354.4363 14.78808142419193
GPS BII-07
1 20533U 90025A 97338.11732036 -.00000009 00000-0 00000+0 0 3793
2 20533 54.2143 266.6628 0034141 47.7419 312.5751 1.91040804 55972
PegSat
1 20546U 90028A 97340.93800344 .00022907 00000-0 30698-3 0 1834
2 20546 94.1156 300.3622 0049553 75.0709 285.6032 15.56414868428340
HST
1 20580U 90037B 97339.56407776 .00000735 00000-0 64588-4 0 101
2 20580 28.4660 24.0275 0014749 174.1360 185.9403 14.86556261218577
MACSAT 2
1 20608U 90043B 97338.86642682 .00000277 00000-0 44887-4 0 3146
2 20608 89.9208 168.6600 0106414 344.3457 15.4479 14.65060749404715
Glonass 44
1 20619U 90045A 97341.79060192 -.00000019 00000-0 10000-3 0 4512
2 20619 64.9492 305.4579 0024720 214.7785 145.0597 2.13102899 58780
Glonass 45
1 20620U 90045B 97340.03218623 -.00000006 00000-0 10000-3 0 4251
2 20620 64.9336 305.5108 0010068 30.6288 329.4527 2.13102609 58781
Glonass 46
1 20621U 90045C 97341.03763054 -.00000012 00000-0 10000-3 0 563
2 20621 64.9645 305.5462 0016506 199.9645 159.9721 2.13103222 58804
Kristall
1 20635U 90048A 97341.89399042 -.00000476 00000-0 66865-6 0 8843
2 20635 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036428094
ROSAT
1 20638U 90049A 97342.21423166 .00000421 00000-0 45858-4 0 7114
2 20638 52.9934 31.0092 0010801 330.7161 29.3154 15.07814314413623
Meteor 2-19
1 20670U 90057A 97341.16347412 .00000084 00000-0 61639-4 0 4679
2 20670 82.5434 280.5821 0015091 180.6884 179.4290 13.84137379376161
CRRES
1 20712U 90065A 97341.12805527 .00000541 00000-0 60701-3 0 5337
2 20712 18.1572 30.6806 7190946 63.4592 351.2768 2.36016703 55815
GPS BII-08
1 20724U 90068A 97338.47042769 -.00000007 00000-0 10000-3 0 3083
2 20724 55.2485 87.1485 0140062 195.5465 164.0265 2.00561446 52376
Feng Yun1-2
1 20788U 90081A 97341.21371708 .00000058 00000-0 66301-4 0 5849
2 20788 98.8232 334.5282 0017205 78.8549 281.4547 14.01397334371458
Meteor 2-20
1 20826U 90086A 97338.75496984 .00000051 00000-0 32387-4 0 1178
2 20826 82.5273 218.1535 0014566 94.4690 265.8134 13.83665885362908
GPS BII-09
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1 20830U 90088A 97341.51591437 -.00000065 00000-0 10000-3 0 2547
2 20830 56.2106 29.9218 0069313 93.6359 267.2113 2.00559413 52887
GPS BIIA-10
1 20959U 90103A 97339.92156661 .00000001 00000-0 00000+0 0 2718
2 20959 55.4403 89.2699 0139519 245.0723 113.4463 2.00556742 51449
DMSP B5D2-5
1 20978U 90105A 97341.82045308 .00000148 00000-0 67889-4 0 3208
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Glonass 61
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XTE
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2 23757 22.9837 8.8509 0012861 343.5799 16.4262 14.97996403105789
Polar
1 23802U 96013A 97341.85279783 .00000010 00000-0 00000+0 0 1797
2 23802 86.3616 20.2195 6539857 259.8740 25.6768 1.35165074 8884
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1 23824U 96010E 97338.54437646 .00027891 00000-0 45232-1 0 3756
2 23824 48.0183 75.3883 6734487 192.8646 132.9856 2.90594167 16660
GPS BIIA-25
1 23833U 96019A 97338.36955989 -.00000037 00000-0 00000+0 0 2801
2 23833 54.5108 326.1170 0018173 140.3763 219.7614 2.00566280 12415
Priroda
1 23848U 96023A 97341.89399042 -.00000476 00000-0 66865-6 0 5343
2 23848 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036 92663
MSX
1 23851U 96024A 97338.93466788 -.00000047 00000-0 00000+0 0 2917
2 23851 99.4240 336.8057 0008144 127.6175 232.5736 13.97398744 82325
SAX
1 23857U 96027A 97341.08257393 .00001985 00000-0 11758-3 0 1169
2 23857 3.9527 138.9521 0014066 270.9280 88.9545 14.92094039 87608
MSTI 3
1 23868U 96031A 97342.28444629 .00231883 20520-4 45491-3 0 2548
2 23868 97.0869 169.8625 0133952 7.1257 353.1879 15.85852298 88173
TOMS-EP
1 23940U 96037A 97340.51505391 -.00036147 00000-0 00000+0 0 1910
2 23940 97.5683 245.3777 0026376 338.8857 21.1907 15.16349562 79614
GPS BIIA-26
1 23953U 96041A 97340.28358861 -.00000007 00000-0 00000+0 0 2299
2 23953 55.2702 86.7055 0024965 347.4094 12.5156 2.00568302 10246
ADEOS
1 24277U 96046A 97341.22229339 .00000139 00000-0 74718-4 0 2732
2 24277 98.5858 55.6536 0002135 92.8202 267.3220 14.27042140 68046
FO-29
1 24278U 96046B 97338.12291475 .00000011 00000-0 43840-4 0 1255
2 24278 98.5200 356.0169 0352367 105.7244 258.3051 13.52635668 64096
FAST
1 24285U 96049A 97341.22143732 .00003010 00000-0 29301-3 0 1575
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2 24285 82.9789 318.4484 2203183 47.5319 329.2045 10.82954810 51140
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1 24286U 96049B 97341.21857647 .00003857 00000-0 36991-3 0 1664
2 24286 82.9940 318.6942 2201721 46.6042 329.8459 10.83577611 51157
Microsat
1 24291U 96050A 97342.25924357 .00030849 66326-5 29799-3 0 3478
2 24291 62.7874 275.9889 0434193 177.1876 183.1797 14.99711480 68906
MO-30
1 24305U 96052B 97339.75514407 .00000204 00000-0 20364-3 0 1660
2 24305 82.9374 227.7965 0031892 88.1648 272.3147 13.73100760 62603
GPS BIIA-27
1 24320U 96056A 97335.16436191 -.00000011 00000-0 00000+0 0 1304
2 24320 54.4474 266.8083 0051506 95.0143 265.5755 2.00563870 8805
SAC-B/HETE
1 24645U 96061A 97339.28527779 .00001587 00000-0 86405-4 0 1171
2 24645 37.9769 279.5568 0047368 217.6572 142.0874 15.15402224 60024
ZEYA
1 24744U 97010A 97338.24970972 .00007405 00000-0 23517-3 0 1188
2 24744 97.2631 240.0990 0005674 191.4027 168.7088 15.32922206 42120
DMSP B5D2-9
1 24753U 97012A 97341.80516668 .00000137 00000-0 97458-4 0 2737
2 24753 98.9135 25.5039 0008447 282.3768 77.6469 14.13020582 34902
MINISAT 01
1 24779U 97018A 97339.28478513 .00002960 00000-0 16750-3 0 634
2 24779 150.9678 156.2170 0014511 171.5161 188.5674 14.98663873 34206
CELESTIS
1 24780U 97018B 97341.15658164 .00002493 00000-0 12409-3 0 657
2 24780 150.9810 171.2749 0019800 192.7633 167.2422 14.99873125 34513
GOES 10
1 24786U 97019A 97335.49265137 -.00000080 00000-0 00000+0 0 1458
2 24786 0.0377 287.8271 0006388 1.1307 214.1240 1.00262715 2233
Feng Yun 2B
1 24834U 97029A 97338.23170528 .00000000 00000-0 10000-3 0 957
2 24834 0.8550 259.0113 0007485 68.7308 292.7840 1.00261736 1793
GPS BIIR-02
1 24876U 97035A 97336.81088542 .00000077 00000-0 00000+0 0 786
2 24876 54.9513 146.8812 0015951 240.8487 119.0116 2.00537243 2704
SeaStar
1 24883U 97037A 97339.77911005 .00000119 00000-0 37649-4 0 818
2 24883 98.2186 75.7671 0001944 358.9469 1.1725 14.55499453 18583
Soyuz TM-26
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2 24886 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036 19418
Meteosat 7
1 24932U 97049B 97340.83375080 -.00000085 00000-0 00000+0 0 754
2 24932 1.6308 290.2912 0002842 326.9943 108.2332 1.00272971 971
COSMOS 2346
1 24953U 97052A 97341.19814257 .00000033 00000-0 16568-4 0 365
2 24953 82.9245 226.1206 0041681 76.4518 284.1282 13.79048556 10269
FAISAT 2V
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2 24954 82.9235 226.1300 0041601 76.8502 283.7293 13.78975088 10279
Sputnik 40
1 24958U 97058C 97341.24371648 .00049408 00000-0 53782-3 0 361
2 24958 51.6597 295.5770 0007594 59.8147 300.3599 15.62895140 5248
Progress M-36
1 25002U 97058A 97341.89399042 -.00000476 00000-0 66865-6 0 712
2 25002 51.6553 292.4272 0008070 60.1634 299.8980 15.61215036 9890
STEP-M4
1 25013U 97063A 97341.86538963 .00002725 00000-0 90841-4 0 362
2 25013 44.9639 132.4906 0048689 49.5605 310.9510 15.33021782 7117
MAQSAT H
1 25023U 97066A 97340.68149236 .00000155 00000-0 14062-2 0 214
2 25023 7.8691 38.9484 6539382 215.7682 74.1634 3.07859011 1143
MAQSAT B
1 25024U 97066B 97335.09715071 -.00000082 00000-0 -12657-4 0 176
2 25024 7.8506 41.9486 6535428 209.7263 87.0818 3.08571962 974
YES
1 25025U 97066C 97341.33690028 -.00000401 00000-0 -14847-2 0 182
2 25025 7.8663 38.7125 6533483 216.2415 73.2412 3.07787244 1142
ARIANE 5 (SPELDA)
1 25026U 97066D 97341.31995666 -.00000053 00000-0 43207-3 0 249
2 25026 7.8686 38.5895 6539672 216.4727 72.7599 3.07933900 1168
GPS BIIA-28
1 25030U 97067A 97318.13414556 .00000027 00000-0 10000-3 0 170
2 25030 54.8914 209.2111 0145163 95.5811 266.7340 1.99879326 224
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1 25032U 97067C 97340.89044362 .00078355 58172-7 17122-2 0 376
2 25032 34.9911 184.9448 6030500 224.0552 68.1294 4.08193810 1233
Iridium 43
1 25039U 97069A 97339.84383233 -.00001121 00000-0 -40728-3 0 740
2 25039 86.3990 122.4754 0002389 52.6786 307.4970 14.34219764 3887
Iridium 41
1 25040U 97069B 97338.09351979 .00000185 00000-0 59066-4 0 619
2 25040 86.3968 123.2100 0001959 89.8258 270.3165 14.34274912 3639
Iridium 40
1 25041U 97069C 97341.90488467 -.00002235 00000-0 -76528-3 0 618
2 25041 86.4224 121.6334 0001907 75.8086 284.3322 14.36779501 4181
Iridium 39
1 25042U 97069D 97339.86951149 -.00000016 00000-0 -12722-4 0 592
2 25042 86.4000 122.4713 0002163 156.4430 203.6886 14.34229437 3889
Iridium 38
1 25043U 97069E 97338.26296336 -.00002767 00000-0 -94793-3 0 509
2 25043 86.4155 123.1543 0002024 109.9974 250.1450 14.36668911 3668
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1 25044U 97069F 97342.27020198 .00099534 13400-5 51823-3 0 334
2 25044 83.5587 108.2718 0255286 244.1633 113.3018 15.46768267 4509
Kupon
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2 25045 0.0517 280.7862 0006843 91.4263 92.2482 1.00249659 227
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1997070C
1 25047U 97070C 97319.14177011 .15418202 12931-4 98767-4 0 212
2 25047 51.6306 302.7054 0011413 329.7985 30.1827 16.53074858 407
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2 25048 0.0584 308.4228 0015232 0.9497 50.5538 0.99608330 124
Sirius 2
1 25049U 97071A 97331.03337384 .00000101 00000-0 00000+0 0 271
2 25049 1.1068 71.4461 0037006 217.2791 153.9118 1.00693884 171
Cakrawarta 1
1 25050U 97071B 97336.77679977 -.00000326 00000-0 00000+0 0 344
2 25050 0.1601 56.0362 0013319 42.4933 0.3216 1.00187937 240
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1 25051U 97071C 97341.24857369 .00035805 11267-5 20233-2 0 148
2 25051 6.9146 187.0251 7337260 198.1291 100.2130 2.24371523 550
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1 25052U 97071D 97340.61665564 .00038886 00000-0 51711-2 0 104
2 25052 6.9718 186.8281 7277467 197.7633 107.7351 2.30275623 551
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2 25053 47.5145 309.2693 7283574 6.4370 359.1966 2.25600628 562
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2 25054 47.4849 309.6818 7301787 6.0870 359.2697 2.26078531 525
RESURS-F1M
1 25059U 97072A 97341.90971293 .00089673 23721-5 10299-3 0 471
2 25059 82.3301 229.9663 0024501 73.3448 287.0521 16.08253079 3142
1997072B
1 25060U 97072B 97325.03414774 .25094872 -12234-5 11916-3 0 238
2 25060 82.3279 249.7319 0016709 352.4488 8.8532 16.55760951 425
TRMM
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2 25063 35.0016 340.4468 0010930 22.2072 337.9118 15.65920110 1621
Hikoboshi
1 25064U 97074B 97342.21293925 .00010346 00000-0 22887-3 0 155
2 25064 34.9718 343.3407 0116861 282.4235 76.3651 15.35942838 1540
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1 25065U 97074C 97338.48976408 .00024491 00000-0 46003-3 0 123
2 25065 34.5471 8.1998 0116651 250.5423 108.2653 15.40339390 967
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2 25066 34.9964 343.3627 0006614 244.4536 115.5484 15.72418068 1527
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1 25067U 97075A 97342.03472222 -.00000282 00000-0 00000+0 0 55
2 25067 0.1554 260.1772 0005794 130.3531 198.1875 1.00308425 128
Equator-S
1 25068U 97075B 97338.51019628 -.00000013 00000-0 00000+0 0 64
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2 25069 3.9632 229.7072 7373128 183.0536 166.5768 2.20162581 100
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1 25070U 97075D 97337.19516347 .00041144 00000-0 54718-2 0 34
2 25070 3.9957 232.3687 7295586 178.2220 188.8454 2.28002832 09
Astra 1G
1 25071U 97076A 97339.58128818 -.00000110 00000-0 00000+0 0 56
2 25071 12.2108 71.1127 4298528 0.1714 179.9222 1.70216361 44
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1 25072U 97076B 97339.21647117 .55708376 12821-4 20715-3 0 151
2 25072 51.5841 56.0666 0011435 248.9398 111.0352 16.57140173 376
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1 25073U 97076C 97337.63161823 .21250391 12459-4 11722-2 0 56
2 25073 51.5815 65.0087 0015672 277.8941 82.0443 16.40856849 102
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1 25074U 97076D 97338.11609809 -.00000104 00000-0 00000+0 0 43
2 25074 12.3535 71.1137 4381576 0.4410 359.7146 1.71856814 19
1997077A
1 25077U 97077A 97342.34512382 .00000448 -14072-5 00000+0 0 13
2 25077 86.2673 121.8276 0501798 158.1417 205.1439 15.51936380 04
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Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

2994. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <348C6335.3CE7@mail.rancho.cc.ca.us>
Source record: 17466
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:
>
> DavidC wrote:
[snip]

> At any rate, if all it took was hard work (IE earning) to become
> wealthy and powerful, why are there more white collar criminals
> than blue collar millionaires?

> Wirehead

You don't know what you're talking about.
Your 'question' assumes that there are, but you give absolutely no
proof.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@

2995. Where are u wa6wdx?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-08 00:00:00 UTC
From: xe2kaf <xe2kaf@tamnet.com.mx>
Message-ID: <66icuv$4rg$1@hp.fciencias.unam.mx>
Source record: 17467

Hey George I�m still looking for you, in the hf and even by this mailing
way, sending you a lot of messages but never answer so if you can read this
please send me your correct e-mail!!!
wa6wdx@aol.com ??????de xe2kaf@tamnet.com.mx

2996. Re: Freedom of DX'ing, of all TV and radio

Newsgroup: rec.radio.amateur.space
Date: 1997-12-09 00:00:00 UTC
From: "Lou Paris, Jr." <LTParis@worldnet.att.net>
Message-ID: <66ip93$aaq@bgtnsc01.worldnet.att.net>
Source record: 17468
Cross-posted to: alt.radio.pirate,rec.radio.amateur.space

This was not just for pirate radio, but in general radio and television liscenses. Same with amature radio. Why shold someone wanting to talk on the amature band have to pay the FCC to be allowed to DX? I aknowlege that there should be limits to power, and most other FCC ruled to date, but why the cost? The FCC get's millions just from the government to operate, and get billions form amature and commercial radio and tv. I think it's just not right.
Anyways, I was just responding to a message, and it had multiple recipiants, including rec.radio.amateur. But i still stand in my beliefs.

>Another flippin' thread that has NOTHING to do with most of the newsgroups that
>you are flooding with it.
>
>LEARN HOW TO USE YOUR FREAKIN' NEWSREADER TO ONLY POST TO ONE , RELEVANT, GROUP
>AT A TIME!!!!!!!!! THOSE OF US IN REC.RADIO.AMATEUR. SPACE HAVE NO INTEREST IN
>YOUR PIRATE RADIO OPINIONS!!!!!!!!!!!!!!!!!!
>

2997. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-09 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348D0FD8.4023@raccoon.com>
Source record: 17469
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

John Lundgren wrote:
>
> WireHead Prime wrote:
> >
> > DavidC wrote:
> [snip]
>
> > At any rate, if all it took was hard work (IE earning) to become
> > wealthy and powerful, why are there more white collar criminals
> > than blue collar millionaires?
>
> You don't know what you're talking about.
> Your 'question' assumes that there are, but you give absolutely no
> proof.

John,

So you're saying that there are more blue collar millionaires than
white collar criminals???

Let's analyze, shall we?

Ok...how does one become a blue collar millionaire? Well, it's virtually
impossible through hard work alone. A person could probably acquire a
tidy savings but it'd take YEARS or even DECADES to do so. They could
invest their money but only a small percentage of the time would that
investment lead to wealth rather than no movement in net worth or financial
ruin.

One could inherit the money...but if there was that much money in the
family one would wonder why you'd be blue collar in the first place unless
it was a distant relative, in which case it'd be very unlikely you'd get any
significant portion of the estate...in either case, the chances of inheriting
a million bucks are very very slim.

The final two ways I can see for a blue collar worker to get a million bucks
are to win the lottery, which hardly constitutes EARNING the money as much as
it does just getting lucky (although I suppose they earned the investment
capital necessary to buy the tickets to win), or to file a legitimate or
phoney insurance claim of some sort, which itself hardly constitutes hard work.

I'm going to guestimate a bit but I think it'll be reasonable:

Odds of Any Particular Blue-Collar Worker Becoming a Blue-Collar Millionaire

Hard Work: nil
Inheritance: 1/[20(+/-10)] (and I'm being MORE than fair here)
Lottery: EXTREMELY Low Odds by definition
Insurance: 1/10 maybe or less

So basically, it's pretty darned hard to become a blue collar millionaire.

On the other hand, according to American corporations white collar crime is not only a HUGE problem but a GROWING problem. On Discovery last night on the Justice Files they were talking about just shoplifting, not technically a white collar crime mind you but still indicative. They said the average shoplifter steals $90 worth of merchandise while an internal thief steals $300 or more worth of merchandise. At one job I had, the managers were finally caught stealing hundreds of dollars and thousands of dollars worth of (food) merchandise. With S&L Scandals, fraudulant home equity loan schemes, embezzlement (at my current company the previous book-keeper made off with $20,000 or so, ended up in jail but we never saw the money again) and even (though I find it harder to believe than Conservatives just cry-babying over a Democrat getting elected President) the President is accused of white-collar crime, I find it difficult to understand (unless you are extremely mentally challenged, John) how you could believe that blue collar millionaires could outnumber white collar criminals.

The point being that hard work alone and "earning privileges" cannot account for millionaires. There are a very few who did it through hard work but most inherited their initial investment capital from rich daddy (they were never blue collar to begin with) or broke one or more laws (usually tax evasion at the very least) to get where they are. Or they did it through highly unethical circumstances though not technically illegal. Bill Gatus of Borg basically stole the design for MS-DOS from Digital Research (ever notice how much it looks like CP/M...I wonder why?) and then screwed over IBM in his rise to power. Just because IBM deserved it, maybe, doesn't make it right for Bill to have done it.

In either case, John, if all you're going to do is sit around and repeat the party line and protect the wealthy and the powerful with your words, then don't accuse me of having no proof. Especially, when what comes out of your keyboard is so absurd. Basically, this whole thread got started because, like the good Puritans, the greatest concern of hams is that somewhere somebody is having a good time and you MUST put a stop to it...unless, of course, they're officially licensed to be part of your little fraternal club. Do no-code techs have to carry around little paddles with their call-signs on them?

Face it. You don't give a damn what I say, no matter how well-reasoned it is. All you care about is proving me wrong because I'm not you. I, on the other hand, only care about making America more free and convincing you to stop trying to stop me.

Wirehead

2998. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-09 00:00:00 UTC
From: Richard Santiago <rsantiago1@hotmail.com>
Message-ID: <66jn86$8mb@suriname.earthlink.net>
Source record: 17470
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

EXCUSE ME....WHAT DOES THIS HAVE TO DO WITH THIS STRING? THIS SUBJECT? THIS
NEWSGROUP? THIS INDUSTRY? I NEVER THOUGHT THAT
"Making a Los power FM transmitter" COULD GENERATE
SO MUCH.....WELL, YOU UNDERSTAND.

>So you're saying that there are more blue collar millionaires than
>white collar criminals???
>
>Let's analyze, shall we?

2999. CQ MAGAZINE $15/yr; 73 MAGAZINE $15/yr...others

Newsgroup: rec.radio.amateur.space
Date: 1997-12-10 00:00:00 UTC
From: edhowell@aol.com
Message-ID: <19971210010600.UAA01141@ladder01.news.aol.com>
Source record: 17471

Popular Communications just $11/yr. Over 600 titles in every category. Save money on all your radio, computer, family, business magazines! E-mail me list of titles you are interested in and I will return price quotes within few hours. Thanks. You'' save money and help a pore boy at same time!
Merry Christmas Ed W4SOD

3000. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-10 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <348EBF99.6349@mail.rancho.cc.ca.us>
Source record: 17472
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:
>
> John Lundgren wrote:

> > WireHead Prime wrote:

> > > DavidC wrote:
> > [snip]

> > > At any rate, if all it took was hard work (IE earning) to become
> > > wealthy and powerful, why are there more white collar criminals
> > > than blue collar millionaires?

> > You don't know what you're talking about.
> > Your 'question' assumes that there are, but you give absolutely no
> > proof.

> John,

> So you're saying that there are more blue collar millionaires than
> white collar criminals???

> Let's analyze, shall we?

I wouldn't trust your analysis if it was the last thing on earth.

> Ok...how does one become a blue collar millionaire? Well, it's virtually
> impossible through hard work alone.

I worked for one as an apartmnent manager. I grew up with his sons. He
worked for McDonnell Douglass and never rose higher than lead man (if
that isn't blue collar, I don't know what is). He and his family bought
and owned three apatrment buildings where I lived, he owned his
residence (in a well-to-do part of the town) and also another house and
apartment building.

He sold each of the three ten-unit apartment buildings, alone, for a
half million each, now,

IF THAT DOESN'T MAKE HIM A MILLIONAIRE, YOU'RE TOTALLY CLUELESS.

[totally clueless BS snipped]

> Face it. You don't give a damn what I say, no matter how well-reasoned it is.

I just received a page, and I consider that more important than the crap
you're saying.

I just proved you WRONG. Why, because you're wrong, that's all. Wrong reasoning. You're even afraid to come out and use your real name.

Good bye, Schmuck.

> Wirehead

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@

3001. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-10 00:00:00 UTC
From: Bill <billr*@no.net>
Message-ID: <348ED644.2E20@no.net>
Source record: 17473
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

David L Pearce wrote:
>
> WireHead Prime wrote:
>
> > Wow! You really put me down.
>
> I have you ever listened to yourself and tried to decide what age you are? You sound
> 13-ish/14-ish. We could care less that you are breaking the law as long as we don't
> pick up your reception. But if we ever do, you will have infringed on our rights, and
> at that moment you will reported and your expensive equipment, most likely
> confiscated. There will be no warning . . .
>
> I would encourage you not to transmit, as is typical with extremist liberals that
> claim to have all the "fun" (especially those of a teenage vintage), we the middle
> class consisting of BOTH minorities and whites (wanted to make sure that fact was
> clear before you jump on top of your racial soap box again), have to pay the bill if
> the FCC has to send agents out to pay you a visit, and even more if you are sent to
> prison. Which again, is another infringement upon our rights. So before you go
> claiming your rights, you had better think about whose and what rights you are taking
> away in the process. Or are you so self righteous that you can decide what rights of
> ours you may infringe upon to satisfy your own desire to have "fun"? Remember, we (who
> are official amateurs) earned the right to transmit, you didn't . . .
>
> Sincerely,
>
> David Pearce
> dlpearce@eos.ncsu.edu

David, you will get nowhere trying to reason with this moron. He should
change his title to Dumbhead Prime. He is just one of the current
generation that crys and screams about his "rights" like he has a right
to everything he wants and dosen't think anyone should ever have to earn
a priviledge to do anything.

3002. Re: Freedom of DX'ing (was Re: Making a Low power FM transmitter)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-10 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <348d254b.3796378@news.gv.net>
Source record: 17474
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

"Lou Paris, Jr." <LTParis@worldnet.att.net>
shared these priceless pearls of wisdom:

->Well my $0.02. I agree. I think that for one the FCC should be either
->reorganized or aboished to some extent. The I idea of goverment charging
->rediculous fees to give you the right of broadcasting is
unconstitutional.
->Now I could see them regualting so you don't overpower the airwaves with
->overmodualtion, and carving out a channel in the airwaves for you to DX
on,
->but the fees should be like $25 flat. That's it. But some of these fees
or
->overwhelming.

I'm certainly glad we didn't overspend our "fees" on your education.

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

3003. Is MIR still Active ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: l38217@alfa.ist.utl.pt
Message-ID: <66p7r5$ug8$1@ci.ist.utl.pt>
Source record: 17381

Hello !
I just would like to know if MIR is still operative on packet.
Is the frequency still the same 145.800MHz ?
Is the speed 1200 Bauds ?
I have talked with an ham that has made contact with them but
it was a long time ago, that's why I'm asking.
Also, where can I find some keplerian data about the sattelites
and and MIR.

73 !
--

Pedro Pedroso	
l38217@alfa.ist.utl.pt	CT1ELP
Eng. Electrotecnica e Computadores	Founder member of GPDX
(Telecomunicacoes e electronica)	

| Address: P.O.Box 116 , 2806 Almada Codex , PORTUGAL |

3004. Learn about Amateur Television (ATV)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: wb6izg@qsl.net
Message-ID: <348f473c.4458053@news.adnc.com>
Source record: 17475
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I invite you to visit my web site to learn about ATV. If you have always been curious about real television that hams use to communicate with each other then this site is for you. View a video of a television net, see pictures and data of the ATV repeater in southern CA., view videos of a balloon launch and rocket launch having ATV, and visit links to most ATV related sites around the world.

Site is www.qsl.net/wb6izg

See you there,

Bruce Forsberg
WB6IZG

ATV Home Page: http://www.qsl.net/wb6izg
Email: wb6izg@qsl.net

3005. N4OKL Web page update

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: John Harmon <n4okl@amsat.org>
Message-ID: <66ol37$bp0$1@news.iag.net>
Source record: 17476

Hello all,
I have updated my Amateur Radio and Satellite web page at
http://www.newwave.net/~jharmon/
and would like you to check it out.
Thanks. de John - N4OKL

3006. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <348FADD8.3D73@raccoon.com>
Source record: 17477
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Wow! You really put me down. You proved the existence of a WHOLE blue collar millionaire. YOU ONLY HAVE TO DO THAT A FEW HUNDRED THOUSAND MORE TIMES TO OUTWEIGH THE NUMBER OF PROVEN WHITE COLLAR CRIMINALS IN THE MEDIA EVERY DAY!

Clearly you can neither read nor go much past what the 700 Club and your goose-stepping friends tell you to think. I could never reason with you however hard I tried. You don't think I'm wrong because I am. You think I'm wrong because you're threatened by anything and anyone that isn't JUST LIKE YOU.

You're nothing but a feckless Nazi with no courage. I'm hiding behind an alias? I'm on the Internet you dullard! I'm no harder to find than you are! That is if you can resolve your rectal cranial insertion long enough to have a little chat with a search engine.

You know...none of this thread would've happened if you hadn't had to just LEAP UP on your soapbox and inform people of your obviously superior knowledge that pirate radio is illegal, which it STILL ISN'T. It's still a violation of Federal Regulations which, in itself, is STILL NOT A CRIME unless such violations are willful and continued!

By the way, you know how the ARRL Handbook and other sources say to keep one hand in your pocket when you're working on a rig? That rule doesn't apply to you. Go right ahead and stick both of those self-satisfiers right into that rig. Electricity can't hurt you any more than your own stupidity, I guarantee it. Shock therapy might help you I suppose.

Wirehead

John Lundgren wrote:
>
> WireHead Prime wrote:
> >
> > John Lundgren wrote:
>
> > > WireHead Prime wrote:
>
> > > > DavidC wrote:
> > > [snip]
>
> > > > At any rate, if all it took was hard work (IE earning) to become
> > > > wealthy and powerful, why are there more white collar criminals
> > > > than blue collar millionaires?

>
> > > You don't know what you're talking about.
> > > Your 'question' assumes that there are, but you give absolutely no
> > > proof.
>
> > John,
>
> > So you're saying that there are more blue collar millionaires than
> > white collar criminals???
>
> > Let's analyze, shall we?
>
> I wouldn't trust your analysis if it was the last thing on earth.
>
> > Ok...how does one become a blue collar millionaire? Well, it's virtually
> > impossible through hard work alone.
>
> I worked for one as an apartmnent manager. I grew up with his sons. He
> worked for McDonnell Douglass and never rose higher than lead man (if
> that isn't blue collar, I don't know what is). He and his family bought
> and owned three apatrment buildings where I lived, he owned his
> residence (in a well-to-do part of the town) and also another house and
> apartment building.
>
> He sold each of the three ten-unit apartment buildings, alone, for a
> half million each, now,
>
> IF THAT DOESN'T MAKE HIM A MILLIONAIRE, YOU'RE TOTALLY CLUELESS.
>
> [totally clueless BS snipped]
>
> > Face it. You don't give a damn what I say, no matter how well-reasoned it is.
>
> I just received a page, and I consider that more important than the crap
> you're saying.
> I just proved you WRONG. Why, because you're wrong, that's all. Wrong
> reasoning. You're even afraid to come out and use your real name.

3007. **Free radio club publicity

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: n9vjg@aol.com
Message-ID: <19971211140500.JAA00868@ladder01.news.aol.com>
Source record: 17478

Dear radio hobby club volunteer:

FBOM Magazine Online, the interactive version of FBOM Magazine, is offering to post information about your non-profit radio club's hamfests, jamborees and other large radio hobby-related events free of charge on our web site http://n-lemma.com/FBOM/.

The only strings attatched are that your club is a non-profit organization and you can use some extra publicity.

These listings will be continously updated. As an added incentive for others to rely on the listings, we will contact you 2 weeks prior to your event and put a "Confirmed or not confirmed by FBOM" stamp on the listing.

Please send us information about your club's fundraising events as soon as possible. You can also use a form on the our web site. Simply click any references to "Hamfest listings."

For any questions, email the Publisher, Eric Bond, N9VJG n9vjg@n-lemma.com or the Webitor, Chuck Brown, N9UPO n9upo@n-lemma.com.

Feel free to spread the word to other radio hobby-related clubs and organizations--especially those who do not have internet access. Our mailing address:

FBOM
P.O. Box 7711
Westchester, IL 60154-7711

Thank you and 73s

Eric Bond, N9VJG W.C.
Janitor and Publisher
FBOM Magazine Online

Eric, N9VJG
n9vjg@n-lemma.com
http://n-lemma.com/FBOM/

3008. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: David L Pearce <dlpearce@eos.ncsu.edu>
Message-ID: <349005DD.2A93A24@eos.ncsu.edu>
Source record: 17479
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

WireHead Prime wrote:

> Wow! You really put me down.

I have you ever listened to yourself and tried to decide what age you are? You sound 13-ish/14-ish. We could care less that you are breaking the law as long as we don't pick up your reception. But if we ever do, you will have infringed on our rights, and at that moment you will reported and your expensive equipment, most likely confiscated. There will be no warning . . .

I would encourage you not to transmit, as is typical with extremist liberals that claim to have all the "fun" (especially those of a teenage vintage), we the middle class consisting of BOTH minorities and whites (wanted to make sure that fact was clear before you jump on top of your racial soap box again), have to pay the bill if the FCC has to send agents out to pay you a visit, and even more if you are sent to prison. Which again, is another infringement upon our rights. So before you go claiming your rights, you had better think about whose and what rights you are taking away in the process. Or are you so self righteous that you can decide what rights of ours you may infringe upon to satisfy your own desire to have "fun"? Remember, we (who are official amateurs) earned the right to transmit, you didn't . . .

Sincerely,

David Pearce
dlpearce@eos.ncsu.edu

3009. mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-11 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <34904030.8F53C2CB@indigo.ie>
Source record: 17480

Could some kind and considerate individual please let me know where I
can get a circuit diagram for a low noise preamp that covers up to about
2GHz, preferably useing the mars6 IC.

Many Thanks

Terry Gaff

3010. AEA AT-1 Satellite Tracker

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: Bill Messier <bmessier@clinic.net>
Message-ID: <01bd06d3$81ace620$83d4e4cf@clinic>
Source record: 17382

I am looking for the Schematic and parts list for the AEA ST-1 Satellite Tracker. Could someone scan a copy of just the above and E mail it to me at: bmessier@clinic.net
Actually I want to home-brew some kind of satellite tracker that can be used with Insta Track software etc.
Thanks in advance. Bill Messier (K1MNW)

3011. Re: Is MIR still Active ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mlnxrrnai.fsf@spinner.ecofe.com>
Source record: 17383

I just would like to know if MIR is still operative on packet.
Is the frequency still the same 145.800MHz ?

I've intermittently heard packet, mostly on the late evening passes
PST (~0700Z) on 145.985 MHz, but i have no idea if they're listening
there or on 437.850 MHz as previously announced. I've not gotten
MIR/SAFEX to respond during the past several days, so i suspect that
the uplink may be 437.850 MHz or some similar frequency in the 70cm
space sub-band. Also note that Mir runs on Moscow time, and they may
only run packet when someone's awake (and in the past, it's been visa
versa).

Is the speed 1200 Bauds ?

I believe so. Someday, they may try 9600 thru SAFEX, but that's only
a previously described capability, not anything that's been mentioned
since the original equipment description.

I have talked with an ham that has made contact with them but
it was a long time ago, that's why I'm asking.
Also, where can I find some keplerian data about the sattelites
and MIR.

I've not heard voice from MIR since John was up there (i forget the call)
but others have described long contacts with the previous American on Mir.
I haven't heard much about the current resident. Maybe others can answer
both questions.
-- KD6PAG (Networking Old-Timer, RF newbie)

http://qsl.net/kd6pag/AO-27.html [Skeds invited; QRV CM87 & nearby grids]
http://qsl.net/kd6pag/MIR.html

3012. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <34910B0B.2870@raccoon.com>
Source record: 17384
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Well, if nothing else, perhaps I kept you folks busy for a few days so you'd have less time to run around with your little DF rigs seeking out 'evil pirates' and turning them in.

Maybe I am immature (BTW, I am quite middle class and nobody ever gave me ANYTHING) but I'll tell you what...you're certainly no better.

In fact, even if I'm totally wrong and misled...at least my heart's in the right place. At least I care about someone other than myself. At least I don't just sit around smugly telling everyone, "That's the way the world is...it sucks... and I'm going to make sure it sucks more for you than it does for me." You'd call me immature even if I weren't.

I've received ALOT of mail messages saying, "Yeah I agree with you but why are you bothering with those guys?" Frankly, they're right. And I've forced you to reveal what you truly are. You're so vile I don't even have a name for you.

So I'm going to prove that I'm the bigger man...and end this thread. You want the last word, here's your chance. You just go ahead and take out all your hatred and self-righteous feelings on me. You may say that I let it go on too long, but so did you. So you just lay into me with all that anger that you've got bottled up inside. Who knows? Maybe you'll get it out of your system enough that your wife, your children or that innocent (gay/lesbian/black/white/asian/buddhist/whatever) will be spared your rage for one evening.

I have the courage to do something you haven't done: Give you the last word.

Wirehead

David L Pearce wrote:
>
> WireHead Prime wrote:
>
> > Wow! You really put me down.
>
> I have you ever listened to yourself and tried to decide what age you are? You sound
> 13-ish/14-ish. We could care less that you are breaking the law as long as we don't
> pick up your reception. But if we ever do, you will have infringed on our rights, and
> at that moment you will reported and your expensive equipment, most likely
> confiscated. There will be no warning . . .
>
> I would encourage you not to transmit, as is typical with extremist liberals that
> claim to have all the "fun" (especially those of a teenage vintage), we the middle
> class consisting of BOTH minorities and whites (wanted to make sure that fact was

> clear before you jump on top of your racial soap box again), have to pay the bill if
> the FCC has to send agents out to pay you a visit, and even more if you are sent to
> prison. Which again, is another infringement upon our rights. So before you go
> claiming your rights, you had better think about whose and what rights you are taking
> away in the process. Or are you so self righteous that you can decide what rights of
> ours you may infringe upon to satisfy your own desire to have "fun"? Remember, we (who
> are official amateurs) earned the right to transmit, you didn't . . .
>
> Sincerely,
>
> David Pearce
> dlpearce@eos.ncsu.edu

3013. FS: RADIOS/EQUIP.

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bd0727$38d5da20$a5c1acd1@restar.idir.net>
Source record: 17385
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
HAM RADIOS and EQUIPMENT
FOR SALE
FT 757GXII= $900 (LOW $700)
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300 (SOLD)
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200 (SOLD)
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

3014. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: Howard and Kelly Lute <OptCamel@sj.bigger.net>
Message-ID: <3491D7ED.6D4CC385@sj.bigger.net>
Source record: 17386
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Wirehead...just let this bozo go, he's so obviously "right" in his beliefs, he doesn't get it at all. The airwaves belong to us all equally, licenses or not. We didn't invent the frequency spectrum and who are we to give it to the corporate bastards and thier appologists? Thanks Wirehead for your stand.
friend,
Lute

WireHead Prime wrote:

> Well, if nothing else, perhaps I kept you folks busy for a few days so you'd have
> less time to run around with your little DF rigs seeking out 'evil pirates' and
> turning them in.
>
> Maybe I am immature (BTW, I am quite middle class and nobody ever gave me ANYTHING)
> but I'll tell you what...you're certainly no better.
>
> In fact, even if I'm totally wrong and misled...at least my heart's in the right
> place. At least I care about someone other than myself. At least I don't just
> sit around smugly telling everyone, "That's the way the world is...it sucks...
> and I'm going to make sure it sucks more for you than it does for me." You'd call
> me immature even if I weren't.
>
> I've received ALOT of mail messages saying, "Yeah I agree with you but why are you
> bothering with those guys?" Frankly, they're right. And I've forced you to reveal
> what you truly are. You're so vile I don't even have a name for you.
>
> So I'm going to prove that I'm the bigger man...and end this thread. You want the
> last word, here's your chance. You just go ahead and take out all your hatred and
> self-righteous feelings on me. You may say that I let it go on too long, but so
> did you. So you just lay into me with all that anger that you've got bottled up
> inside. Who knows? Maybe you'll get it out of your system enough that your wife,
> your children or that innocent (gay/lesbian/black/white/asian/buddhist/whatever)
> will be spared your rage for one evening.
>
> I have the courage to do something you haven't done: Give you the last word.
>
> Wirehead
>
> David L Pearce wrote:
> >
> > WireHead Prime wrote:
> >
> > > Wow! You really put me down.

> >
> > I have you ever listened to yourself and tried to decide what age you are? You sound
> > 13-ish/14-ish. We could care less that you are breaking the law as long as we don't
> > pick up your reception. But if we ever do, you will have infringed on our rights, and
> > at that moment you will reported and your expensive equipment, most likely
> > confiscated. There will be no warning . . .
> >
> > I would encourage you not to transmit, as is typical with extremist liberals that
> > claim to have all the "fun" (especially those of a teenage vintage), we the middle
> > class consisting of BOTH minorities and whites (wanted to make sure that fact was
> > clear before you jump on top of your racial soap box again), have to pay the bill if
> > the FCC has to send agents out to pay you a visit, and even more if you are sent to
> > prison. Which again, is another infringement upon our rights. So before you go
> > claiming your rights, you had better think about whose and what rights you are taking
> > away in the process. Or are you so self righteous that you can decide what rights of
> > ours you may infringe upon to satisfy your own desire to have "fun"? Remember, we (who
> > are official amateurs) earned the right to transmit, you didn't . . .
> >
> > Sincerely,
> >
> > David Pearce
> > dlpearce@eos.ncsu.edu

3015. Re: Is MIR still Active ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <3491DD7F.28BC@icss.net>
Source record: 17387

John Mock wrote:
>
> I just would like to know if MIR is still operative on packet.
> Is the frequency still the same 145.800MHz ?
>
> I've intermittently heard packet, mostly on the late evening passes
> PST (~0700Z) on 145.985 MHz, but i have no idea if they're listening
> there or on 437.850 MHz as previously announced. I've not gotten
> MIR/SAFEX to respond during the past several days, so i suspect that
> the uplink may be 437.850 MHz or some similar frequency in the 70cm
> space sub-band. Also note that Mir runs on Moscow time, and they may
> only run packet when someone's awake (and in the past, it's been visa
> versa).
>
> Is the speed 1200 Bauds ?
>
> I believe so. Someday, they may try 9600 thru SAFEX, but that's only
> a previously described capability, not anything that's been mentioned
> since the original equipment description.
>
> I have talked with an ham that has made contact with them but
> it was a long time ago, that's why I'm asking.
> Also, where can I find some keplerian data about the sattelites
> and MIR.
>
> I've not heard voice from MIR since John was up there (i forget the call)
> but others have described long contacts with the previous American on Mir.
> I haven't heard much about the current resident. Maybe others can answer
> both questions.
> -- KD6PAG (Networking Old-Timer, RF newbie)
>
> http://qsl.net/kd6pag/AO-27.html [Skeds invited; QRV CM87 & nearby grids]
> http://qsl.net/kd6pag/MIR.html

I am unable to keep up with the frequent changes in frequency, operating
mode, and the repeater (is it safex?). Its not fun anymore.
Brian/N0iMD

3016. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: Yik Feng Tan <yftan@acs.ucalgary.ca>
Message-ID: <66t47e$8ve@ds2.acs.ucalgary.ca>
Source record: 17388
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

I agree!

On Mon, 8 Dec 1997, mike lamet wrote:

> WHY DONT YOU ALL JUST SHUT UP OR PUT THIS CRAP ON A NEWS GROUP THAT
> CARES!!!!!!!
>
>

3017. subscribe

Newsgroup: rec.radio.amateur.space
Date: 1997-12-12 00:00:00 UTC
From: sp1wsx@polbox.COM
Message-ID: <199712130809.JAA30145@mx1.polbox.com>
Source record: 17389

SP1WSX
Tomasz Rzepecki
Uznam Isl. (EU-129)
POLAND

3018. Re: Is MIR still Active ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: Adrian Wallace <awallace@riverland.net.au>
Message-ID: <3493476B.63F3@riverland.net.au>
Source record: 17390

John Mock wrote:
>
> I just would like to know if MIR is still operative on packet.
> Is the frequency still the same 145.800MHz ?
>
> I've intermittently heard packet, mostly on the late evening passes
> PST (~0700Z) on 145.985 MHz, but i have no idea if they're listening
> there or on 437.850 MHz as previously announced. I've not gotten
> MIR/SAFEX to respond during the past several days, so i suspect that
> the uplink may be 437.850 MHz or some similar frequency in the 70cm
> space sub-band. Also note that Mir runs on Moscow time, and they may
> only run packet when someone's awake (and in the past, it's been visa
> versa).
>
> Is the speed 1200 Bauds ?
>
> I believe so. Someday, they may try 9600 thru SAFEX, but that's only
> a previously described capability, not anything that's been mentioned
> since the original equipment description.
>
> I have talked with an ham that has made contact with them but
> it was a long time ago, that's why I'm asking.
> Also, where can I find some keplerian data about the sattelites
> and MIR.
>
> I've not heard voice from MIR since John was up there (i forget the call)
> but others have described long contacts with the previous American on Mir.
> I haven't heard much about the current resident. Maybe others can answer
> both questions.
> -- KD6PAG (Networking Old-Timer, RF newbie)
>
> http://qsl.net/kd6pag/AO-27.html [Skeds invited; QRV CM87 & nearby grids]
> http://qsl.net/kd6pag/MIR.html
Check out Space News..... I reckon I saw where they have changed to a
split mode 2M/70cm.
Adrian.

--

3019. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: Buster <BBusterB@cowcentric.net>
Message-ID: <349254C1.D043AFFE@cowcentric.net>
Source record: 17391
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Bill wrote:
>
> David, you will get nowhere trying to reason with this moron. He should
> change his title to Dumbhead Prime. He is just one of the current
> generation that crys and screams about his "rights" like he has a right
> to everything he wants and dosen't think anyone should ever have to earn
> a priviledge to do anything.

Bill, you write the best truism of reality that has been
expressed on the "I wanna" alt.radio.pirate group.

Thank you.

BB

--

Laisser les bon rouller!

3020. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: Buster <BBusterB@cowcentric.net>
Message-ID: <34925987.4BF92EEF@cowcentric.net>
Source record: 17392
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.pirate

Is this a troll of pithy?

WireHead Prime wrote:
-
- Well, if nothing else, perhaps I kept you folks busy for a few days so
you'd have
- less time to run around with your little DF rigs seeking out 'evil
pirates' and
- turning them in.
-

Paranoia? C'mon WireHead ...you don't need to go into
all the details of turmoil. Right?

[balanced snipped]

3021. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: vortec@--THESPAMMINATIOR--channel1.com
Message-ID: <66tmvkpju1@news1.channel1.com>
Source record: 17393
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Buster <BBusterB@cowcentric.net> sez:

>Bill wrote:
>>
>> David, you will get nowhere trying to reason with this moron. He should
>> change his title to Dumbhead Prime. He is just one of the current
>> generation that crys and screams about his "rights" like he has a right
>> to everything he wants and dosen't think anyone should ever have to earn
>> a priviledge to do anything.

>Bill, you write the best truism of reality that has been
>expressed on the "I wanna" alt.radio.pirate group.

WHOSE reality???????

--Y.R.N>

3022. Re: Is MIR still Active ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: Tom@astro.net
Message-ID: <66u36a$nd4$2@news.mhv.net>
Source record: 17394

In article <4mlnxrrnai.fsf@spinner.ecofe.com>, John Mock <kd6pag@nospam.mocha.ecofe.com> wrote:
>
> I just would like to know if MIR is still operative on packet.
> Is the frequency still the same 145.800MHz ?

They are experimenting with new freqs for the International space station.
For the next 3 months: UPLINK - 437.850 - DOWNLINK- 145.800.

>I've intermittently heard packet, mostly on the late evening passes
>PST (~0700Z) on 145.985 MHz, but i have no idea if they're listening
>there or on 437.850 MHz as previously announced. I've not gotten
>MIR/SAFEX to respond during the past several days, so i suspect that
>the uplink may be 437.850 MHz or some similar frequency in the 70cm
>space sub-band. Also note that Mir runs on Moscow time, and they may
>only run packet when someone's awake (and in the past, it's been visa
>versa).

Packet is run most of the time, even when they are asleep.

> Is the speed 1200 Bauds ?

Yes.

>I believe so. Someday, they may try 9600 thru SAFEX, but that's only
>a previously described capability, not anything that's been mentioned
>since the original equipment description.
>
> I have talked with an ham that has made contact with them but
> it was a long time ago, that's why I'm asking.
> Also, where can I find some keplerian data about the sattelites
> and MIR.

See my site, it's in my sig. Nasa's Spacelink site has them

>I've not heard voice from MIR since John was up there (i forget the call)
>but others have described long contacts with the previous American on Mir.
>I haven't heard much about the current resident. Maybe others can answer
>both questions.

John Blaha is KC5TZQ, I talked to him back in January. The crew has been
very busy lately and have NOT had time to get on the air. Also, they are
having trouble with an antenna as well.

-- KD6PAG (Networking Old-Timer, RF newbie)

73,
Tom

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division
APRS on 145.790 - Dutchess county,N.Y.

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

3023. New Award

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <3494ad0d.3787808@news.mindspring.com>
Source record: 17395

>There is a new ham radio award, the W.A.S.P. [Worked All States
>Portable] for those of us who travel.
>
>You can work any state from any location with the USA on any band,
>using any mode. QSL cards must indicate that you were portable at the
>time.
>
>Cards do not need to be submitted. Photo-copies are fine.
>Fee for Certificate is $5.00 plus a 9 x 12 SASE.
>
> W.A.S.P. AWARD
> c/o W4SCO
> 4135 LaVista Rd #610-104
> Tucker, GA 30084
>
>email: sco@sco-inc.com

3024. * SpaceNews 15-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1215.1997@ampr.org>
Source record: 17396
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1215
* SpaceNews 15-Dec-97 *

BID: $SPC1215

=========
SpaceNews
=========

MONDAY DECEMBER 15, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
On December 17/18, 1997 the mini-satellite INSPECTOR is scheduled to perform
several fly-arounds of MIR and PROGRESS. Live video will be made available
on the Internet.

Basically, INSPECTOR can be described as a free-flying, remote-controlled
video camera. It is an experimental testbed for servicing platforms designed
to support the construction of the future International Space Station.

More information is available on the World Wide Web at the following URL:

http://www.inspector.de/

* NEW TNC ON MIR *
==================
A new KAM dual mode packet radio terminal node controller (TNC) that was
recently sent to Mir from the MIREX team was tested on-board Mir last week.
The new TNC supports both 1200 as well as 9600 baud connections, and has a
message buffer size of 100 kilobytes -- substantially larger than that of
the PacComm TNC previously in use. 9600 baud communications will be
delayed until a suitable cable wired up and installed.

[Info via Dr. Dave Larsen, N6CO]

* PIONEER 10 NEWS *
===================
WASHINGTON (AP) -- A quarter-century after its launch, Pioneer 10 is still
helping astronomers explore the universe, but the little spacecraft is
slowly fading from radio contact and will be beyond the reach of even
the most sensitive antenna by Christmas next year.

"It will be kind of like losing an old friend," says John D. Anderson, a Jet Propulsion Laboratory scientist who helped build Pioneer 10.

Since its launch, six presidents have held office, wars have been fought and ended, the Soviet empire has crumbled, and astronauts who walked the moon have become old men. But Pioneer 10 is like that famous battery bunny -- it's still going.

Anderson, who watched Pioneer 10's launch in March 2, 1972, said the little spacecraft is now more than 6 billion miles from Earth, farther than any other machine ever. It is still streaking away at a speed of more than a half-million miles a day.

NASA scientists stopped sending instructions to Pioneer 10 earlier this year because its return signal was too weak to give clear data. The distance was so great that it took nine hours for a signal to reach the craft. But Anderson said Pioneer 10 can still send back a carrier wave, sort of a radio hum that lets the Earth know it's okay.

Anderson said NASA, using a 70-meter dish antenna designed for deep space communications, made the last contact on 30-Nov-97.

"It is still quite healthy," said Anderson. "It's just that the power source is so weak that you can't receive the data from scientific instruments."

All contact will be lost next year, he said, when the craft moves beyond the range of even the most sensitive equipment. The signal will fade and finally become undetectable.

"I've made a career of Pioneer 10 and will miss it," said Anderson. "It will be like losing something that you have a very personal attachment to. It's kind of like losing an old friend."

Pioneer 10 was launched as the first probe to Jupiter. After a close-up study of the giant planet, it was accelerated by the slingshot effect of Jupiter's gravity and gained enough speed to leave the solar system. Since then, it has moved past the orbits of Uranus, Neptune and Pluto, exited the solar system in 1983 and is now in what astronomers called the Kuipper Belt. To Pioneer 10, the sun is only a bright star.

A nuclear heater supplies power to Pioneer 10, and Anderson said the atomic element will continue to work for hundreds of years. In about 30,000 years, he said, the spacecraft will approach another star.

Anderson said the nation got "a bargain" from Pioneer 10's $100 million cost. It lasted far longer than expected and NASA has built up an extensive library of deep-space data from the craft.

"It will continue to benefit science for decades," he said. "All of that data has been archived and is available to anyone."

The Pioneer 10 data, he said, are enabling him and two other scientists to challenge the announced discovery of a planet that is said to orbit a pulsar star 1,200 light-years away.

Anderson said that by comparing the radio energy from the star and Pioneer 10, researchers found evidence that radiation from the sun was causing the radio waves to change slightly every 25 days. He said this change matched the rotation of the sun. This suggested that data interpreted by other researchers as evidence that a small planet orbited the distant pulsar may have been in error.

The electronic blip thought to represent a planet may, in fact, be caused by solar radiation, said Anderson.

Alexander Wolszczan of Pennsylvania State University, co-discover of that distant planet, said he still believes the planet is really there and that new studies will confirm that it is.

But he said he was delighted that Pioneer 10 was "still alive and doing well" and still helping out astronomers.

"It shows there is still some interesting science that can be done with Pioneer 10," said Wolszczan.

[Info via Paul Recer of the Associated Press]

* WEBERSAT-OSCAR-18 NEWS *
==========
Bob Argyle, KB7KCL reports that WEBERSAT-OSCAR-18 is gathering and sending Whole Orbit Data. The PHOTO task is being uploaded and the command team hopes to have pictures and spectra by about the 12th of December. WO-18's return to service is suspected to be seasonal in nature. Bob sends thanks to all those who have sent telemetry received from WO-18.

* FUJI-OSCAR-29 SCHEDULE *
==========
The following is the operating schedule for the FUJI-OSCAR-29 communication satellite:

12-Dec-97 at 08:11 UTC : Mode JD 9600
19-Dec-97 at 08:49 UTC : Digitalker
26-Dec-97 at 07:42 UTC : Mode JA
09-Jan-98 at 07:14 UTC : Mode JD 1200
16-Jan-98 at 07:52 UTC : Mode JD 9600
23-Jan-98 at 08:30 UTC : Mode JA
30-Jan-98 at 07:24 UTC : Mode JD 1200

[Info via Kazu Sakamoto, JJ1WTK]

* INTERNATIONAL SPACE STATION NEWS *
==========
NASA recently named the first team members to live and work aboard the International Space Station, and four crew members already hold amateur radio operator's licenses. In addition, several of the crew members are studying for their licenses.

The first crew will consist of American astronaut William M. Shepherd, as the expedition commander. Shepherd is currently studying for his license. He'll be accompanied by Russian cosmonauts Yuri Gidzenko and

Sergei Krikalev, U5MIR. The crew is training for an early 1999 launch and a planned five-month mission on the ISS.

The second crew, headed by Russian cosmonaut Yuri Usachev, R3MIR, will include US astronauts Susan Helms, KC7NHZ, and James S. Voss, who's indicated an interest in getting his ham license.

No licensed hams are among the third crew, which will be headed by astronaut Kenneth Bowersox and will include Russian crewmates Vladimir Dezhurov and Mikahil Turin. Bowersox also has said he'd like to get his ham license.

Russian cosmonaut Yuri Onufrienko will head the fourth crew. US astronauts Carl Walz, KC5TIE, and Daniel Bursch will accompany him.

AMSAT-NA's VP of Manned Space, Frank Bauer, KA3HDO, reports that the international team developing the ISS ham radio station is now working hard to incorporate a transportable ham station for ISS, and deliver this equipment to the Johnson Space Center in Houston, Texas for flight certification in June, 1998. Initially, ISS crews will inhabit the service module, which will include a ham radio antenna, with ham gear scheduled to be delivered aboard the STS-96 shuttle flight. Microsat/repeater payloads are tentatively scheduled to arrive in early 2002, expanding ham radio capability aboard the station.

[Info via the AMSAT News Service]

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

3025. Weather satellites - current activity

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: lawrenceh@peverell.demon.co.uk
Message-ID: <3493fa7e.16038805@news.demon.co.uk>
Source record: 17397

For those interested in the weather satellites (wwxsats) the following
are operational:

Polar orbiters:
NOAA-12 picture data on 137.50MHz and beacon on 136.77MHz.
NOAA-14 picture data on 137.62MHz and beacon on 137.77MHz.
Meteor 3-5 picture data in sunlight only on 137.85MHz.

Geostationary:
reception depends on longitude:
WEFAX transmissions on 1691.0MHz
Meteosat-6 (also WEFAX on 1694.5MHz)
Goes-8
Goes-9
GOMS
GMS
Fengyun-2 possibly.

Lawrence Harris

3026. REQUEST: looking for HI stations for sat qso

Newsgroup: rec.radio.amateur.space
Date: 1997-12-13 00:00:00 UTC
From: Erik van Bronkhorst <caseycct@ridgenet.net>
Message-ID: <3492B928.7DDD@ridgenet.net>
Source record: 17398

I have worked Alaska on both FO-20 and FO-29, now I would
like to get Hawaii.
I notice that passes between the west coast and Hawaii
are usually devoid of activity on these satellites.
I know there must be some hawaiian hams with satellite
gear over there!
I would also be willing to give AO-27 a shot.
73, and hang loose :)
--
Erik van Bronkhorst
CW/KotGT DoD#4342585443 AMA#438054
caseycct@ridgenet.net
http://www.ridgecrest.ca.us/~caseycct/erik/
http://www.2von.com
kc6uut@qsl.net
http://www.qsl.net/kc6uut/
kc6uut@wa6ybn.#soca.ca.usa.na

3027. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: robert@jtan.com
Message-ID: <EL6yIs.Myp@kd3bj.ampr.org>
Source record: 17399
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

**** <****@no.net> writes:

>Steve Quest wrote:

>>
>> I understand that the Netherlands tends to be the most free nation
>> on earth right now. I even understand the police in Amsterdam are
>> FRIENDLY and have go-tee's and long hair! :) I have yet to visit the
>> country, but if it is all that I hear it is, I'll be moving there if at
>> all possible. Just as my heroes (George Washington, Ben Franklin, Thomas
>> Jefferson) left their country (Great Brittan) to seek freedom, so shall I.
>>
>> sq
>>
>> --
>> -<squest@cris.com>---------\ ((|)) Amendment1 Congress shall make
>> ============================> /_\ no law abridging the freedom
>> MicroPower FM Broadcasting-/ /_/\ of speech, or of the press.

>Good, when are you going? Their loss will be our gain.

Maybe the Netherlands is freer in some respects. However, firearms laws
are much more restrictive. Example: A business associate from the
Netherlands was surprised at all the guns and ammunition sales around
here. He is a small-game hunter. He must store his gun at the police
station, sign it in and out, and if one of the clerical folks messes up on
the paperwork, he is held responsible, not the clerk who made the error.
Now, I do think the Dutch are much freer about sex, drugs, and rock 'n'
roll!

--
Robert Garland Amateur Radio Station NX3S
Hilltown Township Bucks County Grid FN20ii
Pennsylvania USA robert@jtan.com

3028. ANS-348 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <6724kk$6ud$1@news3.mr.net>
Source record: 17400

BJ Arts, WT0N, Amsat News Service editor
Daniel (Dan) James, NN0DJ, Amsat News Service Assistant editor

SB SAT @ AMSAT $ANS-348.01
26TH ANNUAL SKN ON OSCAR

HR AMSAT NEWS SERVICE BULLETIN 348.01 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.01

Amateur radio operators worldwide are cordially invited to join in the
26th annual Straight Key Night on OSCAR, sponsored by AMSAT-NA for
ham radio satellite enthusiasts.

According to Ray Soifer, W2RS, it's entirely unofficial with no rules, no
scoring and no need to send in a log. Just call CQ SKN in the CW passband
segment of any OSCAR satellite from 0000 to 2359 UTC on January 1,
1998, or answer a CQ SKN call from another station. OSCAR Zero (EME)
contacts count too.

Of course, all SKN operating must be done with a straight hand key.
Those participating are encouraged to nominate someone they
worked for recognition as having the "best fist." To send in a
"best fist" nomination, please send it to;

e-mail - w2rs@amsat.org

packet radio - W2RS @ WA2SNA or
W2RS @ GB7HSN

Regular mail can also be sent to the W2RS callbook address.
Those nominated will be featured in a bulletin sent to many of the
amateur radio publications and posted via ANS, packet radio and the
Internet in early February.

[ANS thanks Ray Soifer, W2RS, for this information]

SB SAT @ AMSAT $ANS-348.02
KC5VPF GETS EXTRA TIME ON MIR

HR AMSAT NEWS SERVICE BULLETIN 348.02 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.02

NASA has delayed next month's space shuttle flight to Mir, leaving
American astronaut David Wolf, KC5VPF, aboard the space station for

at least another few days. The shuttle Endeavour was supposed to blast off January 15, but NASA announced December 8 that January 20 will be the new launch date.

Wolf, who's been on Mir since late September, learned of the delay last weekend. The delay will give the Russian crew time to do additional work on Mir, including three spacewalks and the arrival of another supply ship. NASA also wants to check out problems discovered on the shuttle Columbia which returned to Earth last week after a two-week mission. Also, one of Endeavour's cargo bay doors accidentally was dented last week.

During the January mission, the Endeavour will pick up Wolf and drop off his replacement, Andy Thomas, KD5CHF. Thomas will be the last US astronaut to live aboard Mir.

[ANS thanks the ARRL for the bulletin.]

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SB SAT @ AMSAT $ANS-348.03
HAM SATELLITE FREQUENCIES OK AT WRC '97

HR AMSAT NEWS SERVICE BULLETIN 348.03 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.03

Frequency allocations used in amateur radio satellite communications fared well at the now concluded World Radio Conference (WRC 97) held in Geneva, Switzerland.

WRC 97 delegates did agree to upgrade the Earth Exploration Satellite Service from secondary to primary at 1215 to 1300 MHz, which should have only minimal impact on amateur use of 1240-1300 MHz. The presence of these satellites reduces the possibility that other, less-compatible services might later be introduced into this band.

In other allocation decisions, amateur satellite segments were not included among allocations for wind profiler radars. Except for a worldwide primary allocation at 1270 to 1295 MHz, the only specific allocations for wind profiler radars are in Region 1, and those are on a secondary basis.

Region 2 administrations were urged to implement wind profilers in radio location bands at 440 to 450 MHz, 904 to 928 MHz, 1270 to 1295 MHz and 1300 to 1375 MHz, while protecting amateur satellite and weak-signal operations. The delegates also agreed that the frequencies between 420 to 435 MHz or 438 to 440 MHz could be considered for use in situations where there was incompatibility between wind profiler radars and other radio applications. In this case, too, the amateur-satellite segment is protected.

For an in depth report on WRC 97, visit the ARRL's website at: www.arrl.org

[ANS thanks the ARRL and Amateur Radio Newsline for this information]

/EX

SB SAT @ AMSAT $ANS-348.04
PLYMOUTH BALLOON LAUNCH SUCCESSFUL

HR AMSAT NEWS SERVICE BULLETIN 348.04 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.04

Hank Riley, N1LTV, balloon launch Technical Director for PCIS-1,
a small, high altitude balloon with a tiny expendable 2 meter CW beacon
aboard, reports the balloon was launched December 9, 1997
under near perfect sky and wind conditions.

Winds were very light and Hank says the balloon rose gently almost
straight up and then off to the north. Optical contact (without even
binoculars for aid) was maintained for almost 20 minutes.

The beacon signal was picked up by N1LTV (at 24 statute miles distant)
within just minutes of launch using only a 2 meter FM handheld and a
four element beam. At 15 minutes into the flight, Hank was able to copy
the beacon with a rubber duck antenna attached to the HT.

N1LTV is awaiting QSL reports. Several trackers have signal records
covering well over an hour of beacon transmissions. Hank also reminds
stations that it's also quite valuable to hear from those stations who
attempted to copy the balloon and did not. This will aid in the effort
to understand signal conditions during the flight.

An SASE if required if you'd like a Balloon QSL card. N1LTV asks
stations to include information about your receiving and antenna
equipment, as it will be useful for the post-flight analysis. Hank reports
his callbook address should be used for all QSL requests.

[ANS thanks Hank Riley, N1LTV for this information]

/EX

SB SAT @ AMSAT $ANS-348.05
T49C NEWS

HR AMSAT NEWS SERVICE BULLETIN 348.05 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.05

Mike, N1JEZ, reports that if you were fortunate enough to work T49C via
satellite last November, you should check out their Web site at:

http://sk7do.te.hik.se/clubs/sk0ux/T48RCT.html

There is an "electronic" QSL server online. Search for your call. When
it comes up, select it and download a .PS file (Postscript). Send this to

your printer and you will have a QSL card. The satellite contacts made by T49C were in addition to the over 8,000 HF contacts the DXpedition made from the rare Cuban grid square (FL 11) during the CQ WW CW contest.

[ANS thanks Goran, SM0DRD, and Mike, N1JEZ for this information]

/EX

SB SAT @ AMSAT $ANS-348.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 348.06 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.06

MIR
As part of ongoing frequency experiments to improve Amateur Radio operations on board MIR, and to better understand how these frequencies will be effective on the International Space Station, MIR will begin a 2-phase frequency experiment beginning December 1, 1997 and ending on May 31, 1997.

For phase 1, a 70cm/2m crosslink experiment will operate for a 3 month period from December 1, 1997 up to March 1, 1998.

On December 1, 1997 the MIR operating frequencies will change to:

Uplink: 437.850 MHz Downlink: 145.800 MHz

Phase 2 of this experiment will use a 2 meter-only set of uplink and downlink frequencies. This phase of the experiment will begin on March 1, 1998 and will also be of 3 months duration.
[ANS thanks the MIREX team for this information]

SAFEX, MIR 70cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
The SAFEX activity very intermittent.
[ANS thanks the MIREX team for this information]

RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz)
Operational, now in mode A.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.

RS-16
At this time only the beacons are on.
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 and 29.451 MHz

Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

RS-17
Operational. 145.820 MHz
Sputnik RS-17 is still going strong. Its 100 mw beacon has been head around the world. Sputnik has a tentative life expectancy of 3-6 weeks on batteries. There are no solar panels on Sputnik. Since it was launched on November 3, 1997, it is expected to last until the December time frame Attitude Sputnik is now flying ahead and BELOW the Mir Space Station.

QSL Information is as follows:

Sergey Samburov (RV3DR)
P.O. Box 73
Korolev-10 City
141070, Russia
or
FR5KJ Radio Club
College Jules Reydellet
103 Rue de la Republique
97 489 Saint Denis Cedex
Reunion Island , France
[ANS thanks the MIREX team for this information]

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz CW/USB)
Operational.

AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational The control ops have programmed AO-27 to start earlier in its pass.
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600 baud BPSK)
Operational.
12 Dec. 08:11z JD 9600
19 Dec. 08:49z Digi-talker

26 Dec. 07:42z JA
09 Jan. 07:14z JD 1200
16 Jan. 07:52z JD 9600
23 Jan. 08:30z JA
30 Jan. 07:24z JD 1200

[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX

SB SAT @ AMSAT $ANS-348.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 348.07 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 14, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-348.07

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK)
KO-23 is becoming useful with download efficiencies climbing above 50%.
With KO-23 becoming eclipsed once again the operation is improving as the
satellite cools.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally.

The operating schedule is unchanged.
ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

The mode-S beacon is ON, transmitting an unmodulated carrier, but
telemetry indicates that it has partially failed, and delivering half
power. This beacon is a useful test source for those testing mode-S
converters, prior to the launch of P3-D. It is considerably weaker
than DOVE, which should be used for initial testing. Any reports of
reception on 2401.00 MHz would be most welcome. Please e-mail reception
reports to g3cwv@amsat.org.

The 435.025 MHz beacon is normally OFF. However it can sometimes be
heard when the satellite is being commanded by ground control, (i.e.

within range of Guildford, UK). When the 435 beacon is transmitting,
the 145 beacon is normally OFF. The data transmitted is mainly
binary.

OSCAR-11 users are welcome to visit the G3CWV web site. It contains
some software for capturing data, and decoding ASCII telemetry and the
WOD survey. There is an archive of raw data (mainly WOD) for analysis,
which is continually being expanded, as new data is captured.
The URL is - http://www.users.zetnet.co.uk/clivew/
[ANS thanks Clive Wallis, G3CWV, for this information]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
uptime is 1182/05:45:59. Time is Sat Dec 13 11:14:47 1997
+X (RX) Temp -7.263 D
RX Temp 0.603 D
Bat 1 Temp 9.680 D
Bat 2 Temp 6.049 D Baseplt Temp 6.049 D
RC PSK BP Temp -0.002 D RC PSK HPA Tmp 1.209 D
+Y Array Temp 3.024 D PSK TX HPA Tmp -0.607 D
+Z Array Temp -7.263 D

Total Array C= 0.417 Bat Ch Cur=-0.020 Ifb= 0.028 I+10V= 0.346
TX:010C BCR:7F PWRC:59F BT: A WC:25 EDAC:3C

Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
The DOVE S band beacon is on. The frequency is 2401.220 MHz. The 2 meter
transmitter is also on, 145.825 MHz. Telemetry is being sent about every
30 seconds
[ANS thanks Jim White, WD0E, for this update]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
Bob Argyle, KB7KCL reports that WEBERSAT-OSCAR-18 is gathering and sending
Whole Orbit Data. The PHOTO task is being uploaded and the command team
hopes to have pictures and spectra by about the 12th of December. WO-18's
return to service is suspected to be seasonal in nature. Bob sends thanks
to all those who have sent telemetry received from WO-18.
[ANS thanks Bob Argyle, KB7KCL, and SpaceNews for
this update.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88,
145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)

Operating normally.
uptime is 906/20:47:56. Time is Sat Dec 13 10:53:06 1997
+X (RX) Temp -4.357 D
RX Temp 0.131 D
Bat 1 Temp 2.374 D
Bat 2 Temp 3.496 D
RC PSK BP Temp -1.552 D RC PSK HPA Tmp -2.674 D
+Y Array Temp 3.496 D PSK TX HPA Tmp 0.131 D
+Z Array Temp -4.917 D

Total Array C= 0.369 Bat Ch Cur= 0.160 Ifb= 0.021 I+10V= 0.118
TX:016 BCR:82 PWRC:36E BT:3C WC: 0

General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK)
UO-22 is operating normally.
Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and
Operations Manager of UO-22, for this report]

IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz
SSB, 1200 Baud PSK)
NO report at this time..

[Please send your Satellite or News reports to ANS Editor BJ Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

3029. radio signal from apollo hardware ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: Denis Perron <denis.perron@cegepat.qc.ca>
Message-ID: <EL5q9u.HuL@data-io.com>
Source record: 17401

Hello. My name is Denis. I have an interesting question (i think).

Is it still possible to hear radio signal sent from equipment left on the moon by members of apollo mission . (or signal sent from the moon from russian lunar program).
I know appollo 11 crew left a seismometer on the moon. Was it transmiiting a radio signal (is it still transmitting, on which frequency ?). etc...

thanks for info

Denis

3030. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: Dwight Stewart <stewart@sccoast.net>
Message-ID: <3494B390.7384@sccoast.net>
Source record: 17402
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

> WireHead Prime <wiredone@raccoon.com> wrote...
>
> <snip> inform people of your obviously superior knowledge that
> pirate radio is illegal, which it STILL ISN'T. It's still a
> violation of Federal Regulations <snip>

REPLY...

Actually, a radio like was described in the original message ("a low power transmitter which is able to cover a radius of 300 ft"), is not illegal, or a violation of FCC regulations.

In fact, you can buy a device like this in almost any toy store (wireless microphones for broadcast to FM radio receivers). And, with the right antenna, one of these can easily achieve a range greater than 300 feet.

If you want something more sophisticated, try the professional wireless microphones designed for musicians. Some of these use the FM radio frequencies (or can if tuned slightly), and some even offer stereo output (again a better antenna would increase range).

You might also want to get a catalog from Ramsey Electronics (716-924-4560). They offer several low-power radio kits (AM, FM, and FM stereo).

Dwight Stewart

3031. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3494AD01.146F@trader.com>
Source record: 17403
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Cliff wrote:
> The design and implementation of a low cost, low power FM broadcast-band
> transmitter... is not a simple task...
> ...amateur radio has (d)evolved from a knowledge base to a toy parade

I couldn't agree more. The $150 (used) 2mFM HT is nice, but a $25 kit that
teaches some theory (as opposed to paraphrasing it in HAM-SPEAK) would
breath some life into this hobby.

Somebody sent me a schematic for a simple low power broadcast FM transmitter.
It's so elegent. Two 2222As. I put it into SPICE and have been testing it,
with the idea of altering it for 6 or 2 meters. In the process, I'll learn
more about SPICE _and_ controlling the deviation in FM.

So following this thread hasn't been totally useless.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

3032. fox hunting sorta

Newsgroup: rec.radio.amateur.space
Date: 1997-12-14 00:00:00 UTC
From: firedept@ccf.nrl.navy.mil
Message-ID: <3494A526.12B@ccf.nrl.navy.mil>
Source record: 17404

I am interested in building something to keep tabs on my irish setter when I go camping. A friend of mine knows people that compete in fox hunts and have a commercial system. These systems cost anywhere from $600 to $1000. Does any one have plans to build a transmitter that would be compact enough to go around a dogs neck and yet strong enough to send a signal a couple miles.
PS. I guess it should be water proof?
KF4ALO Dave

3033. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: Cliff <teknocolor@aol.com>
Message-ID: <01bd08e3$c9fad7e0$2b1f03cf@turbopig>
Source record: 17405
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

I don't think that I can stand any more of this rampant idiocy. This poor kid wants to know how to build a low power FM transmitter, and we bombard him/her with legalese and empty threats. What we, as a community of professional amateurs, are passing up is the opportunity to encourage a young (and obviously intelligent) mind to do some scientific and independent thinking.

The design and implementation of a low cost, low power FM broadcast-band transmitter (an undertaking that CAN be kept inside the letter of the law, by the way) is not a simple task... this has been made quite obvious by the number of replies that avoid the question altogether. I have a feeling that amateur radio has (d)evolved from a knowledge base to a toy parade... this feeling is reinforced everytime I go to a hamfest and see twenty gadget booths for every one book booth. By the way, if anyone here knows of a good, technical newsgroup that isn't a glorified swap shop, please let me know. Does anyone even open up the cases on their radios anymore(other than to scrawl their name/call on the inside)?

As for the young man/lady who wanted information on the FM transmitter, please don't be discouraged by those here who would waggle their callsigns so piously in your face. By the time that you complete your project, your working knowledge of RF electronics will greatly overshadow most of theirs. Plenty of them didn't work as hard as they say they did to earn the *privilege* of transmitting (NOT broadcasting)... the book is $14.95 at Radio Shack and can be memorized in a matter of weeks. I wouldn't usually be so hard on the hams (I'm one too...), but the callous attitude they have displayed as of late makes me a little angry.

A good friend of the family got his start in radio broadcasting with a pirate rig that he built himself and ran from his basement when he was just an 8th grader in my parent's sunday school class. A local radio station scooped him up soon afterward, and now he is a *very* successful regional operations manager for a large broadcasting company.

If you would like more info on building a LEGAL fm transmitter, go ahead and e-mail me. If you want to tell me how much Amsterdam sucks because you have to keep your gun at the police station and read all the paperwork, keep it to yourself. And if you think that someone counts as a blue collar millionaire because he owns property, do *NOT* admit it to the world. That blue collar millionaire could quit that blue collar job and still be a millionaire, you idiot.

To anyone who shares my admittedly liberal opinion, I apologize for any generalizations I may have issued.

cnospambeckwith@netmcr.com
kilo
echo
four
united
papa
zulu

3034. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: gavin@cypher.co.nz
Message-ID: <34947a93.17286244@news.southern.co.nz>
Source record: 17406

On Thu, 11 Dec 1997 19:34:08 +0000, Terry Gaff <shbcommm@indigo.ie>
wrote:

>Could some kind and considerate individual please let me know where I
>can get a circuit diagram for a low noise preamp that covers up to about
>2GHz, preferably useing the mars6 IC.

The entire MAR-X family were designed as "gain blocks" and as such
were not intended for use as pre-amps. They tend to be very noisy
and quite hard to match well. Any good single transistor will
outperform a MAR anyday, however only over a limited frequency range.
The MAR devices "work" over a wide frequency range, but not very well
at any single frequency.
--
Gavin Melville
gavin@cypher.co.nz

3035. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: pdg@ReMoVe_tHiS.cam.org
Message-ID: <3494aa54.19214737@nntp.hip.cam.org>
Source record: 17407
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

>Yik Feng Tan wrote:
>>>
>>> Dear Masters,
>>>
>>> I am a newbie to these mews group. I going to build a low power FM
>>> transmitter which is able to cover a radius of 300 ft. I wonder if any of
>>> you have or know any webpages that can help me build this device.

Kid asks simple question and it turns into a moral, legal and
political debate...

And we hams wonder why our numbers are declining steadily and kids are
not joining up amongst our ranks... geee, I just can't figure why.

Pat

\/ Scouter Pat - Patrick De Gagne - Montreal, Canada
/\ Dollard Des Ormeaux Venturers - Roxboro Fire Dept
/ \ http://www.cam.org/~pdg - IRC: I-Spy on #Scouting
/ \ PDG @CAM .ORG - VE2VFD - I used to be a Flying Frog!

3036. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: joe <jedent@jedavisent.com>
Message-ID: <34954C41.6B15@jedavisent.com>
Source record: 17408

Gavin Melville wrote:
>
> On Thu, 11 Dec 1997 19:34:08 +0000, Terry Gaff <shbcommm@indigo.ie>
> wrote:
>
> >Could some kind and considerate individual please let me know where I
> >can get a circuit diagram for a low noise preamp that covers up to about
> >2GHz, preferably useing the mars6 IC.
>
> The entire MAR-X family were designed as "gain blocks" and as such
> were not intended for use as pre-amps. They tend to be very noisy
> and quite hard to match well. Any good single transistor will
> outperform a MAR anyday, however only over a limited frequency range.
> The MAR devices "work" over a wide frequency range, but not very well
> at any single frequency.
> --
> Gavin Melville
> gavin@cypher.co.nz
This is true. As an experiment I built a single MMIC broadband amp.
I also built the Ramsey broadband amp that uses an MOSFET.
No tuned circuits were used in front of these.
The plans for each claimed 50 Ohms input and 50 Ohms output.
Each amp was connected to a RS-2004 scanner with s-meter and a discone
antenna.
The MosFet amp out preformed the MMIC amp about 2:1 over a wide range
of freqs.
Then I connected the MOSFET ahead of the MMIC amp with just a bnc male/
male connector. The S-meter read just a tad higher than with just the
MosFet by its self.
I know this was a crude test, not accurate at all, but I was looking
at end results.
Result: I use the MOSFET amp in front of the scanner for WX sat rec.
And I put the MMIC amp in service with my spectrum analyzer to give it
a boost.
Any thing written by Al Ward WB5LUA such as articles in QST May '89
and an article by Bill Owen Sept. '88 might be helpful.
I have both, would be glad to scan them and e-mail you BMG format.
joe d K5ZCX

3037. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <673k6e$rfn@canyon.sr.hp.com>
Source record: 17409

Terry Gaff (shbcommm@indigo.ie) wrote:
: Could some kind and considerate individual please let me know where I
: can get a circuit diagram for a low noise preamp that covers up to about
: 2GHz, preferably useing the mars6 IC.

Terry,

Try the ERA series of amplifiers, also available from Mini-Circuits.
I think you'll find something that will go to well past 2 GHz with
fairly reasonable performance. They don't have flat gain but they have
moderate noise figure, are easy to use and pretty inexpensive.

Glenn Elmore n6gn

3038. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: Edward Lawrence <eal@hpeseal.fc.hp.com>
Message-ID: <34956182.4F06@hpeseal.fc.hp.com>
Source record: 17410
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

Dwight Stewart wrote:
>
> > WireHead Prime <wiredone@raccoon.com> wrote...
> >
> > <snip>

> REPLY...
>
> Actually, a radio like was described in the original message ("a low
> power transmitter which is able to cover a radius of 300 ft"), is not
> illegal, or a violation of FCC regulations.
>
(snip)
> You might also want to get a catalog from Ramsey Electronics
> (716-924-4560). They offer several low-power radio kits (AM, FM, and FM
> stereo).
>
> Dwight Stewart

My two cents worth! Simply go to "Best Buy", purchace a simple
FM stereo transmitter that is intended for use with a CD player to
tramsmit into your own car radio. These cost $20-30, and are simple
and cheap enough for anyone. Now learn more about it, and educate
yourself by solving the problems you encounter.

The advice from the posting above is sound. Always listen to cool-
headed reasoning IF any is offered. And go ahead and work on getting
your Amateur radio Operators License. With an inquiring mind and the
willingness to experiment, you can not help but acquire knowledge that
will bring you to the forefront of any field you wish to pursue.

Good Luck@

ED Lawrence WA5SWD Speaking for myself ONLY!!!

3039. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3495674d.75295257@news.atl.bellsouth.net>
Source record: 17411

On Mon, 15 Dec 1997 01:00:16 GMT, gavin@cypher.co.nz (Gavin Melville) wrote:
>On Thu, 11 Dec 1997 19:34:08 +0000, Terry Gaff <shbcommm@indigo.ie>
>wrote:
>
>>Could some kind and considerate individual please let me know where I
>>can get a circuit diagram for a low noise preamp that covers up to about
>>2GHz, preferably useing the mars6 IC.
>
>The entire MAR-X family were designed as "gain blocks" and as such
>were not intended for use as pre-amps. They tend to be very noisy
>and quite hard to match well. Any good single transistor will
>outperform a MAR anyday, however only over a limited frequency range.
>The MAR devices "work" over a wide frequency range, but not very well
>at any single frequency.

The MAR series does have a noise figure which is too high for preamp use, but they aren't hard to match at all. They are 50 ohms in and out over their working range. They're stable too, if presented with 50 ohm terminations. Some in the series are unconditionally stable. That makes them useful for *following* a preamp stage which may be termination sensitive.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3040. Re: radio signal from apollo hardware ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3495682d.75519616@news.atl.bellsouth.net>
Source record: 17412

On Sun, 14 Dec 1997 02:20:42 GMT, "Denis Perron" <denis.perron@cegepat.qc.ca>
wrote:
>Hello. My name is Denis. I have an interesting question (i think).
>
>Is it still possible to hear radio signal sent from equipment left on the
>moon by members of apollo mission . (or signal sent from the moon from
>russian lunar program).
>I know appollo 11 crew left a seismometer on the moon. Was it transmiiting
>a radio signal (is it still transmitting, on which frequency ?). etc...

Unfortunately, the transmitters left behind by Apollo were commanded off as
a "budget cutting" measure over a decade ago, IE Uncle Fed didn't want to pay
anyone to monitor them anymore. The commands given shut them down completely,
both transmitters and receivers, so they can't be commanded back on either.
Bummer.

I don't know the story on the Russian landers, but none of them are currently
transmitting either.

One reason for shutting them down completely was so that they couldn't
interfere with other spacecraft signals if the transmitters started to drift
or otherwise misbehave. But since we've abandoned the Moon for the last
quarter century, that hardly seems an issue. The laser retroreflectors still
work of course. They are passive devices. If you have a good laser and
a good telescope, you might be able to see returns from them.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3041. Re: radio signal from apollo hardware ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: Villy R&#65533;lv&#65533;g <la4gy.no_spam@online.no>
Message-ID: <34956E62.327@online.no>
Source record: 17413

Gary Coffman wrote:
>
> On Sun, 14 Dec 1997 02:20:42 GMT, "Denis Perron" <denis.perron@cegepat.qc.ca>
> wrote:
> >Hello. My name is Denis. I have an interesting question (i think).
> >
> >Is it still possible to hear radio signal sent from equipment left on the
> >moon by members of apollo mission . (or signal sent from the moon from
> >russian lunar program).
> >I know appollo 11 crew left a seismometer on the moon. Was it transmiiting
> >a radio signal (is it still transmitting, on which frequency ?). etc...
>
> Unfortunately, the transmitters left behind by Apollo were commanded off as
> a "budget cutting" measure over a decade ago, IE Uncle Fed didn't want to pay
> anyone to monitor them anymore. The commands given shut them down completely,
> both transmitters and receivers, so they can't be commanded back on either.
> Bummer.
>
> I don't know the story on the Russian landers, but none of them are currently
> transmitting either.
>
> One reason for shutting them down completely was so that they couldn't
> interfere with other spacecraft signals if the transmitters started to drift
> or otherwise misbehave. But since we've abandoned the Moon for the last
> quarter century, that hardly seems an issue. The laser retroreflectors still
> work of course. They are passive devices. If you have a good laser and
> a good telescope, you might be able to see returns from them.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |
The equipment is now being operated by lunatic's.... :-))))))
--
Villy Rolvaag E-mail: la4gy@online.no
Langneset 10 AX-25 : LA4GY@LA3M.MO.W.NOR.EU
N-8600 Mo i Rana Tel. : +47 75 15 85 90 (priv)
Norway Tel. : +47 75 12 96 17 (work)

"Who is General Failure and why is he reading my hard disk?"
(Remove the word ".no_spam" in my adress to send me a reply)

3042. Newbie needs software...

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: John Lochey <jlochey@idesign.com>
Message-ID: <01bd09a1$47d02590$26280a0a@jlochey>
Source record: 17414

Does anybody know of a cheap (free?) computer program that can be used to study for the Tech No-Code license???

Thanks,

John

--
John Lochey
NT Network Administrator
Ann Arbor, Michigan, USA

3043. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <3495BB1A.3A1F9DC8@indigo.ie>
Source record: 17415

Gavin Melville wrote:

> On Thu, 11 Dec 1997 19:34:08 +0000, Terry Gaff <shbcommm@indigo.ie>
> wrote:
>
> >Could some kind and considerate individual please let me know where I
>
> >can get a circuit diagram for a low noise preamp that covers up to
> about
> >2GHz, preferably useing the mars6 IC.
>
> The entire MAR-X family were designed as "gain blocks" and as such
> were not intended for use as pre-amps. They tend to be very noisy
> and quite hard to match well. Any good single transistor will
> outperform a MAR anyday, however only over a limited frequency range.
> The MAR devices "work" over a wide frequency range, but not very well
> at any single frequency.
> --
> Gavin Melville
> gavin@cypher.co.nz

Gavin,

I'm actually looking for a preamp for about 1530 MHz to use with a 4ft dish. I can build circuits and use a soldering iron no sweat but I dont exactly have a professorship in electronic design so I assumed that the MAR 6/8 IC might be the man. If you say that a transistor circuit would be better then thats great and thanks a lot. So now I have a better idea of what I need so If anybody can help with a circuit ......

Regards to all for Christmas and New Year

Terry Gaff Dublin, Ireland.

PS - Thanks to all who replied.

3044. tnc that decodes DGPS?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: bradley a hampton <bhampton@whidbey.net>
Message-ID: <3495C321.CD79DB3A@whidbey.net>
Source record: 17416

does anyone know of a TNC that has the capability to decode the DGPS transmisions?
I have an icom-706 and I would like to be able to tune my receiver to 302Khz which is my local DGPD beacon and fsk/msk the audio then convert it to the RTCM standard for my garmin gps.

it seems wrong to spend 400.00 on a differential receiver when I have a 1400.00 in my truck.

ps I check ed the NAV group and they doen't know what a tnc is.
thanks brad

3045. Hello Space fans..

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: BUCKYZ@webtv.net
Message-ID: <674g5tkbl1@newsd-199.bryant.webtv.net>
Source record: 17417

come by and read the latest issue of The B~Hive Cafe.......space news
and lots more
http://www.geocities.com/Area51/Lair/1885/idex2.html

3046. NORAD Two-Line Orbital Element Sets (TLE111)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-15 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <674fac$8u9$1@blackbird.afit.af.mil>
Source record: 17418

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #111 -
Alouette 1
1 00424U 62049A 97347.26368451 .00000040 00000-0 36094-4 0 3383
2 00424 80.4655 106.8935 0023988 74.9252 285.4552 13.67911039756729
ATS 1
1 02608U 66110A 97344.21936724 .00000069 00000-0 10000-3 0 496
2 02608 14.4065 346.9954 0007240 127.9163 232.1372 1.00330685 30290
ATS 3
1 03029U 67111A 97340.27029157 -.00000113 00000-0 10000-3 0 7253
2 03029 14.8450 353.9960 0012807 276.2791 156.7708 1.00272697110151
Starlette
1 07646U 75010A 97345.37139001 -.00000236 00000-0 -74788-4 0 1070
2 07646 49.8257 169.1577 0206153 221.2696 137.2456 13.82192971153955
LAGEOS
1 08820U 76039A 97348.16813267 .00000015 00000-0 00000+0 0 3391
2 08820 109.8181 212.6913 0044415 11.1870 348.9915 6.38664370248633
GOES 2
1 10061U 77048A 97346.34939471 .00000046 00000-0 10000-3 0 9278
2 10061 13.0201 31.0173 0010724 146.0372 214.0025 1.00289856 19899
IUE
1 10637U 78012A 97344.08575383 -.00000199 00000-0 10000-3 0 4204
2 10637 36.3420 74.9813 1381805 71.9114 302.6591 1.00083635 25355
GOES 3
1 10953U 78062A 97348.16655776 -.00000095 00000-0 00000+0 0 8842
2 10953 12.0572 34.1033 0004386 214.2400 145.6957 1.00277340 24529
SeaSat 1
1 10967U 78064A 97346.67384570 .00000043 00000-0 58430-4 0 6254
2 10967 107.9998 219.4744 0002118 246.1363 113.9558 14.38214383 19588

```
Nimbus 7
1 11080U 78098A 97347.62735260 -.00000067 00000-0 -23660-4 0 7177
2 11080 98.8809 187.4386 0008736 304.3969 55.6360 13.83676272966460
GOES 5
1 12472U 81049A 97347.09831916 -.00000282 00000-0 10000-3 0 353
2 12472 9.0282 44.9053 0004576 117.8583 242.1102 1.00306576 18558
Cosmos 1383
1 13301U 82066A 97343.36220327 .00000016 00000-0 75078-6 0 6325
2 13301 82.9296 97.7362 0027021 188.5938 171.4752 13.68088948771236
LandSat 4
1 13367U 82072A 97347.54749184 -.00000417 00000-0 -82761-4 0 1221
2 13367 98.0020 25.5320 0005703 244.9186 115.1421 14.57214496819812
DMSP B5D2-1
1 13736U 82118A 97349.25442509 .00000094 00000-0 57962-4 0 3746
2 13736 98.6175 174.7915 0007698 231.9970 128.0513 14.25881149778884
IRAS
1 13777U 83004A 97348.51553574 .00000370 00000-0 28436-3 0 8542
2 13777 98.9734 168.6626 0013506 34.8269 325.3775 13.99293766429630
Cosmos 1447
1 13916U 83021A 97347.85511057 .00000100 00000-0 88542-4 0 7277
2 13916 82.9444 148.1846 0039347 74.0946 286.4541 13.74364777738558
TDRS 1
1 13969U 83026B 97346.39965270 -.00000303 00000-0 10000-3 0 8188
2 13969 9.7278 38.5667 0002567 224.9041 272.6168 1.00271607 26835
GOES 6
1 14050U 83041A 97347.25410337 .00000009 00000-0 10000-3 0 7622
2 14050 7.8996 48.6962 0002990 142.6935 217.2095 1.00312570111655
AO-10
1 14129U 83058B 97345.28517451 .00000011 00000-0 10000-3 0 5208
2 14129 26.4806 112.6654 6023074 175.2129 195.3746 2.05879088 81066
LandSat 5
1 14780U 84021A 97345.72445838 .00000160 00000-0 45764-4 0 6673
2 14780 98.2639 47.2539 0003489 52.6217 307.5298 14.57087316732969
UO-11
1 14781U 84021B 97346.89909418 .00000291 00000-0 56717-4 0 222
2 14781 97.8546 321.1894 0011996 146.4570 213.7403 14.69634227737509
Cosmos 1574
1 15055U 84062A 97348.02195285 .00000015 00000-0 -13471-6 0 9279
2 15055 82.9576 204.1178 0026203 265.1894 94.6269 13.73657637675783
Cosmos 1602
1 15331U 84105A 97345.39103829 .00000628 00000-0 70568-4 0 6098
2 15331 82.5324 324.9652 0019604 321.6459 38.3362 14.85011951713438
ERBS
1 15354U 84108B 97345.55013624 -.00000049 00000-0 17199-4 0 3240
2 15354 56.9955 10.4909 0009561 103.7870 256.4226 14.95117136717953
NOAA 9
1 15427U 84123A 97348.83475660 .00000030 00000-0 39042-4 0 3941
2 15427 98.8828 58.1102 0014423 204.5241 155.5244 14.13903377670730
Mir
1 16609U 86017A 97349.19084173 .00006738 00000-0 83584-4 0 8534
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2 16609 51.6572 255.6695 0008171 92.4325 267.7601 15.61343777675281
SPOT 1
1 16613U 86019A 97347.89117379 -.00000044 00000-0 00000+0 0 1457
2 16613 98.7743 59.0136 0002395 114.8868 245.2564 14.20003144297618
Cosmos 1766
1 16881U 86055A 97348.20061897 .00000417 00000-0 47151-4 0 5251
2 16881 82.5193 19.8662 0019401 344.0959 15.9639 14.83945000614665
EGP
1 16908U 86061A 97348.17929868 -.00000083 00000-0 10000-3 0 2300
2 16908 50.0112 121.4600 0011406 319.8453 40.1538 12.44417910184269
NOAA 10
1 16969U 86073A 97348.90355761 .00000050 00000-0 39714-4 0 3225
2 16969 98.5564 337.3369 0012368 197.6606 162.4148 14.25073875584329
MOS-1
1 17527U 87018A 97349.21053603 -.00000043 00000-0 00000+0 0 6127
2 17527 98.8588 43.0757 0018606 258.1659 101.7418 14.00447388551410
GOES 7
1 17561U 87022A 97347.31326804 -.00000145 00000-0 10000-3 0 4312
2 17561 4.1108 65.7991 0002255 212.4964 178.4583 1.00268001 22766
Kvant-1
1 17845U 87030A 97348.99883169 .00008533 00000-0 10420-3 0 2359
2 17845 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821609369
DMSP B5D2-3
1 18123U 87053A 97348.87238016 .00000045 00000-0 45344-4 0 1551
2 18123 98.7586 175.9819 0014863 134.3774 225.8624 14.15504319541698
RS-10/11
1 18129U 87054A 97346.86625429 .00000051 00000-0 39558-4 0 4339
2 18129 82.9231 106.6643 0012928 82.7537 277.5088 13.72387058524741
Meteor 2-16
1 18312U 87068A 97346.36397735 .00000089 00000-0 66716-4 0 6103
2 18312 82.5529 281.2306 0013121 130.1095 230.1218 13.84110087521319
Meteor 2-17
1 18820U 88005A 97349.07085087 .00000014 00000-0 -81151-6 0 4394
2 18820 82.5423 332.8429 0015570 189.7010 170.3822 13.84786790499075
DMSP B5D2-4
1 18822U 88006A 97349.02001957 .00000088 00000-0 57205-4 0 6906
2 18822 98.3915 161.1900 0005657 203.0990 156.9935 14.23256418512217
Glonass 34
1 19163U 88043A 97346.46078283 -.00000052 00000-0 10000-3 0 2388
2 19163 65.4960 67.5368 0006707 164.9450 195.1078 2.13102365 73819
Glonass 36
1 19165U 88043C 97347.45748994 -.00000047 00000-0 10000-3 0 6459
2 19165 65.4540 67.4548 0001841 226.8175 133.1924 2.13101504 74457
METEOSAT 3
1 19215U 88051A 97347.13843508 -.00000098 00000-0 10000-3 0 3549
2 19215 4.3324 64.9129 0008377 152.9654 206.7533 0.96947539 22455
OKEAN 1
1 19274U 88056A 97346.89599793 .00000501 00000-0 58929-4 0 2242
2 19274 82.5113 122.5917 0020557 132.3206 227.9755 14.82736368509939
Meteor 3-2
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1 19336U 88064A 97346.88990585 .00000051 00000-0 10000-3 0 6222
2 19336 82.5397 141.6913 0016800 320.6671 39.3216 13.16985124451041
Glonass 39
1 19503U 88085C 97347.95762923 -.00000057 00000-0 10000-3 0 5263
2 19503 65.3516 306.3031 0008091 157.9166 202.1026 2.13101891 71956
NOAA 11
1 19531U 88089A 97348.85077677 .00000059 00000-0 56403-4 0 2124
2 19531 99.1335 25.7465 0012227 145.0882 215.1091 14.13158483475511
TDRS 3
1 19548U 88091B 97344.71005574 -.00000197 00000-0 10000-3 0 3210
2 19548 3.5529 68.9601 0003032 176.1149 175.3027 1.00278002 20951
Glonass 40
1 19749U 89001A 97346.11830356 -.00000053 00000-0 10000-3 0 7445
2 19749 65.4559 67.0363 0006434 254.1466 105.8129 2.13101321 69427
Glonass 41
1 19750U 89001B 97345.23406856 -.00000056 00000-0 10000-3 0 6513
2 19750 65.4693 67.1551 0008978 256.2371 103.6811 2.13101683 69426
GPS BII-01
1 19802U 89013A 97348.59208601 -.00000050 00000-0 00000+0 0 5051
2 19802 55.5472 88.9239 0019575 174.5681 185.4468 2.00556611 64651
Akebono
1 19822U 89016A 97348.96559416 .00005886 00000-0 29447-3 0 562
2 19822 75.0638 164.1058 3693115 50.3185 336.9397 8.02389890210165
Meteor 2-18
1 19851U 89018A 97345.68663604 .00000067 00000-0 46517-4 0 6073
2 19851 82.5224 208.5064 0013152 255.5416 104.4283 13.84445582443898
MOP-1
1 19876U 89020B 97345.12774282 .00000000 00000-0 10000-3 0 3012
2 19876 3.0748 70.4662 0017244 282.2527 77.1182 0.97105685 11881
TDRS 4
1 19883U 89021B 97341.64440366 -.00000266 00000-0 10000-3 0 3753
2 19883 0.9821 85.3277 0004697 195.0487 346.9938 1.00266363204503
GPS BII-02
1 20061U 89044A 97345.93965393 -.00000037 00000-0 10000-3 0 4832
2 20061 53.8527 263.9541 0170634 227.3495 131.2264 2.00563521 62342
Nadezhda 1
1 20103U 89050A 97346.21548123 .00000075 00000-0 64259-4 0 1739
2 20103 82.9565 68.1942 0038078 343.1821 16.8072 13.73885610423242
GPS BII-03
1 20185U 89064A 97347.13430273 -.00000056 00000-0 10000-3 0 5112
2 20185 55.4142 89.3462 0018165 13.8980 346.1679 2.00571099 60949
GMS 4
1 20217U 89070A 97344.60140005 -.00000370 00000-0 10000-3 0 6801
2 20217 2.8524 72.6430 0000328 125.4562 217.7854 1.00280880 30841
INTERCOSMOS 24
1 20261U 89080A 97348.09202677 .00000173 00000-0 52880-4 0 6399
2 20261 82.5969 282.6354 1239607 242.4829 104.5027 12.47492157373847
GPS BII-04
1 20302U 89085A 97343.80907335 .00000072 00000-0 00000+0 0 5262
2 20302 53.1628 203.6424 0189015 220.1660 138.6073 2.00559283 59675
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Meteor 3-3
1 20305U 89086A 97342.87929528 .00000044 00000-0 10000-3 0 9549
2 20305 82.5413 111.4382 0007525 54.4782 305.7031 13.04424335388562
COBE
1 20322U 89089A 97345.55081651 -.00000182 00000-0 -88359-4 0 3570
2 20322 98.9228 357.0590 0009336 331.5561 28.5099 14.03466293413002
Kvant-2
1 20335U 89093A 97348.99883169 .00008533 00000-0 10420-3 0 1009
2 20335 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821458370
GPS BII-05
1 20361U 89097A 97345.32384006 -.00000026 00000-0 10000-3 0 2951
2 20361 56.2768 31.9118 0094675 149.0242 211.6008 2.00566331 49180
COSMOS 2054 (Altair-1)
1 20391U 89101A 97336.04687096 -.00000205 00000-0 10000-3 0 5619
2 20391 4.8176 60.1543 0003838 147.8407 211.9314 1.00240533 29342
SPOT 2
1 20436U 90005A 97346.25153644 -.00000044 00000-0 00000+0 0 3068
2 20436 98.7114 58.3594 0000823 110.1636 249.9629 14.20037091408912
UO-14
1 20437U 90005B 97348.27489478 .00000043 00000-0 33237-4 0 3184
2 20437 98.5062 65.9348 0011947 38.5263 321.6769 14.29987407411957
AO-16
1 20439U 90005D 97346.74441865 .00000019 00000-0 24084-4 0 1130
2 20439 98.5280 67.7884 0012248 45.4691 314.7490 14.30031597411757
DO-17
1 20440U 90005E 97347.20219526 .00000053 00000-0 37013-4 0 1113
2 20440 98.5330 69.2271 0012582 41.5866 318.6273 14.30175851411859
WO-18
1 20441U 90005F 97345.73499599 .00000016 00000-0 22751-4 0 1189
2 20441 98.5307 67.6619 0012853 47.4623 312.7635 14.30141287411649
LO-19
1 20442U 90005G 97345.75782220 .00000040 00000-0 32037-4 0 1161
2 20442 98.5331 68.4551 0013437 46.0410 314.1874 14.30259568411675
GPS BII-06
1 20452U 90008A 97348.71175600 .00000017 00000-0 10000-3 0 4085
2 20452 54.0574 144.5071 0076924 97.7685 263.1495 2.00546254 57754
MOS-1B
1 20478U 90013A 97345.25787028 -.00000044 00000-0 00000+0 0 989
2 20478 99.0707 52.3690 0005510 202.0436 158.0489 13.93984912320074
DEBUT
1 20479U 90013B 97345.86606238 .00000009 00000-0 99354-4 0 1087
2 20479 99.0661 274.4887 0540374 334.4127 23.1104 12.83362717367515
FO-20
1 20480U 90013C 97346.26196886 -.00000017 00000-0 40142-4 0 166
2 20480 99.0677 274.5218 0540656 334.3058 23.2049 12.83241875367541
MOS-1B R/B
1 20491U 90013D 97345.85420432 .00000352 00000-0 71920-3 0 4037
2 20491 99.0171 354.8937 0470596 102.6015 262.8113 13.03030440372531
LACE
1 20496U 90015A 97347.38137896 .00004517 00000-0 12615-3 0 8175
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2 20496 43.1027 332.7188 0011634 358.6370 1.4451 15.37897576437545
Nadezhda 2
1 20508U 90017A 97348.09118014 .00000027 00000-0 13158-4 0 1743
2 20508 82.9547 201.2072 0043677 290.6534 68.9944 13.73531262390692
OKEAN 2
1 20510U 90018A 97349.27138456 .00000281 00000-0 35016-4 0 6441
2 20510 82.5234 78.3952 0018738 336.9248 23.1135 14.78807858420377
GPS BII-07
1 20533U 90025A 97348.06251167 -.00000030 00000-0 00000+0 0 3827
2 20533 54.2108 266.2968 0033999 47.0298 313.3024 1.91040966 56167
PegSat
1 20546U 90028A 97348.39548079 .00024966 00000-0 33135-3 0 1887
2 20546 94.1163 304.6849 0048141 48.2712 312.2630 15.56746271429500
HST
1 20580U 90037B 97348.35925290 .00000649 00000-0 55053-4 0 127
2 20580 28.4677 327.8876 0014342 264.4873 95.4077 14.86564604219884
MACSAT 2
1 20608U 90043B 97347.54065208 .00000296 00000-0 48457-4 0 3164
2 20608 89.9208 168.5778 0104946 314.0346 45.2255 14.65064534405988
Glonass 44
1 20619U 90045A 97346.95249014 -.00000059 00000-0 10000-3 0 4544
2 20619 64.9463 305.2817 0024677 207.3958 152.4564 2.13102582 58899
Glonass 45
1 20620U 90045B 97348.94808009 -.00000053 00000-0 10000-3 0 4276
2 20620 64.9270 305.2029 0010234 30.1270 329.9228 2.13102602 58975
Glonass 46
1 20621U 90045C 97345.26093489 -.00000054 00000-0 10000-3 0 577
2 20621 64.9626 305.4011 0016518 200.0028 159.9195 2.13103231 58898
Kristall
1 20635U 90048A 97348.99883169 .00008533 00000-0 10420-3 0 8922
2 20635 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821429203
ROSAT
1 20638U 90049A 97346.52269488 .00000698 00000-0 63704-4 0 7124
2 20638 52.9930 11.5951 0011216 345.1757 14.8902 15.07823452414273
Meteor 2-19
1 20670U 90057A 97349.18744134 .00000041 00000-0 23805-4 0 4745
2 20670 82.5444 274.2101 0015636 157.4878 202.6973 13.84137721377274
CRRES
1 20712U 90065A 97347.90597217 .00000511 00000-0 61494-3 0 5363
2 20712 18.1539 27.9491 7191120 68.5329 350.2684 2.36026959 55973
GPS BII-08
1 20724U 90068A 97347.44484398 -.00000057 00000-0 10000-3 0 3128
2 20724 55.2534 86.7867 0142555 194.8650 164.7002 2.00563029 52361
Feng Yun1-2
1 20788U 90081A 97349.21013347 .00000175 00000-0 14401-3 0 5909
2 20788 98.8244 342.2606 0017072 57.8195 302.4624 14.01401042372579
Meteor 2-20
1 20826U 90086A 97347.36014932 .00000056 00000-0 36904-4 0 1190
2 20826 82.5272 211.3053 0014480 73.3722 286.9060 13.83666679364090
GPS BII-09
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2 21089 82.9230 147.2466 0029096 161.4780 198.7444 13.74089391343494
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Nadezhda 3
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2 21854 65.3796 66.1462 0016261 17.6064 342.4809 2.13105373 45579
Glonass 55
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Glonass 61
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Nadezhda 4
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Glonass 78
1 23735U 95068B 97347.82616107 .00000084 00000-0 00000+0 0 3512
2 23735 64.8107 185.6695 0006487 201.0752 158.9608 2.13124094 15571
Glonass 77
1 23736U 95068C 97347.90572753 .00000083 00000-0 00000+0 0 3474
2 23736 64.8039 185.6798 0007558 187.6378 172.4161 2.13101853 15576
XTE
1 23757U 95074A 97346.51158546 .00001077 00000-0 60279-4 0 1943
2 23757 22.9859 312.5947 0013456 85.5239 274.6786 14.98008236107024
Polar
1 23802U 96013A 97344.07251226 -.00000006 00000-0 00000+0 0 1804
2 23802 86.3533 20.1793 6539697 259.7658 25.8806 1.35166908 8910
1996010E
1 23824U 96010E 97348.50714501 .00020523 00000-0 34670-1 0 3783
2 23824 48.0352 71.7834 6730014 196.2340 122.9034 2.91023421 16955
GPS BIIA-25
1 23833U 96019A 97344.35238079 -.00000065 00000-0 00000+0 0 2824
2 23833 54.5082 325.8688 0019870 146.2085 213.9210 2.00566160 12531
Priroda
1 23848U 96023A 97348.99883169 .00008533 00000-0 10420-3 0 5422
2 23848 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821 93771
MSX
1 23851U 96024A 97346.52427042 -.00000047 00000-0 00000+0 0 2933
2 23851 99.4230 344.5850 0008246 107.8037 252.4025 13.97400973 83388
SAX
1 23857U 96027A 97348.96950188 .00001774 00000-0 97327-4 0 1180
2 23857 3.9519 81.1691 0014315 23.2854 336.8150 14.92109444 88783
MSTI 3
1 23868U 96031A 97345.69038912 .00273080 28312-4 51228-3 0 2604
2 23868 97.0837 173.3982 0129200 353.6379 6.4817 15.87361129 88719
TOMS-EP
1 23940U 96037A 97342.64749577 .00189601 00000-0 17839-1 0 1960
2 23940 97.8567 247.5074 0010584 275.4073 84.6061 14.92797898 79697
GPS BIIA-26
1 23953U 96041A 97348.26073254 -.00000054 00000-0 00000+0 0 2321
2 23953 55.2731 86.3853 0025487 346.2034 13.7089 2.00567629 10408
ADEOS
1 24277U 96046A 97348.72459346 -.00000010 00000-0 13593-4 0 2796
2 24277 98.5855 63.0142 0002037 70.4299 289.7099 14.27042101 69116
FO-29
1 24278U 96046B 97346.92525224 .00000005 00000-0 38402-4 0 1277
2 24278 98.5192 3.6001 0352389 82.9378 281.1697 13.52636454 65280
FAST
1 24285U 96049A 97346.85582682 .00004354 00000-0 42739-3 0 1606
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2 24285 82.9827 315.8247 2202709 37.5932 336.0711 10.82997728 51752
1996049B
1 24286U 96049B 97347.21893050 .00005036 00000-0 48492-3 0 1691
2 24286 82.9962 315.9029 2201420 35.9854 337.1011 10.83633069 51803
Microsat
1 24291U 96050A 97348.85918968 .00027628 66053-5 27161-3 0 3537
2 24291 62.7866 253.5859 0430919 178.3254 181.9416 15.00216983 69895
MO-30
1 24305U 96052B 97347.18777210 .00000204 00000-0 20364-3 0 1681
2 24305 82.9343 222.2994 0031949 66.9981 293.4534 13.73102239 63628
GPS BIIA-27
1 24320U 96056A 97345.63436854 -.00000005 00000-0 10000-3 0 1323
2 24320 54.4698 266.3521 0048976 93.5465 267.0435 2.00565873 9013
SAC-B/HETE
1 24645U 96061A 97348.83957785 .00001328 00000-0 73143-4 0 1196
2 24645 37.9769 222.4225 0049391 292.4155 67.1315 15.15430297 61475
ZEYA
1 24744U 97010A 97349.21575550 .00006890 00000-0 21796-3 0 1230
2 24744 97.2673 250.8747 0006459 148.6691 211.4940 15.33070394 43800
DMSP B5D2-9
1 24753U 97012A 97348.81533211 .00000112 00000-0 83718-4 0 2803
2 24753 98.9124 32.4786 0008157 259.5703 100.4547 14.13022168 35892
MINISAT 01
1 24779U 97018A 97347.40954284 .00002631 00000-0 14085-3 0 657
2 24779 150.9675 208.7666 0014167 254.5347 105.3690 14.98692442 35425
CELESTIS
1 24780U 97018B 97345.21569018 .00002343 00000-0 11239-3 0 662
2 24780 150.9824 197.5876 0019914 235.8973 123.9693 14.99883681 35127
GOES 10
1 24786U 97019A 97342.29606076 -.00000093 00000-0 00000+0 0 1460
2 24786 0.0326 296.2797 0004571 355.6812 146.9233 1.00265781 2302
Feng Yun 2B
1 24834U 97029A 97345.63030671 -.00000330 00000-0 00000+0 0 988
2 24834 0.8584 257.3951 0000637 107.6985 46.1585 1.00264570 1849
GPS BIIR-02
1 24876U 97035A 97348.77800908 .00000021 00000-0 00000+0 0 804
2 24876 54.9843 146.3980 0020143 251.1744 108.5835 2.00538293 2944
SeaStar
1 24883U 97037A 97348.23480251 .00000097 00000-0 32544-4 0 839
2 24883 98.2187 84.0883 0001407 336.1205 23.9927 14.55501706 19810
Soyuz TM-26
1 24886U 97038A 97348.99883169 .00008533 00000-0 10420-3 0 1349
2 24886 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821 20527
Meteosat 7
1 24932U 97049B 97345.30100674 -.00000088 00000-0 00000+0 0 760
2 24932 1.6221 290.2313 0002842 327.1311 280.7875 1.00273033 1016
COSMOS 2346
1 24953U 97052A 97345.69653040 .00000061 00000-0 44003-4 0 383
2 24953 82.9242 222.7567 0041587 64.3043 296.2403 13.79049201 10887
FAISAT 2V
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1 24954U 97052B 97345.70083669 .00000047 00000-0 30638-4 0 350
2 24954 82.9241 222.7676 0041487 65.0272 295.5167 13.78975466 10899
Sputnik 40
1 24958U 97058C 97348.85107184 .00048726 00000-0 51596-3 0 461
2 24958 51.6572 257.1546 0007532 96.0192 264.1648 15.63606821 6432
Progress M-36
1 25002U 97058A 97348.99883169 .00008533 00000-0 10420-3 0 790
2 25002 51.6566 256.6379 0008203 91.1318 269.0782 15.61340821 11001
STEP-M4
1 25013U 97063A 97347.53443572 .00002292 00000-0 78038-4 0 399
2 25013 44.9641 101.2597 0048221 83.1542 277.4825 15.33046519 7982
MAQSAT H
1 25023U 97066A 97346.19370043 -.00000026 00000-0 67239-3 0 233
2 25023 7.8779 35.9336 6538870 221.7884 63.2815 3.07860457 1310
MAQSAT B
1 25024U 97066B 97348.35927505 -.00000168 00000-0 -25580-3 0 225
2 25024 7.8768 34.6227 6535248 224.3094 59.3596 3.08571538 1381
YES
1 25025U 97066C 97346.20187513 -.00000312 00000-0 -90121-3 0 207
2 25025 7.8631 35.9208 6533772 221.7100 63.7880 3.07788304 1298
ARIANE 5 (SPELDA)
1 25026U 97066D 97348.45231391 -.00000164 00000-0 -25165-3 0 279
2 25026 7.8811 34.6650 6538953 224.2942 59.3329 3.07932306 1386
GPS BIIA-28
1 25030U 97067A 97348.04502567 .00000061 00000-0 00000+0 0 222
2 25030 54.8999 208.0125 0101486 103.6320 257.6188 2.00588366 813
RESURS-F1M
1 25059U 97072A 97347.17399455 .00161701 -11961-5 95032-4 0 667
2 25059 82.3331 223.8012 0020782 68.1107 292.2333 16.18107201 3995
1997072B
1 25060U 97072B 97325.03414774 .25094872 -12234-5 11916-3 0 238
2 25060 82.3279 249.7319 0016709 352.4488 8.8532 16.55760951 425
TRMM
1 25063U 97074A 97349.18022480 .00032976 00000-0 21899-3 0 237
2 25063 34.9955 292.9604 0002457 264.4862 95.5432 15.74373665 2710
Hikoboshi
1 25064U 97074B 97349.17139456 .00006693 00000-0 16717-3 0 206
2 25064 34.9712 298.7248 0105478 347.9292 12.1768 15.33791022 2613
1997074C
1 25065U 97074C 97349.24669485 .00023703 00000-0 43807-3 0 161
2 25065 34.5450 298.2989 0116074 350.2188 9.6269 15.40859158 2622
1997074D
1 25066U 97074D 97349.22341906 .00115602 00000-0 10096-2 0 203
2 25066 35.0038 293.3622 0009870 114.3464 245.8289 15.67543686 2702
JCSAT-5
1 25067U 97075A 97348.19462597 -.00000289 00000-0 00000+0 0 116
2 25067 0.0809 253.1022 0000986 336.3291 62.6817 1.00300000 176
Equator-S
1 25068U 97075B 97345.51316788 -.00000236 00000-0 00000+0 0 99
2 25068 3.9743 229.0179 7306087 185.0754 159.7253 2.27486167 184
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1997075C
1 25069U 97075C 97348.48532962 .00105271 16681-6 38955-2 0 144
2 25069 3.9496 226.8452 7362151 188.6949 142.2074 2.21841205 256
1997075D
1 25070U 97075D 97343.73632571 .00000787 00000-0 11304-3 0 43
2 25070 3.9736 229.4514 7295531 183.8317 168.8769 2.28572420 157
Astra 1G
1 25071U 97076A 97343.81000000 -.00000004 00000-0 00000+0 0 62
2 25071 0.3490 53.9210 0227954 13.8370 309.9110 1.02907201 111
1997076B
1 25072U 97076B 97339.21647117 .55708376 12821-4 20715-3 0 151
2 25072 51.5841 56.0666 0011435 248.9398 111.0352 16.57140173 376
1997076C
1 25073U 97076C 97337.63161823 .21250391 12459-4 11722-2 0 56
2 25073 51.5815 65.0087 0015672 277.8941 82.0443 16.40856849 102
1997076D
1 25074U 97076D 97338.11609809 -.00000104 00000-0 00000+0 0 43
2 25074 12.3535 71.1137 4381576 0.4410 359.7146 1.71856814 19
Iridium 42
1 25077U 97077A 97348.43414264 -.00121821 00000-0 -17008-1 0 120
2 25077 86.2851 119.0619 0007169 267.8885 91.6904 14.78503554 907
Iridium 44
1 25078U 97077B 97348.57007368 -.00038879 00000-0 -53455-2 0 115
2 25078 86.2887 119.0031 0008778 282.2014 77.9684 14.78647854 923
1997077C
1 25079U 97077C 97349.24267637 .00658745 -14521-5 54339-3 0 174
2 25079 86.2887 118.3057 0324874 143.3786 219.0192 15.56982792 1075
1997077D
1 25080U 97077D 97348.86229312 .00325904 -14293-5 68673-3 0 148
2 25080 86.2248 118.4795 0292351 131.6736 230.9859 15.53081748 1011
1997077E
1 25081U 97077E 97346.40473393 .17638631 -32434-5 43926-2 0 116
2 25081 86.5329 119.8708 0166149 152.5536 207.4943 16.02446721 629
1997077F
1 25082U 97077F 97346.86202104 .22627648 -35662-5 50958-2 0 130
2 25082 86.5008 119.6144 0159423 153.8797 207.0652 16.04406838 727
1997077G
1 25083U 97077G 97347.55766488 .49029426 -24928-5 29935-2 0 142
2 25083 86.0437 119.0540 0081478 135.3169 233.3820 16.27842110 827
1997077H
1 25084U 97077H 97346.35973404 .15542923 -28856-5 51287-2 0 52
2 25084 85.9810 119.7038 0194326 150.8075 267.2116 15.94748075 603
Galaxy 8I
1 25086U 97078A 97348.85596390 -.00000191 00000-0 10000-3 0 63
2 25086 5.4174 258.3439 3868578 182.1915 174.5560 1.04933208 86
1997078B
1 25087U 97078B 97343.84000000 -.00001759 14235-5 00000+0 0 28
2 25087 27.0260 258.5300 7936069 181.2440 98.0220 1.53702387 12
Cosmos 2348
1 25088U 97079A 97349.28788654 .00013684 00000-0 22980-3 0 150
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2 25088 65.0259 202.0585 0009614 262.7925 97.0141 15.51999289 939
1997079B
1 25089U 97079B 97343.72960990 .99999999 77297-5 46663-2 0 58
2 25089 64.9565 220.5942 0099433 69.1526 295.6486 16.36106420 56
1997072D
1 25092U 97072D 97348.09845193 .03251057 -12103-5 10114-2 0 102
2 25092 82.3414 222.7087 0009943 97.4661 262.7760 16.26507621 172
1997072E
1 25093U 97072E 97349.19601426 .03733806 -84131-6 59933-2 0 70
2 25093 82.3367 221.5370 0134523 340.1371 19.4643 15.88701565 257
1997072F
1 25094U 97072F 97349.25597675 .02655688 -91391-6 42374-2 0 64
2 25094 82.3254 221.4698 0127572 339.0437 20.5618 15.90023447 266
--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil
```

3047. Re: Making a Low power FM transmitter

Newsgroup: rec.radio.amateur.space
Date: 1997-12-16 00:00:00 UTC
From: slime@radiotelephone.net.ham
Message-ID: <3495e63e.1418797@news.total.net>
Source record: 17419
Cross-posted to: alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.space,alt.radio.broadcasting,alt.radio.digital

take off all the irrelevant newsgroups.

follow up to: rec.radio.amateur.misc, rec.radio.amateur.equipment

---

Mr. Slime AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : slime@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

3048. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-16 00:00:00 UTC
From: winton bell <w.bell@psyc.canterbury.ac.nz>
Message-ID: <3495F176.6484@psyc.canterbury.ac.nz>
Source record: 17420

Hi Gavin,

I would like to check on preamps construction with you.
I have 435Mhz and 145Mhz preamps to make with switching for protection
and control.
73 Winton.

3049. Re: tnc that decodes DGPS?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-16 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <349685E5.5087@larc.nasa.gov>
Source record: 17421

To my knowledge, no one presently makes a TNC to handle RTCM 104. The main problem is the need to take the serial bits in groups of six, order reverse the bits and then add the two bit tag. However, TAPR is actively working on an adapter but does not have an expected shipping date.

John
j.m.franke@larc.nasa.gov

3050. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3496bcbe.69295393@news.atl.bellsouth.net>
Source record: 17422

On Mon, 15 Dec 1997 23:19:54 +0000, Terry Gaff <shbcommm@indigo.ie> wrote:
>I'm actually looking for a preamp for about 1530 MHz to use with a 4ft
>dish. I can build circuits and use a soldering iron no sweat but I dont
>exactly have a professorship in electronic design so I assumed that the
>MAR 6/8 IC might be the man. If you say that a transistor circuit would
>be better then thats great and thanks a lot. So now I have a better
>idea of what I need so If anybody can help with a circuit ......

The Proceedings of the Central States VHF Conference (available
from ARRL) documents a large number of very good preamp designs.
There are several volumes of the Proceedings, perhaps someone at
ARRL can give you an index so you can determine which volume(s)
are of interest. (IMHO they are all of interest in one way or another to
anyone building circuits at VHF and above.) This info will enable you
to build a suitable preamp for your application.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3051. Sun and Moon Rise ans Set Times

Newsgroup: rec.radio.amateur.space
Date: 1997-12-17 00:00:00 UTC
From: "David W. Bray" <bray@lion.ece.clarkson.edu>
Message-ID: <678e0m$k4h@bgtnsc01.worldnet.att.net>
Source record: 17423

There is a new WWW server which will give you the Sun and Moon rise and set time for anywhere in the world. For US information it is just point and click. Please try it out.
URL: http://lion.ece.clarkson.edu/sunmoon/
-- David W. Bray, Potsdam, NY

3052. Re: 10M downlink antennas

Newsgroup: rec.radio.amateur.space
Date: 1997-12-17 00:00:00 UTC
From: ka3hsw@aol.com
Message-ID: <19971217161900.LAA05039@ladder01.news.aol.com>
Source record: 17424

In article <348c6db4.4673587@news.mindspring.com>, kc4ejv@mindspring.com (Brand Paul Hunt) writes:

>I am currently using a verticle dipole stuck on a side of tree very much like
>a cell tower antenna but I am not very happy with it. For HF, I have a
>full-wave 40 meter horizontal loop and I am still astounded how quiet it is.
>So, my next 10 mtr downlink I think is going to be a full-wave loop. The
>dimensions I believe are 16 feet per side or 64 feet total length.

Nope... 8 feet per side, fed with a 1/4 wavelength of 75-ohm coax as a matching transformer.

73 de KA3HSW

3053. FS:Beams,Tower+ & 2mtr 16w Amp vhf/uhf

Newsgroup: rec.radio.amateur.space
Date: 1997-12-17 00:00:00 UTC
From: "n2rif@amsat.org" <n2rif@kwiknet.net>
Message-ID: <01bd0b07$e5f8b400$f38d56cf@Kwiknet.ppp>
Source record: 17425

Item #1
Hello All;
I am selling 5ft Glen Martin Roof Tower w/ matching thrust bearing
and 9ft heavy duty aircraft aluminum 2" diameter mast. All in great
shape almost like new. Email: n2rif@amsat.org You can try calling
but my phone is usually busy cause Im on the net most of the time.
My ph# is 609-386-9382..
New it cost over $400 for everything. I am asking $290 OBO. It is
assembled. Shipping will probably be a bit hard to re-package. So
anyone who is within driving distance should probably re: My qth
is Burlington, NJ about 5 miles NorthEast of Phila,Pa and 12 miles
South of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

Item #2
Hello All;
I'm selling used 2mtr 2x11 Element Crossed satellite X-yagi and
70cm 2x19 Element Crossed satellite X-Yagi.
Both are in good cosmetic & working shape. For details Please re:
email: n2rif@amsat.org You can also try calling but my phone is
usually busy... My ph# is 609-386-9382.. I am Asking $155.00 OBO
for both. No CODs All cash offers will be considered
Also since both of these antennas are too large to probably ship.
It is better for anyone within driving distance of my qth to come,
look and consider buying these beams. My qth is Burlington, NJ
about 8 miles N-E of Phila, Pa and 12 miles S-E of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

Item #3
Hello All;
I'm selling a "like new - used 9 times" Mirage B 1016G [made
by KLM not by MFJ] Pre-amplified 10w-in 160-170w-out 2mtr
amplifier with all orignal boxes & docs.
Worked the "Sats" with this amp & has super preamp. Reason
for sale is strictly financial. I am asking $270 + shipping OBO.
Sorry No CODs...
Please re: me via email: n2rif@amsat.org Or Packet
N2RIF@K2UL.NJ.USA.NOAM. You can also try
calling but my phone is usally busy. My ph# is 609-386-9382..
Thank you for reading my bulletin. Thomas J or just T.j. -73

3054. Re: fox hunting sorta

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: Bob <snokid@cris.com>
Message-ID: <3499F96E.5439@cris.com>
Source record: 17332

firedept@ccf.nrl.navy.mil wrote:
>
> I am interested in building something to keep tabs on my irish setter
> when I go camping. A friend of mine knows people that compete in fox
> hunts and have a commercial system. These systems cost anywhere from
> $600 to $1000. Does any one have plans to build a transmitter that
> would be compact enough to go around a dogs neck and yet strong enough
> to send a signal a couple miles.
> PS. I guess it should be water proof?
> KF4ALO Dave
hamtronics sells a couple of transmitters they are lower power though I
think...good luck

73's

de KB8VRU
-

| By sending me unsolicitated commercial email you agree to pay my |
| standard consulting fee of $250/hr for examining your message (a |
| minimum charge of one (1) hour). The bill for my service will be |
| sent to you along with my analysis of your message. |

3055. Australis OSCAR5 info wanted

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: Paul Titze <ptitze@astron.physics.usyd.edu.au>
Message-ID: <34984CB9.5456@astron.physics.usyd.edu.au>
Source record: 17426

Hello everyone,

I am building the AMSAT Australia website and will be putting
together a complete section on OSCAR5 which was built in 1967
here in Australia at the University of Melbourne. I've been
trying to find good quality photographs of the sat but not much
luck. Does anyone know where I can find good pics of the sat?

Paul, VK2THN.

==
Email : ptitze@astron.physics.usyd.edu.au
Website : http://www.physics.usyd.edu.au/~ptitze
Cyberspace : http://www.physics.usyd.edu.au/~ptitze/vrml/vk2thn.wrl
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WizLab
Bringing to life your ideas.(TM)
Email : vk2thn@amsat.org
Website : http://wizlab.base.org

Website development, VRML Cyberspaces, 2D & 3D graphics, Industrial
3D animation, Web based multimedia.
==

3056. OSCAR Freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: slime@radiotelephone.net.ham
Message-ID: <34986bd9.7064148@news.total.net>
Source record: 17427

Hi.

I would like to know the OSCAR freqs in Eastern Canada.

I was trying to set up the 2m repeater 146.600-... however, I was
getting some complaints about OSCAR freqs of near 145.590.

thanks for your help.

Mr. Slime AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : slime@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

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3057. Re: OSCAR Freqs

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: slime@radiotelephone.net.ham
Message-ID: <34986c51.7183299@news.total.net>
Source record: 17428

On Thu, 18 Dec 1997 00:20:18 GMT, slime@radiotelephone.net.ham (Mr. Slime) wrote:

>getting some complaints about OSCAR freqs of near 145.590.

sorry. it's near 145.990.

Mr. Slime AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : slime@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

3058. Getting started in amateur SATCOM?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: Illusions <illusions@*NOSPAM*enterprise.net>
Message-ID: <67apnfnuo1@news.enterprise.net>
Source record: 17429

Hello,
I am wondering if anyone can tell me what it takes to get started in amateur satellite/wideband communications. My goal is to build both a SATCOM receiving station and rig up sort of a short range microwave shot. Also, I'd like to fabricate what I can myself both for learning purposes and to cut down on costs. Specifically, I guess I'd need a dish, receiver and computer interface and software with which I can analyze, etc. the signals I receive. I suppose I'll need an FAQ or good book on building an antenna and some sort of LNA/LNB, info on what receivers are good to buy and info on purchasing computer software. If someone can point me to this info I will be most grateful.

Thank you
Brandon Wheaton

3059. Re: Getting started in amateur SATCOM?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-18 00:00:00 UTC
From: George Edwards <gedwards@onramp.net>
Message-ID: <01bd0bc0$f2d4ca60$08e532ce@708714231>
Source record: 17430

Brandon...read the latest issue of QST magazine....you can start out with a dual band handheld...a whip antenna...and a good
schedule. With this set-up you can work AO27 as a repeater...MIR....and the astronauts on the MIR. As the article points out
the dual band needs to cover the 430 freqs which many of them don't as they are on the "USA repeater freqs" of 440.

There are several "hand held" dual band antennas that are fun to build and use also.

I am just getting started in this area of ham radio myself...and am now working on a base station but I have antenna limitations.
Again...the mistake that I made to start with was buying a rig with only 440 to 450 capabilities on the 70cm band when I
needed 430 to 440.

73/George/K5VUU

Illusions <illusions@*NOSPAM*enterprise.net> wrote in article
<67apnfnuo1@news.enterprise.net>...
> Hello,
> I am wondering if anyone can tell me what it takes to get started in amateur
> satellite/wideband communications. My goal is to build both a SATCOM
> receiving station and rig up sort of a short range microwave shot. Also, I'd
> like to fabricate what I can myself both for learning purposes and to cut
> down on costs. Specifically, I guess I'd need a dish, receiver and computer
> interface and software with which I can analyze, etc. the signals I receive.
> I suppose I'll need an FAQ or good book on building an antenna and some sort
> of LNA/LNB, info on what receivers are good to buy and info on purchasing
> computer software. If someone can point me to this info I will be most
> grateful.
>
> Thank you
> Brandon Wheaton
>
>
>

3060. Re: Getting started in amateur SATCOM?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-19 00:00:00 UTC
From: RABDRH <rabdrh@rmitcc.its.rmit.edu.au>
Message-ID: <3499B7FD.36EE@rmitcc.its.rmit.edu.au>
Source record: 17333

Illusions wrote:
>
> Hello,
> I am wondering if anyone can tell me what it takes to get started in amateur
> satellite/wideband communications...

Start out at the AMSAT homepage at http://www.amsat.org

3061. Re: fox hunting sorta

Newsgroup: rec.radio.amateur.space
Date: 1997-12-19 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <349A1CD2.57C1@trader.com>
Source record: 17334

> firedept@ccf.nrl.navy.mil wrote:
> > I am interested in building something to keep tabs on my irish setter
> > when I go camping.

Do you camp in space? :-)
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

3062. * SpaceNews 22-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-19 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1222.1997@ampr.org>
Source record: 17335
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1222
* SpaceNews 22-Dec-97 *

BID: $SPC1222

=========
SpaceNews
=========

MONDAY DECEMBER 22, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* OSCAR-11 NEWS *
=================
During the period 16-Nov-97 to 15-Dec-97, UoSAT-OSCAR-11 has continued to
provide good signals on its 145.826 MHz beacon, although some interference
has occured from DOVE and Sputnik-40, which also transmit near this frequency.

Two reports have been received about the Mode-S beacon. Carl, WA7PIB reports
reception at levels 3-4 S units above the noise, compard with DOVE's 8-9.
A station in Sweden also reports the beacon at 8 dB above the noise.

Satellite telemetry continues to be nominal. Internal temperatures have
continued to fall, and at the present time are 8.8C and 6.4C for battery
and telemetry electronics respectively. This fall in temperature is due
to increasing in solar eclipse times, which are expected to reach a
maximum in early February.

Two WOD surveys have been transmitted during the reporting period. Both
are of Channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage).
The previous WOD dated 29-Oct-97 continued until it was replaced by a
survey dated 14-Dec-97. These show the effect of solar eclipses on
array currents and voltage.

The new format AMSAT-UK bulletin, No. 114 is now being transmitted by the
spacecraft. It contains details of amateur satellite frequencies and modes
of operation. It may be changed at monthly intervals.

The operating schedule remains unchanged:

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)

ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The Mode-S beacon is ON transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and is delivering only half power. This beacon is a useful test source for those testing Mode-S converters prior to the launch of P3-D. It is considerably weaker than DOVE, which should be used for initial testing. Reports of reception of the 2401 MHz Mode-S beacon would be most welcome, and should be directed to Clive Wallis at : g3cwv@amsat.org.

The 435.025 MHz beacon is normally OFF. However, it can sometimes be heard when the satellite is being commanded by ground control (ie. within range of Guildford, UK). When the 435 MHz UHF beacon is transmitting, the 145 MHz VHF beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit an OSCAR-11 web site created by Clive Wallis, G3CWV. It contains some software for capturing data and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded as new data is captured. The URL is:

http://www.users.zetnet.co.uk/clivew/

[Info via Clive Wallis, G3CWV]

* NEW SPUTNIK-40 QSL ADDRESS *
==============================
A change has been made to a previously published QSL address for the Sputnik-40/RS-17 satellite. The revised address is as follows:

Sergej Samburov
PO Box 73
Korolev-10 City
Moscow Area, 141070, Russia

Note that the zip code and the city name have changed. Envelopes sent to this address should be well sealed, not include cash or display amateur radio callsigns. A self-addressed envelope and an IRC or two should be included with your reception report to insure a QSL card will be returned.

[Info via Miles Mann, WF1F]

* MIR NEWS *
============
The Mir space station is currently making visible passes just after sunset along the east coast of the US. These passes will continue for the first part of the week. The next opportunity to witness visible passes of Mir in the evening sky will not occur again until the last few days of January 1998. The next US Space Shuttle mission is expected to dock with Mir around that time, so it may be possible to witness both Mir and the Space Shuttle

in the evening sky in late January.

The Mir crews have two space walks planned shortly. The first walk is expected around 29-Dec-97, and the second approximately 10 days later.

Reports of Mir being active on packet radio (145.985 MHz) continue to be received. It is not clear when or if the latest Mir frequency experiment, which was planned to begin on 01-Dec-97, will ever come about.

* AMSAT-UK CALL FOR PAPERS *
============================
The thirteenth AMSAT-UK Colloquium will be held at Surrey University, Guildford, Surrey, U.K., from Friday 31-Jul-98 to Sunday 02-Aug-98. Next year's event will include technical and operational matters as well as an IARU forum.

AMSAT-UK invites authors to submit papers about amateur radio space and associated activities for this event, and for the "Proceedings" document which will be published at the same time. Colloquium organizers normally prefer authors to present the papers themselves rather than having someone else read them in the authors' absence, but also welcome "unpresented" papers for the document.

Offers of Papers should be submitted as soon as possible; the final date for full documents is mid-June 1998 in order that the "Proceedings" document be available to participants. A second and final call for papers will issue about March 1998, probably at the same time as Colloquium booking information becomes available.

Submissions should be sent to Richard W. L. Limebear, G3RWL via the following routes:

Internet e-mail: g3rwl@amsat.org
Packet Radio: G3RWL @ GB7HSN.#32.GBR.EU
Satellite: AO16/19/22/23/25

Terrestrial mail: Richard W. L. Limebear, G3RWL
60 Willow Road
Enfield EN1 3NQ
United Kingdom

AMSAT-UK also invites anyone with requests for Program Topics to submit them as soon as possible to G3RWL.

[Info via Richard W. L. Limebear, G3RWL]

* SEASON'S GREETINGS *
======================
All the best wishes for a happy and healthy holiday season! de John, KD2BD

* FEEDBACK/INPUT WELCOMED *
===========================
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

3063. Job Opportunity

Newsgroup: rec.radio.amateur.space
Date: 1997-12-19 00:00:00 UTC
From: Michael Scott <mike@aloha.net>
Message-ID: <349B3E56.21@aloha.net>
Source record: 17336

I placing this information because I am looking for people who want their hobby to be their job.....like me. I will be moving to Phoenix soon to build out and run a good sized PCS network in that area (Tucson included). My company will be looking for technicians (both switch and field types) to operate and maintain this extensive network on an on-going basis. If you have cellular and/or PCS operating experience or even a phone company technical background that will be a big plus. UNIX programming and or operating backgrounds would also be considered in lieu of the previous qualifications. The job is full time and will commence around April/May Timeframe...this is a great opportunity to get in before the pack. If your interested please fax me a resume at 808-5931610 (referencing Phoenix positions) or send it in either text or MS Word format to the email address above.

I kid you not,,, this is a fun job and its lots of hard work at the beginning.....no wimps please!!! 73's mike N6GOZ

3064. RS 10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-12-20 00:00:00 UTC
From: figure100@aol.com
Message-ID: <19971220184501.NAA18060@ladder02.news.aol.com>
Source record: 17337

A few years ago, I made some enjoyable contacts using RS-10. Now, I can't even hear the 29 MHz beacon or any downlink signals on 29 Mhz. Does anyone know if the 10 meter downlink has been turned off? Is RS-10 still operating? I would appreciate any replies...my wife thinks I'm nuts watching my tracking program & listening for signals that don't exist! 73!

3065. Re: RS 10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-12-20 00:00:00 UTC
From: Dave Sjolin <sjolin@swbell.net>
Message-ID: <349C34A4.6409@swbell.net>
Source record: 17338

Figure100 wrote:
>
> A few years ago, I made some enjoyable contacts using RS-10. Now, I can't even
> hear the 29 MHz beacon or any downlink signals on 29 Mhz. Does anyone know if
> the 10 meter downlink has been turned off? Is RS-10 still operating? I would
> appreciate any replies...my wife thinks I'm nuts watching my tracking program &
> listening for signals that don't exist! 73!

RS-10 has been dead for some time. RS-12 as of late has been operating
in mode A (144 up, 28 dn) for some time. RS-12 operates on slightly
different frequencies than did RS-10. Give it a try.

73 de Dave, N0IT

3066. Federation

Newsgroup: rec.radio.amateur.space
Date: 1997-12-20 00:00:00 UTC
From: Betty Malone <bjmalone@email.msn.com>
Message-ID: <##TCTWcD9GA.237@upnetnews03>
Source record: 17339

I have an idea for an organization dedicated to radio astronomy and all aspects of space for more information or ideas e-mail me at bjmalone@msn.com

BJMalone

3067. ANS-355 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-12-21 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <67k5tg$326$1@news3.mr.net>
Source record: 17340

BJ Arts, WT0N, Amsat News Service editor
Daniel (Dan) James, NN0DJ, Amsat News Service Assistant editor

SB SAT @ AMSAT $ANS-355.01
AMSAT-UK 13TH COLLOQUIUM

HR AMSAT NEWS SERVICE BULLETIN 355.01 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.01

The 13th AMSAT-UK Colloquium will be held at Surrey University, Guildford, Surrey, U.K., from Friday 31st July to Sunday 2nd August 1998. This year's event will include technical and operational matters as well as an IARU forum.

Amsat-UK invite authors to submit papers, about amateur radio space and associated activities, for this event and for the "Proceedings" document which will be published at the same time. We normally prefer authors to present the papers themselves rather than having someone else read them in the authors' absence, but we also welcome "unpresented" papers for the document.

Offers of Papers should be submitted as soon as possible; the final date for full documents is mid-June 1998 in order that the "Proceedings" document be available to participants. A second (and final) call for papers will issue about March 1998; probably at the same time as Colloquium booking information becomes available.

Submissions should be sent *ONLY* to G3RWL, via the following routes:

Internet e-mail: g3rwl@amsat.org
Packet Radio: G3RWL @ GB7HSN.#32.GBR.EU
Satellite: AO16/19/22/23/25

Terrestrial mail: R W L Limebear G3RWL
60 Willow Road
Enfield EN1 3NQ
United Kingdom.
(I have no fax)

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G3RWL. Invitations for papers on specific subjects will be included in the future call.

[ANS thanks Richard Limebear, G3RWL, Colloquium Program organizer for this report.]

/EX

SB SAT @ AMSAT $ANS-355.02
SAREX QSL's for STS-83 & 94

HR AMSAT NEWS SERVICE BULLETIN 355.02 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.02

Dee Interdonato, NB2F, tells ANS the SAREX
QSL's for STS-83 & STS-94 were sent out on December
15th, 1997. The Bergen Amateur Radio Association of Northern NJ conducted
the QSL adventure for this latest SAREX Shuttle Mission. Thanks to the
efforts of John Chooljian, K2KRF, John Tworsky, KC2EV, Mike Surmick, K2QW
and Dee Interdonato, NB2F, the cards were processed and distributed as
quickly as accuracy permitted. Dee hopes all that were waiting will be
getting a well deserved Holiday present from the SAREX group.

[ANS thanks Dee Interdonato, NB2F, for this news.]

/EX

SB SAT @ AMSAT $ANS-355.03
AMSAT '98 PLANS MOVING AHEAD

HR AMSAT NEWS SERVICE BULLETIN 355.043 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.03

Bill Ford, WB5SXK, reports that plans are moving forward for the
1998 Amsat Symposium to be held in Vicksburg, Mississippi from
October 9 through 11, 1998.

Bill says that the hotel location will be confirmed within a few weeks.
In the meantime, WB5SXK does have some basic information about
the Vicksburg area on the following web site:

http://pages.prodigy.com/DXHF93A

This information is also reachable via a link from the Amsat-NA home
page.

[ANS thanks Bill Ford, WB5SXK for this information]

SB SAT @ AMSAT $ANS-355.04
ASUSAT INFO

HR AMSAT NEWS SERVICE BULLETIN 355.04 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.04

The Amsat News Service was informed by
Assi Friedman, 4Z7ABA/KK7KX , of Arizona State University that

the FM repeater on the ASUSAT should offer a slight performance improvement over AO-27. The downlink antenna on ASUSAT will be located differently then AO-27 so it is expected to perform better too. The uplinks should be just as good as AO-27 as they are using a similar configuration. As to operating time, the repeater will use a PL decoder so it will not be turned on for an entire window, it will only operate if someone tries to access it. We have been redoing our power budget and it looks like we will be able to provide more operating time, maybe even in eclipses - even though there are no promises. The main factor that will determine the duty cycle of the repeater is resource sharing with the GPS and Camera, where the GPS is the second largest electron eater.

[ANS thanks Assi Friedman, 4Z7ABA/KK7KX , of Arizona State University for this information.]

/EX

SB SAT @ AMSAT $ANS-355.05
FREE LOGGING SOFTWARE

HR AMSAT NEWS SERVICE BULLETIN 355.05 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.05

Mark, N8VEA, is offering his free software program designed for logging VHF, UHF and satellite contacts. The program is called VHF-DX 4.0, and is compatible with Windows 95. The program covers all aspects of VHF, UHF and satellite logging. In addition, it tracks several awards such as VUCC, WAS and DXCC. For satellite use, it logs the name of the satellite as well as the up/down mode. Mark reports he has recently added both the MIR station and the space shuttle to the list of satellites. VHF/UHF contesting is also supported.

You can download the latest version at the N8VEA web site:
http://www.qsl.net/n8vea

[ANS thanks Mark Hoersten , N8VEA, for this information]

/EX

SB SAT @ AMSAT $ANS-355.06
T49C QSL SERVER

HR AMSAT NEWS SERVICE BULLETIN 355.06 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.06

Ray Soifer, W2RS, let the Amsat News Service know that he has checked with Bill, Kennamer, K5FUV, at the ARRL DXCC desk, who tells him that, under Rule 2, QSLs obtained from a server such as the one described in the ANS-348.05 bulletin are not acceptable for DXCC credit. Bill also said that he tried out the T49C server himself and found that the QSLs

it produces are easy to modify, another good reason why they're no good for DXCC.

If one wants a QSL card that's good for DXCC, QSL in the usual way to the manager, SK0UX.

[ANS thanks Ray Soifer, W2RS, for this information.]

/EX

SB SAT @ AMSAT $ANS-355.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 355.07 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.07

MIR
MIREX chief Dave Larsen, N6CO, reports that an announced crossband ''experiment'' has been abandoned for now because of problems with the antenna on MIR. The crossband test was to have begun December 1 and was to have involved a 70 cm uplink and a 2-meter downlink. US astronaut Dave Wolf, KC5VPF, has been on 145.985 MHz FM simplex from the Russian space station, but only sporadically.

A space walk at the end of December will check and--if necessary--repair the 2-meter/70-cm antenna that might have been damaged during a space walk in November. The Kenwood TM-733 aboard Mir has been connected to the spacecraft's SAFEX repeater antenna.

The Russian MAREX team and North American based MIREX team are aware of the problem with the new TNC on Mir. They know exactly what the problem is, They just need to wait for the crew to have time to make the adjustments. Mirex has had detailed discussions with MAREX on which settings need to be changed to restore full operations. The MIREX team was informed that the crew was very busy and it may take a few days for them to make the changes. When they do have time, they will make the adjustments. So, everyone is asked to be patient in the meantime.
[ANS thanks the ARRL and MIREX team for this information]

SAFEX, MIR 70cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
The SAFEX activity is very intermittent.
[ANS thanks the MIREX team for this information]

RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz)
Operational, now in mode A.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.

RS-16
At this time only the beacons are on.
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 and 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

RS-17
Operational. 145.820 MHz
Sputnik is now flying 7 miles below Mir, in a shorter orbit. This will
place Sputnik, 34 minutes ahead of Mir.
New Sputnik-40 QSL Address QSL Information is as follows:
QSL Information for SWL (Short Wave Listener)

Sergey Samburov (RV3DR)
P.O. Box 73
Korolev-10 City
141070, Russia
[ANS thanks the MIREX team for this information]

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.

AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.
FO-20, like many Leo's is in a "sun synchronous" orbit. The precession in
the RAAN of its orbit due to the earth's oblateness matches the earth's
rotation around the sun so that FO-20 always has about 33 minutes of
eclipse time each orbit and the rest in sunshine. A sun synchronous orbit
is a retrograde LEO polar orbit with an inclination of about 98 degrees.
At this inclination RAAN precession = 360 degrees in 365 days. The
stability in temperature and solar energy is, needless to say, very
helpful. The ratio of eclipse to sunlight can be adjusted by varying
initial orbital elements. FO-29, for example, is virtually always in
sunlight, UO-11 has about 22 minutes of eclipse, most seem to run about 33
minutes eclipse per orbit.

This also means that FO-20 (and other sun synchronous sats) appear at your
location at about the same "sun time" every day. At my QTH FO-20 goes over
about 1:30 PM and 3:30 PM every day. UO-11, AO-16, DO-17, WO-18, LO-19,

UO-22, KO-25, AO-27, FO-29 etc are also in sun synchronous orbits. KO-23,
RS-12/13, RS-15, though in highly inclined orbits, are not sun synchronous.
[ANS thanks Stacey Mills, W4SM, and Kazu Sakamoto, JJ1WTK, for this report]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational.
19 Dec. 08:49z Digi-talker
26 Dec. 07:42z JA
09 Jan. 07:14z JD 1200
16 Jan. 07:52z JD 9600
23 Jan. 08:30z JA
30 Jan. 07:24z JD 1200
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX

SB SAT @ AMSAT $ANS-355.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 355.08 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 21, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-355.08

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK)
KO-23 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally.
OSCAR-11 REPORT 15 December 1997
During the period 16 November to 15th December this satellite has
continued to provide good signals on its 145.826 MHz. beacon,
although some interference has occurred from DOVE and Sputnik-40,
which also transmit near this frequency.

Two reports have been received about the mode-S beacon. Carl WA7PIB
reports 3-4 S points above the noise, compared with Dove's 8-9. A
station in Sweden also reports the beacon at 8 dB above the noise.
Many thanks for those reports.

The telemetry is nominal. Internal temperatures have continued to fall, and at the present time are 8.8C and 6.4C for battery and telemetry electronics respectively. This fall in temperature is due to increasing in solar eclipse times, which are expected to reach a maximum in early February.

Two WOD surveys have been transmitted during the period. Both are of Channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage). The previous WOD dated 29 October continued until it was replaced by a survey dated 14 December. These show the effect of solar eclipses, on array currents, and voltage.

The new format AMSAT-UK bulletin, No. 114 is now being transmitted. This contains details of amateur satellite frequencies and modes of operation. It may be changed at monthly intervals.

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ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but telemetry indicates that it has partially failed, and delivering half power. This beacon is a useful test source for those testing mode-S converters, prior to the launch of P3-D. It is considerably weaker than DOVE, which should be used for initial testing. Any reports of reception on 2401 MHz. would be most welcome. Please e-mail g3cwv@amsat.org.

The 435.025 MHz. beacon is normally OFF. However it can sometimes be heard when the satellite is being commanded by ground control, ie. within range of Guildford, UK. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit my web site. It contains some software for capturing data, and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded, as new data is captured. The URL is -

http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this information]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.

Beacon 2401.1428 MHz.)
Operating normally.
uptime is 1189/07:21:28. Time is Sat Dec 20 12:50:16 1997
+X (RX) Temp -9.078 D
RX Temp -0.002 D
Bat 1 Temp 6.049 D
Bat 2 Temp 4.839 D Baseplt Temp 7.260 D
RC PSK BP Temp 0.603 D RC PSK HPA Tmp 1.814 D
+Y Array Temp 1.814 D PSK TX HPA Tmp 0.603 D
+Z Array Temp -9.078 D
RC PSK TX Out 0.633 W

Total Array C= 0.467 Bat Ch Cur=-0.040 Ifb= 0.006 I+10V= 0.391
TX:010C BCR:7A PWRC:59F BT: A WC:25 EDAC:D3

Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
The DOVE S band beacon is on. The frequency is 2401.220 MHz. The 2 meter
transmitter is also on, 145.825 MHz. Telemetry is being sent about every
30 seconds
A scanned image of the Dove's QSL at 425DXNews Web Site:
http://www-dx.deis.unibo.it/htdx/
[ANS thanks Jim White, WD0E, for this update]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
Bob Argyle, KB7KCL reports that WEBERSAT-OSCAR-18 is gathering and sending
Whole Orbit Data. The PHOTO task is being uploaded and the command team
hopes to have pictures and spectra by about the 12th of December. WO-18's
return to service is suspected to be seasonal in nature. Bob sends thanks
to all those who have sent telemetry received from WO-18.
[ANS thanks Bob Argyle, KB7KCL, and SpaceNews for
this update.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88,
145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)
Operating normally.
uptime is 913/22:22:29. Time is Sat Dec 20 12:27:39 1997
+X (RX) Temp -3.796 D
RX Temp -0.430 D
Bat 1 Temp 4.057 D
Bat 2 Temp 3.496 D Baseplt Temp 2.935 D
RC PSK BP Temp -1.552 D RC PSK HPA Tmp -1.552 D
+Y Array Temp 0.692 D PSK TX HPA Tmp -3.235 D
+Z Array Temp -6.600 D
RC PSK TX Out 0.968 W
Total Array C= 0.320 Bat Ch Cur= 0.032 Ifb= 0.002 I+10V= 0.231

TX:016 BCR:33 PWRC:134AA BT:55 WC: 0

FTL0 Activity Log for Fri Dec 19 00:12:08 1997
23:00:08 FREE DISK 5181120 bytes \ 50 dirs

General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK)
UO-22 is operating normally.
Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and
Operations Manager of UO-22, for this report]

IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz
SSB, 1200 Baud PSK)
No report at this time.

[Please send your Satellite or News reports to ANS Editor BJ Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org
Amsat News Service Bulletin Editor

3068. Re: fox hunting sorta

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: not5mbv@airmail.net
Message-ID: <F0996AFEB5C9EF94.E16F136DA7F765EB.04870B9BF9858C09@library-proxy.airnews.net>
Source record: 17341

Does any one have plans to build a transmitter that
>would be compact enough to go around a dogs neck and yet strong enough
>to send a signal a couple miles.
>PS. I guess it should be water proof?
>KF4ALO Dave

Does the dog have a Ham license Dave?
Ken K5MBV

3069. Mobile AO-27 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: ckelly@bcl.net
Message-ID: <349e4e5e.121962874@news.bcl.net>
Source record: 17342

I have just bought a Yaesu 8100 dual band mobile rig - and wanted to use it for Satellite use. The antenna is a dual band on-glass 1/2 wave.

I find that even on optimal passes, the recieve signal strength of AO-27 is very weak - nearly inaudible. Does anyone have any good experience of working AO-27 mobile ? What kind of antennas are best ?

Thanks

3070. Build a TLM beacon

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: maury <i862@rocketmail.com>
Message-ID: <67lni2$158$1@menelao.polito.it>
Source record: 17343
Cross-posted to: it.hobby.radioamatori,rec.radio.amateur.homebrew,rec.radio.amateur.space

I'd like to know where can I have info on buildin' a 2 mtrs transmitter
sending TLM (temp, curr, volt) like the ones on LeoSats for educaional
purposes. Try to imagine a beacon sending TLM not on Sat but on mountain
(solar cells) or top roof of buildings.
The TLM should be CW or 1200bps packet, easy decoded with simple software.
If you know TLM from RS and Dove sats you know what I mean..
Thanks for your attention !
Maurizio Bertolino
i121171@amsat.org

3071. Re: RS 10/11

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <349E7C22.5CADC14D@cyberportal.net>
Source record: 17344

Figure100 wrote:

> A few years ago, I made some enjoyable contacts using RS-10. Now, I can't even
> hear the 29 MHz beacon or any downlink signals on 29 Mhz. Does anyone know if
> the 10 meter downlink has been turned off? Is RS-10 still operating? I would
> appreciate any replies...my wife thinks I'm nuts watching my tracking program &
> listening for signals that don't exist! 73!

Sadly, RS-10/11 went silent some time ago. It was a great satellite. I've heard that some of the controllers have tried (or will try) to restart the transponder, so check the beacon frequency periodically just in case.

73

--
George J. Molnar (KF2T)
Lebanon, New Hampshire
http://www.cyberportal.net/gmolnar/index.html

3072. Satellite Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: markm@jcave.com
Message-ID: <67mbuj$qm7$1@news.xmission.com>
Source record: 17345

Is there a place where I could download most if not all of the
Frequencies that orbiting satellites are using?

Tnx, Mark

3073. NEW VERSION OF WXSAT!! (2.4)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: jkktl@aol.com
Message-ID: <19971222190401.OAA27565@ladder02.news.aol.com>
Source record: 17346

You can obtain the latest version of WXSAT here:

http://members.aol.com/jkktl/ham.htm

Jim

3074. Re: Mobile AO-27 ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mpvmoq5wa.fsf@spinner.ecofe.com>
Source record: 17347

I find that even on optimal passes, the recieve signal strength of AO-27 is very weak - nearly inaudible. Does anyone have any good experience of working AO-27 mobile ? What kind of antennas are best ?

Try it on a pass closer to the horizon on your existing antenna. It's been coming in weak at times for me in the past week, so i'm not sure if it's me or AO-27.

I have just bought a Yaesu 8100 dual band mobile rig - and wanted to use it for Satellite use. The antenna is a dual band on-glass 1/2 wave.

An antenna intended for terrestrial use may not work well for AO-27 on high elevation passes, especially omni gain antennas. Their 'panacake' pattern is great for terrestrial work, but, by design, they don't work well skywards. I'm running a Yaesu FT-5100 mobile into a homebrewed 2 meter quaterwave tuned for good SWR at 70cm. It's sub-optimal for repeaters, as much of its energy goes skywards, but it's fine for AO-27. AO-27's receiver is very sensitive, so the vertical pattern at 2 meters is less critical. I only use the generic 70cm gain antenna on the low elevation passes, and with duplexer into the 2 meter antenna for the uplink.

Be aware than most folks use either a pre-amp or a directional gain antenna, like the dual-band yagi from Arrow Antennas. So if you're hearing it weakly, then you know that you're getting somewhere and that there's something you can do about it. If you try the 2 meter quarterwave trick (say, with a mag mount), check your SWR on 70cm before transmitting, so you don't have problems with your rig if you forget and leave it connected. And let me know your results, positive or negative, as i'd like to know if my approach is reproducible. Expect some overhead fading with a 2M quarterwave, and it doesn't do so well after the top of the past, as i'm told the downlink tends to be less compatible with vertical polarization after that.

IMPORTANT: AO-27 has a very sensitive receiver and there's almost always someone on passes over the 'States. So please make sure you can copy at least partial callsigns before transmitting to AO-27, or you'll just be causing interference.

You might be able to work the MIR/SAFEX repeater as well, but the 5 KHz step size of the FT-5100 seems to be a significant impairment for me in its current configuration, as sometimes i'm in solid and other times, i'm not copyable. But it's not on right now, as last i heard, they were using its antenna for voice/packet until later this month when a spacewalk will be done to check out and/or repair of its normal

voice/packet antenna.

I didn't catch your callsign, but a quick check of the callbook tells me that there's a good chance i haven't worked your state and/or grid, so i'm looking forward to contacting you. And if i don't catch you, probably someone from the 'Utah contingent' will; they're real friendly, especially with new stations.

-- KD6PAG (Networking Old-Timer, RF newbie)

http://qsl.net/kd6pag/AO-27.html

3075. North Dakota - Satellite anyone?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: Mark Fossum <n0nsv@amsat.org>
Message-ID: <349F06E8.3379@amsat.org>
Source record: 17348

Just a note, I'm going to be in North Dakota (Grid DN98) 24-Dec-97 through 29-Dec-97. I am planning to be active on AO-10, AO-27, FO-20, FO-29 & MIR (if available) during my visit.

If anyone is in need of North Dakota for WAS or just wants to make a Q, I'll be looking forward to hearing from you. Otherwise, best wishes for the holidays!

Mark Fossum - N0NSV

3076. Re: fox hunting sorta

Newsgroup: rec.radio.amateur.space
Date: 1997-12-22 00:00:00 UTC
From: KB9KHM <kb9khm@sprynet.com>
Message-ID: <349E7E5E.CFA82836@sprynet.com>
Source record: 17349

HMMMMMMM..... couldn't it be considered 'remote control' via voice commands?

hahahahaha

Ken wrote:

> Does any one have plans to build a transmitter that
> >would be compact enough to go around a dogs neck and yet strong enough
> >to send a signal a couple miles.
> >PS. I guess it should be water proof?
> >KF4ALO Dave
> _____
> Does the dog have a Ham license Dave?
> Ken K5MBV

--
Mark <KB9KHM>

Home Page:
http://home.sprynet.com/sprynet/kb9khm

3077. Re: mars6 preamp

Newsgroup: rec.radio.amateur.space
Date: 1997-12-23 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <67n4kn$8hc$1@vixen.cso.uiuc.edu>
Source record: 17350

In a previous article, jedent@jedavisent.com (joe) says:

>Gavin Melville wrote:
>>
>> On Thu, 11 Dec 1997 19:34:08 +0000, Terry Gaff <shbcommm@indigo.ie>
>> wrote:
>>
>> >Could some kind and considerate individual please let me know where I
>> >can get a circuit diagram for a low noise preamp that covers up to about
>> >2GHz, preferably useing the mars6 IC.
>>
>> The entire MAR-X family were designed as "gain blocks" and as such
>> were not intended for use as pre-amps. They tend to be very noisy
>> and quite hard to match well. Any good single transistor will
>> outperform a MAR anyday, however only over a limited frequency range.
>> The MAR devices "work" over a wide frequency range, but not very well
>> at any single frequency.
>> --
>> Gavin Melville
>> gavin@cypher.co.nz
>This is true. As an experiment I built a single MMIC broadband amp.
>I also built the Ramsey broadband amp that uses an MOSFET.
>No tuned circuits were used in front of these.
>The plans for each claimed 50 Ohms input and 50 Ohms output.
>Each amp was connected to a RS-2004 scanner with s-meter and a discone
>antenna.
>The MosFet amp out preformed the MMIC amp about 2:1 over a wide range
>of freqs.
>Then I connected the MOSFET ahead of the MMIC amp with just a bnc male/
>male connector. The S-meter read just a tad higher than with just the
>MosFet by its self.
>I know this was a crude test, not accurate at all, but I was looking
>at end results.
>Result: I use the MOSFET amp in front of the scanner for WX sat rec.
>And I put the MMIC amp in service with my spectrum analyzer to give it
>a boost.
>Any thing written by Al Ward WB5LUA such as articles in QST May '89
>and an article by Bill Owen Sept. '88 might be helpful.
>I have both, would be glad to scan them and e-mail you BMG format.
>joe d K5ZCX
>

If you're looking for something simple and relatively inexpensive, I'd
recommend the MGA 86576 GaAs MMIC (available from Down East Microwave).
I've used them in the front end of 3456 and 5760 MHz transverters. They

have more gain and a better noise figure than the MAR series MMIC's.

73, Zack W9SZ

--

3078. Re: Satellite Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-12-23 00:00:00 UTC
From: George Edwards <gedwards@onramp.net>
Message-ID: <01bd0f5b$05c55160$5fe532ce@708714231>
Source record: 17351

http://pw2.netcom.com/~ac6v/pageaag.html

Mark Moulding <markm@jcave.com> wrote in article
<67mbuj$qm7$1@news.xmission.com>...
> Is there a place where I could download most if not all of the
> Frequencies that orbiting satellites are using?
>
> Tnx, Mark
>
>
>

3079. NORAD Two-Line Orbital Element Sets (TLE115)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-23 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <67pb7d$k81$1@blackbird.afit.af.mil>
Source record: 17352

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #115 -
Alouette 1
1 00424U 62049A 97355.82132981 .00000040 00000-0 36094-4 0 3404
2 00424 80.4654 98.4493 0023808 53.8192 306.5150 13.67911764757896
ATS 1
1 02608U 66110A 97355.18249367 .00000089 00000-0 10000-3 0 508
2 02608 14.4000 346.8767 0006189 130.0790 229.9897 1.00334901 30406
ATS 3
1 03029U 67111A 97355.27848019 -.00000111 00000-0 10000-3 0 7286
2 03029 14.8391 353.8406 0012842 276.4802 174.4497 1.00272609110305
Starlette
1 07646U 75010A 97353.83045512 -.00000024 00000-0 91292-4 0 1098
2 07646 49.8276 135.7747 0205502 249.4052 108.4689 13.82194218155124
LAGEOS
1 08820U 76039A 97356.46746636 .00000010 00000-0 00000+0 0 3416
2 08820 109.8195 215.5335 0044434 9.4418 350.7187 6.38664418249161
GOES 2
1 10061U 77048A 97355.32293380 .00000061 00000-0 10000-3 0 9297
2 10061 13.0294 30.9212 0010353 150.7193 209.3349 1.00292839 19985
IUE
1 10637U 78012A 97354.07695339 -.00000240 00000-0 10000-3 0 4216
2 10637 36.3499 74.7844 1378849 72.1331 302.2837 1.00080751 25457
GOES 3
1 10953U 78062A 97353.15258345 -.00000088 00000-0 00000+0 0 8851
2 10953 12.0626 34.0508 0004385 214.2806 145.6778 1.00277569 24573
SeaSat 1
1 10967U 78064A 97354.88124011 .00000021 00000-0 51355-4 0 6275
2 10967 108.0006 236.4650 0002040 249.0855 111.0061 14.38216635 20769

```
Nimbus 7
1 11080U 78098A 97347.62735260 -.00000067 00000-0 -23660-4 0 7177
2 11080 98.8809 187.4386 0008736 304.3969 55.6360 13.83676272966460
GOES 5
1 12472U 81049A 97347.09831916 -.00000282 00000-0 10000-3 0 353
2 12472 9.0282 44.9053 0004576 117.8583 242.1102 1.00306576 18558
Cosmos 1383
1 13301U 82066A 97355.79528780 .00000020 00000-0 57733-5 0 6354
2 13301 82.9313 88.6224 0027989 154.0910 206.1651 13.68089244772935
LandSat 4
1 13367U 82072A 97356.54259983 .00000011 00000-0 12191-4 0 1255
2 13367 98.0010 34.1709 0005684 212.9026 147.1821 14.57214857821121
DMSP B5D2-1
1 13736U 82118A 97356.90316791 .00000070 00000-0 47482-4 0 3806
2 13736 98.6181 182.3144 0007914 206.5211 153.5566 14.25882584779973
IRAS
1 13777U 83004A 97357.16748070 .00000107 00000-0 10385-3 0 8621
2 13777 98.9741 177.1390 0013493 9.3886 350.7530 13.99296133430845
Cosmos 1447
1 13916U 83021A 97355.86330229 .00000046 00000-0 32440-4 0 7294
2 13916 82.9445 142.2611 0039256 52.6742 307.7972 13.74365191739657
TDRS 1
1 13969U 83026B 97353.23301888 -.00000296 00000-0 10000-3 0 8213
2 13969 9.7385 38.5187 0004016 232.2323 212.0567 1.00269993 26901
GOES 6
1 14050U 83041A 97353.23525777 .00000011 00000-0 10000-3 0 7636
2 14050 7.9083 48.6476 0002955 143.3106 216.6382 1.00314045111710
AO-10
1 14129U 83058B 97356.44373445 -.00000214 00000-0 10000-3 0 5230
2 14129 26.5084 110.8211 6020107 178.2366 185.7256 2.05882072 81262
LandSat 5
1 14780U 84021A 97350.18804658 .00000122 00000-0 37347-4 0 6685
2 14780 98.2629 51.6769 0003448 43.7342 316.4123 14.57088680733611
UO-11
1 14781U 84021B 97354.93315325 .00000136 00000-0 30682-4 0 247
2 14781 97.8557 328.9226 0012510 122.1427 238.0990 14.69637494738680
Cosmos 1574
1 15055U 84062A 97356.10712316 .00000037 00000-0 23699-4 0 9293
2 15055 82.9555 198.1518 0026233 242.1540 117.6956 13.73658473676897
Cosmos 1602
1 15331U 84105A 97353.54413467 .00000428 00000-0 47276-4 0 6117
2 15331 82.5311 317.3207 0018767 293.2457 66.6793 14.85018342714644
ERBS
1 15354U 84108B 97354.37596926 -.00000060 00000-0 16186-4 0 3261
2 15354 56.9953 335.2051 0009505 112.2505 247.9567 14.95120586719278
NOAA 9
1 15427U 84123A 97357.04357308 .00000071 00000-0 60926-4 0 4033
2 15427 98.8795 66.2641 0014730 180.6521 179.4635 14.13905931671892
Mir
1 16609U 86017A 97357.06356258 .00018135 00000-0 21446-3 0 1080
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2 16609 51.6558 216.0141 0007906 116.3397 243.8644 15.61322839676517
SPOT 1
1 16613U 86019A 97357.26262669 -.00000044 00000-0 00000+0 0 1485
2 16613 98.7717 68.3023 0002132 88.8682 271.2738 14.20002351298948
Cosmos 1766
1 16881U 86055A 97356.56185479 .00000363 00000-0 40685-4 0 5279
2 16881 82.5189 12.0264 0018704 317.1295 42.8461 14.83950721615908
EGP
1 16908U 86061A 97356.21063520 -.00000083 00000-0 10000-3 0 2320
2 16908 50.0137 96.7711 0011282 339.5869 20.4513 12.44417898185265
NOAA 10
1 16969U 86073A 97356.97791504 .00000020 00000-0 26764-4 0 3329
2 16969 98.5573 345.2116 0012674 173.2016 186.9338 14.25074777585473
MOS-1
1 17527U 87018A 97357.21239228 -.00000043 00000-0 00000+0 0 6147
2 17527 98.8562 50.8269 0018407 234.7508 125.1934 14.00447562552539
GOES 7
1 17561U 87022A 97356.33553682 -.00000130 00000-0 10000-3 0 4369
2 17561 4.1271 65.7566 0002387 219.6817 188.0674 1.00267049 22856
Kvant-1
1 17845U 87030A 97356.80753893 -.00009036 00000-0 -98109-4 0 2451
2 17845 51.6553 217.3061 0008021 113.2266 246.9573 15.61289036610581
DMSP B5D2-3
1 18123U 87053A 97357.07193738 .00000047 00000-0 46108-4 0 1645
2 18123 98.7572 184.0399 0015215 112.0156 248.2633 14.15505300542855
RS-10/11
1 18129U 87054A 97355.76086800 .00000014 00000-0 -76744-6 0 4354
2 18129 82.9251 100.0924 0013154 61.7438 298.5051 13.72387143525965
Meteor 2-16
1 18312U 87068A 97355.18327490 .00000086 00000-0 63783-4 0 6124
2 18312 82.5534 274.2358 0013502 106.7292 253.5354 13.84111427522539
Meteor 2-17
1 18820U 88005A 97356.44077307 .00000006 00000-0 -76691-5 0 4459
2 18820 82.5412 326.9759 0016145 167.8468 192.3086 13.84786615500093
DMSP B5D2-4
1 18822U 88006A 97357.03439562 -.00000015 00000-0 11483-4 0 6968
2 18822 98.3920 168.8325 0006034 178.0268 182.0935 14.23256826513356
Glonass 34
1 19163U 88043A 97355.37675877 -.00000055 00000-0 10000-3 0 2417
2 19163 65.5005 67.2416 0005171 159.2376 200.8325 2.13102516 74008
Glonass 36
1 19165U 88043C 97356.37352034 -.00000055 00000-0 10000-3 0 6488
2 19165 65.4667 67.1602 0002439 189.0684 170.9640 2.13101389 74640
METEOSAT 3
1 19215U 88051A 97355.39038677 -.00000115 00000-0 10000-3 0 3561
2 19215 4.3486 64.8611 0008444 154.5622 205.2608 0.96948337 22530
OKEAN 1
1 19274U 88056A 97355.87143121 .00000316 00000-0 35964-4 0 2260
2 19274 82.5135 114.1892 0021242 103.5624 256.7959 14.82741746511269
Meteor 3-2
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1 19336U 88064A 97354.94282727 .00000051 00000-0 10000-3 0 6242
2 19336 82.5403 135.9943 0016461 299.0178 60.9292 13.16985502452104
Glonass 39
1 19503U 88085C 97347.95762923 -.00000057 00000-0 10000-3 0 5263
2 19503 65.3516 306.3031 0008091 157.9166 202.1026 2.13101891 71956
NOAA 11
1 19531U 88089A 97357.06388385 .00000051 00000-0 51896-4 0 2211
2 19531 99.1305 34.1217 0012499 122.9943 237.2435 14.13159865476670
TDRS 3
1 19548U 88091B 97354.66809168 -.00000191 00000-0 10000-3 0 3232
2 19548 3.5696 68.8755 0002919 169.4109 176.9945 1.00276249 21058
Glonass 40
1 19749U 89001A 97354.56506731 -.00000053 00000-0 10000-3 0 7462
2 19749 65.4636 66.7493 0006502 253.5733 106.4034 2.13101273 69607
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1 19750U 89001B 97351.33451758 -.00000040 00000-0 10000-3 0 6526
2 19750 65.4723 66.9489 0008956 255.0154 104.9339 2.13101679 69557
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1 19802U 89013A 97356.07102777 -.00000046 00000-0 00000+0 0 5101
2 19802 55.5651 88.6218 0020711 174.0498 185.9860 2.00557112 64804
Akebono
1 19822U 89016A 97352.95414435 .00005936 00000-0 29525-3 0 582
2 19822 75.0644 161.7378 3693208 47.2301 338.5427 8.02430469210484
Meteor 2-18
1 19851U 89018A 97349.87840279 .00000026 00000-0 10307-4 0 6087
2 19851 82.5227 205.1663 0013113 240.9689 119.0155 13.84445267444471
MOP-1
1 19876U 89020B 97353.36579061 -.00000089 00000-0 00000+0 0 3041
2 19876 3.0942 70.3940 0016012 281.1420 78.3164 0.97109793 11963
TDRS 4
1 19883U 89021B 97354.88983365 -.00000261 00000-0 10000-3 0 3782
2 19883 1.0080 85.6031 0005082 193.7259 89.5855 1.00274002204635
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1 20061U 89044A 97355.91121499 -.00000042 00000-0 10000-3 0 4850
2 20061 53.8494 263.5401 0170701 227.5131 131.0844 2.00563582 62541
Nadezhda 1
1 20103U 89050A 97350.22096672 .00000023 00000-0 82548-5 0 1748
2 20103 82.9588 65.2429 0037606 332.2049 27.7085 13.73885442423790
GPS BII-03
1 20185U 89064A 97357.10527657 -.00000048 00000-0 10000-3 0 5169
2 20185 55.4310 88.9168 0009871 12.3858 347.6618 2.00572668 61141
GMS 4
1 20217U 89070A 97357.08536458 -.00000357 00000-0 10000-3 0 6858
2 20217 2.8811 72.3735 0000473 317.0335 213.2074 1.00273411 30974
INTERCOSMOS 24
1 20261U 89080A 97356.19294050 .00000344 00000-0 10547-3 0 6411
2 20261 82.6005 277.4619 1240021 224.0286 125.5316 12.47495581374850
GPS BII-04
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2 20302 53.2170 203.3322 0294064 224.7692 135.1532 2.00559886 59792
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COBE
1 20322U 89089A 97353.53543526 .00000229 00000-0 17408-3 0 3599
2 20322 98.9212 4.8860 0009034 308.8429 51.1949 14.03471222414125
Kvant-2
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2 20335 51.6553 217.3061 0008021 113.2266 246.9573 15.61289036459591
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2 20361 56.2889 31.4760 0096791 149.3818 211.2409 2.00567707 49409
COSMOS 2054 (Altair-1)
1 20391U 89101A 97350.01338604 -.00000231 00000-0 10000-3 0 5642
2 20391 4.8448 60.1819 0004120 182.9930 176.7690 1.00236982 29489
SPOT 2
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2 20436 98.7097 67.8606 0001085 107.2085 252.9209 14.20038445410282
UO-14
1 20437U 90005B 97357.23113016 .00000063 00000-0 41089-4 0 3201
2 20437 98.5065 74.6878 0012054 12.9184 347.2301 14.29989168413238
AO-16
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1 20440U 90005E 97355.73748250 .00000009 00000-0 20347-4 0 1136
2 20440 98.5323 77.5929 0012398 19.1035 341.0613 14.30176774413076
WO-18
1 20441U 90005F 97350.21263266 .00000027 00000-0 27180-4 0 1192
2 20441 98.5308 72.0514 0012842 34.4633 325.7371 14.30141875412284
LO-19
1 20442U 90005G 97350.23509089 -.00000007 00000-0 13912-4 0 1176
2 20442 98.5327 72.8451 0013273 34.4672 325.7372 14.30259441412310
GPS BII-06
1 20452U 90008A 97355.69188074 .00000061 00000-0 10000-3 0 4112
2 20452 54.1212 144.2330 0066677 96.6912 264.0584 2.00549268 57896
MOS-1B
1 20478U 90013A 97353.72741123 -.00000044 00000-0 00000+0 0 1000
2 20478 99.0676 60.6786 0005981 180.0801 180.0361 13.93985941321258
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2 20479 99.0680 278.0433 0540356 324.5317 32.0949 12.83362439368073
FO-20
1 20480U 90013C 97354.37007182 -.00000040 00000-0 -86234-5 0 189
2 20480 99.0690 281.1217 0540225 315.9566 39.9672 12.83241456368586
MOS-1B R/B
1 20491U 90013D 97356.06629225 -.00000252 00000-0 -41583-3 0 4069
2 20491 99.0179 3.4425 0470639 78.6469 286.7115 13.03026809373869
LACE
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2 20508 82.9548 195.2985 0043317 267.5667 92.0528 13.73531997391792
OKEAN 2
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2 20510 82.5234 78.3952 0018738 336.9248 23.1135 14.78807858420377
GPS BII-07
1 20533U 90025A 97356.96084589 -.00000041 00000-0 00000+0 0 3852
2 20533 54.2090 265.9633 0036836 52.3555 307.9696 1.91041378 56331
PegSat
1 20546U 90028A 97356.87984354 .00018949 00000-0 24976-3 0 1943
2 20546 94.1162 309.5819 0046606 16.2694 344.0051 15.57046729430827
HST
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2 20580 28.4679 271.7530 0014088 357.1821 2.8683 14.86571068221194
MACSAT 2
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2 20608 89.9201 168.4936 0103697 283.6786 75.2896 14.65067306407231
Glonass 44
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2 20619 64.9411 304.9744 0024436 209.2648 150.6026 2.13102661 59080
Glonass 45
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2 20620 64.9229 304.9982 0008808 30.4848 329.5643 2.13102611 59104
Glonass 46
1 20621U 90045C 97351.83056179 -.00000038 00000-0 10000-3 0 585
2 20621 64.9599 305.1735 0015736 198.4436 161.4761 2.13103201 59032
Kristall
1 20635U 90048A 97356.80753893 -.00009036 00000-0 -98109-4 0 8990
2 20635 51.6553 217.3061 0008021 113.2266 246.9573 15.61289036430425
ROSAT
1 20638U 90049A 97349.50546840 .00000319 00000-0 39250-4 0 7135
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Meteor 2-19
1 20670U 90057A 97356.84996362 .00000063 00000-0 42773-4 0 4815
2 20670 82.5446 268.1259 0016211 135.7563 224.4896 13.84138522378336
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2 20712 18.1559 24.5374 7190542 74.8817 348.8954 2.36037271 56172
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1 20724U 90068A 97352.43071491 .00000010 00000-0 10000-3 0 3138
2 20724 55.2581 86.5876 0140544 195.9804 163.5908 2.00561471 52653
Feng Yun1-2
1 20788U 90081A 97357.20652213 .00000192 00000-0 15542-3 0 5960
2 20788 98.8248 349.9943 0016774 36.7979 323.4335 14.01405389373699
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1 20826U 90086A 97356.10994484 .00000057 00000-0 38054-4 0 1213
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GPS BII-09
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GPS BIIA-10
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2 20959 55.4419 88.6106 0116718 238.6509 120.2058 2.00561412 51770
DMSP B5D2-5
1 20978U 90105A 97357.04389940 .00000013 00000-0 20271-4 0 3375
2 20978 98.5363 67.8464 0078509 335.0539 24.6860 14.32811652369023
Glonass 47
1 21006U 90110A 97355.60947441 -.00000056 00000-0 10000-3 0 36
2 21006 65.4413 66.0337 0058228 185.9845 173.9933 2.13102094 54785
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2 21007 65.4642 66.2152 0031029 179.3895 180.6618 2.13101069 54729
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AO-21
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2 21087 82.9389 273.7966 0035731 106.4542 254.0545 13.74590974345725
RS-12/13
1 21089U 91007A 97353.90111561 .00000025 00000-0 97799-5 0 307
2 21089 82.9222 140.9266 0029827 138.0036 222.3415 13.74089793344667
MOP-2
1 21140U 91015B 97357.09061343 -.00000070 00000-0 00000+0 0 4038
2 21140 1.6512 78.5325 0004164 253.4488 142.9495 1.00272199 27165
Nadezhda 3
1 21152U 91019A 97356.34870625 .00000040 00000-0 27071-4 0 8631
2 21152 82.9248 96.0656 0040671 243.7314 115.9656 13.73556465339687
Glonass 50
1 21216U 91025A 97356.09476612 -.00000044 00000-0 10000-3 0 6859
2 21216 64.6697 304.3585 0018409 190.6811 169.2727 2.13103101 52304
Glonass 51
1 21217U 91025B 97355.23081550 -.00000041 00000-0 10000-3 0 668
2 21217 64.6753 304.3650 0011224 215.2132 144.7190 2.13101908 52270
Glonass 52
1 21218U 91025C 97351.11592303 -.00000041 00000-0 10000-3 0 5367
2 21218 64.6720 304.4802 0009194 301.8346 58.0796 2.13102767 52191
GRO
1 21225U 91027B 97350.44744902 .00001197 00000-0 45582-4 0 5205
2 21225 28.4597 24.9388 0004634 74.7757 285.3349 15.19534591254050
Meteor 3-4
1 21232U 91030A 97355.06225824 .00000050 00000-0 10000-3 0 317
2 21232 82.5429 342.6188 0012211 221.4497 138.5696 13.16478871320155
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1 21263U 91032A 97357.04799243 .00000098 00000-0 62398-4 0 6398
2 21263 98.5321 5.4830 0013661 102.3020 257.9688 14.22776544343219
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2 21397 82.5241 350.2772 0024343 42.3434 317.9696 14.76668825352608
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ERS-1
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2 21574 98.5514 68.2178 0001246 86.3233 273.7175 14.32234275336594
UO-22
1 21575U 91050B 97356.23487181 .00000064 00000-0 35509-4 0 8231
2 21575 98.2766 49.8917 0008625 49.1167 311.0740 14.37104709337495
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1 21576U 91050C 97354.18871188 .00000078 00000-0 40871-4 0 9186
2 21576 98.2734 45.0986 0004999 64.2750 295.8950 14.36529513337058
TUBSAT-A
1 21577U 91050D 97354.69503205 .00000033 00000-0 25443-4 0 8161
2 21577 98.2747 46.2450 0007691 57.2852 302.9074 14.36574136337169
SARA
1 21578U 91050E 97354.22815062 .00000285 00000-0 10493-3 0 202
2 21578 98.3239 58.8400 0005731 53.5495 306.6220 14.39511971337600
TDRS 5
1 21639U 91054B 97356.43739131 .00000092 00000-0 10000-3 0 2517
2 21639 0.0866 102.6233 0001417 137.2523 194.2294 1.00270938 23406
Meteor 3-5
1 21655U 91056A 97353.21775138 .00000051 00000-0 10000-3 0 295
2 21655 82.5509 291.9882 0012573 240.4759 119.5110 13.16857590305065
UARS
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2 21701 56.9847 73.5090 0005591 106.5155 253.6493 14.96659364342407
DMSP B5D2-6
1 21798U 91082A 97357.07731623 .00000047 00000-0 48257-4 0 9954
2 21798 98.9038 19.6631 0013496 98.0685 262.2020 14.14098984313202
Glonass 53
1 21853U 92005A 97353.20611947 -.00000049 00000-0 10000-4 0 2400
2 21853 65.3885 65.7521 0006927 211.8552 148.1517 2.13102076 45840
Glonass 54
1 21854U 92005B 97356.30160262 -.00000055 00000-0 00000+0 0 5374
2 21854 65.3911 65.6380 0016109 16.9400 343.1621 2.13105305 45898
Glonass 55
1 21855U 92005C 97352.62209846 .00000038 00000-0 10000-3 0 4608
2 21855 65.3835 65.7613 0006546 216.1999 143.8123 2.13101290 45807
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2 21867 97.7363 72.7460 0001998 83.8453 276.2994 14.98640024320748
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1 21890U 92009A 97355.60957054 .00000058 00000-0 00000+0 0 943
2 21890 53.7305 203.9527 0065330 194.5514 165.1810 2.00565865 42723
GPS BIIA-13
1 21930U 92019A 97356.26904205 -.00000063 00000-0 00000+0 0 9926
2 21930 55.5318 326.5018 0012678 208.5430 151.3946 2.00577126 41661
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1 21987U 92031A 97355.53501012 .00001568 00000-0 60091-4 0 6849
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2 21987 28.4311 67.0334 0008949 346.3259 13.7092 15.20758852307817
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1 22012U 92038A 97356.19038612 .00000673 00000-0 55547-4 0 8602
2 22012 81.6716 255.0766 0116268 162.9650 197.5535 14.92237540297686
GPS BIIA-14
1 22014U 92039A 97354.86944355 .00000062 00000-0 10000-3 0 9996
2 22014 54.9251 146.5422 0105140 343.7076 16.0039 2.00574413 33474
Glonass 56
1 22056U 92047A 97354.86235169 -.00000040 00000-0 10000-3 0 4045
2 22056 64.5182 304.2958 0004492 255.7356 104.2189 2.13103205 41946
Glonass 57
1 22057U 92047B 97350.46850676 -.00000044 00000-0 00000+0 0 4188
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1 22058U 92047C 97354.16144333 -.00000039 00000-0 10000-3 0 2655
2 22058 64.5272 304.3795 0011367 272.5555 87.3030 2.13102612 41953
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2 22077 66.0843 122.7905 0001494 2.4900 357.6124 12.86306329251248
S80/T
1 22078U 92052C 97355.77983421 -.00000037 00000-0 10000-3 0 7114
2 22078 66.0769 110.3597 0002085 24.3844 335.7266 12.86590258251984
GPS BIIA-15
1 22108U 92058A 97352.83555016 .00000030 00000-0 10000-3 0 9959
2 22108 53.9178 204.9953 0125725 176.7514 183.3989 2.00564583 38615
LAGEOS II
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2 22195 52.6750 1.9505 0137669 318.9201 40.1063 6.47293658122090
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2 22231 54.7400 147.5556 0032977 265.1255 94.4855 2.00571992 37267
GPS BIIA-17
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TDRS 6
1 22314U 93003B 97354.68349986 -.00000276 00000-0 10000-3 0 7468
2 22314 0.0466 113.3210 0001895 168.7085 6.3723 1.00272962 18109
GPS BIIA-18
1 22446U 93007A 97352.73216963 -.00000004 00000-0 10000-3 0 68
2 22446 53.8600 264.4934 0104057 13.5859 346.7508 2.00571054 35580
Glonass 59
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Glonass 61
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2 22521 31.1068 133.7675 0054473 262.2976 97.1477 15.04208948265821
GPS BIIA-19
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2 22581 55.0092 325.6524 0076561 40.1155 320.4427 2.00556385 34697
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2 22657 55.0410 325.6241 0093648 235.7735 123.3342 2.00570978 29999
RADCAL
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2 22700 54.0985 205.8679 0069728 15.6438 344.6490 2.00557161 32787
NOAA 13
1 22739U 93050A 97356.94979434 .00000063 00000-0 60705-4 0 4962
2 22739 99.1197 324.2614 0010460 108.2759 251.9547 14.11013766225143
GPS BIIA-22
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2 22779 54.0291 264.4600 0012045 320.1133 39.8580 2.00551538 31610
Meteor 2-21
1 22782U 93055A 97353.30308834 .00000065 00000-0 45918-4 0 6112
2 22782 82.5507 271.1503 0020915 235.2984 124.6205 13.83088178217174
UFO F2
1 22787U 93056A 97352.88897616 -.00000058 00000-0 10000-3 0 7422
2 22787 3.5799 330.6728 0004608 259.7967 248.2118 1.00272517 14346
SPOT 3
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2 22823 98.7082 66.8115 0017143 241.8253 118.1219 14.17021889219748
STELLA
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2 22824 98.5210 58.9861 0007348 70.1067 290.0906 14.27110265219945
AO-27
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IO-26
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2 22826 98.5272 65.9335 0009823 55.7685 304.4426 14.27860549220850
HEATHSAT
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2 22827 98.5261 60.3884 0010082 55.9596 304.2541 14.28010426220082
KO-25
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1 25094U 97072F 97352.69070048 .17349408 -60346-6 49501-2 0 157
2 25094 82.3190 217.5121 0044977 320.8267 39.1255 16.24632098 818
Cosmos 2348
1 25095U 97080A 97356.90999260 .00628755 58404-5 15490-3 0 159
2 25095 67.1425 281.4190 0111142 87.2698 274.1292 16.14485236 1179
1997080B
1 25096U 97080B 97354.64279487 .59326761 62467-5 18150-3 0 382
2 25096 67.1245 288.8975 0023101 124.5075 237.8860 16.58661317 814
1997058D
1 25100U 97058D 97355.78407403 .00013316 00000-0 15816-3 0 66
2 25100 51.6547 222.4546 0007592 111.9354 253.9018 15.61497153 695
Progress M-37
1 25102U 97081A 97356.29721281 -.00007452 11187-4 -98078-5 0 87
2 25102 51.6565 219.9012 0041639 126.2838 234.1886 15.93376026 315
1997081B
1 25103U 97081B 97356.92783922 .51648857 12838-4 23494-3 0 130
2 25103 51.5999 215.7409 0010256 89.0001 271.3255 16.55635270 422
Iridium
1 25104U 97082A 97357.23261518 -.00068439 00000-0 -94191-2 0 132
2 25104 86.5765 348.9697 0011429 232.7129 127.3059 14.78756134 395
Iridium
1 25105U 97082B 97357.23276279 -.00054602 00000-0 -75120-2 0 96
2 25105 86.5768 348.9702 0011045 233.2065 126.8117 14.78693979 391
Iridium
1 25106U 97082C 97357.23292251 -.00053315 00000-0 -73493-2 0 108
2 25106 86.5785 348.9731 0011013 233.3386 126.6813 14.78603814 395
Iridium
1 25107U 97082D 97356.69165398 -.00052870 00000-0 -72942-2 0 102
2 25107 86.5783 349.2023 0010567 236.8221 123.1892 14.78568312 315
Iridium
1 25108U 97082E 97356.75936051 -.00024160 00000-0 -33187-2 0 88
2 25108 86.5802 349.1757 0010734 240.8375 119.1709 14.78599473 327
1997082F
1 25109U 97082F 97356.86794302 .00098441 10974-5 60219-3 0 42
2 25109 83.6110 348.4485 0269312 344.0802 15.2071 15.41099791 358
Intelsat 804
1 25110U 97083A 97357.02112269 .00002383 00000-0 10000-2 0 79
2 25110 6.9556 270.0037 7277043 179.7527 98.3234 2.27913036 12
1997083B
1 25111U 97083B 97356.26407590 -.00118048 17262-6 -93500-2 0 22
2 25111 6.8942 271.6096 7369158 177.8070 190.0637 2.19811193 02
--
```

Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

3080. FS:Mint! Glen Martin Roof Tower + More

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: ^Fretts <n2rif@kwiknet.net>
Message-ID: <01bd1071$f6f45b00$ea8d56cf@Kwiknet.ppp>
Source record: 17353

Hello All;
I am selling 5ft Glen Martin Roof Tower w/ matching thrust bearing and 9ft heavy duty aircraft aluminum 2" diameter mast. All in great shape almost like new. Email: n2rif@amsat.org You can try calling but my phone is usually busy cause Im on the net most of the time. My ph# is 609-386-9382..
New it cost over $430 for everything. I am asking $290 OBO. It is assembled. The shipping will probably be a bit too expensive!! So anyone who is within driving distance should probably re: My qth is Burlington, NJ about 5 miles NorthEast of Phila,Pa and 12 miles South of Trenton, NJ..
Thank you for reading my bulletin. Thomas J or just T.j. -73

3081. Question re: SAT modes of operation

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: lojack@ix.netcom.com
Message-ID: <34a11f92.8575488@nntp.ix.netcom.com>
Source record: 17354

Is there a way to tell what mode of operation a satellite is
in?

I have just started experimenting with the easy sat rs-12/13
recently. I don't have an all-mode VHF rig so I workthe thing in the
blind using an ICOM-730 split and hand switching between bands. It
worked pretty well 'til the bird was switched to MODE A.

How can you tell what mode a satellite is in without looking
like an idiot calling CQ RS 12 on 20 meters 'til you're blue in the
face?

Thanks,

Scott, WB5PBJ

3082. Re: Radar/Laser Scrambler !!!!

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bd1073$24600d40$7960b6cd@cbx-nt>
Source record: 17355

Nahh!!! Doesn't take much to contend with a reflected pulsed beam. Heck a series of LED's would do it.

nospam <no@spam.com> wrote in article <34a3d9e6.2452675@news.smartt.com>...
> On Mon, 22 Dec 1997 23:23:20 PST, Phantom@strategical.com wrote:
>
> >The wallet sized Phantom(tm) from RMR is the first device to
> >combine a radar detector and a laser/radar scrambler in a single
> >compact unit. . It always transmits an infrared
> >beam, so as to convert and jam the almost instant effect
> >of a laser Lidar unit.
>
> Gee! Must be one hell of a continuous beam, considering lidar
> uses a 20 WATT pulsed 904 nM laser.....!!!
> (do you have to add another radiator to your vehicle to cool this
> sucker??)
>

3083. FT290RII $375

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bd1073$7b85ed60$7960b6cd@cbx-nt>
Source record: 17356

http://www.netexp.net/~cobox/FT290RII.jpg

Yaesu FT-290RII 2 Meter Multi Mode Portable with the FTS-8 Tone board.
Includes the FBA-8 Battery pack and a lighter adapter with Noise Filter.
10 Memory Channels. Multi-Mode Operation, (USB, LSB, CW & FM).
Detachable RF Deck for Portable Operation.
Power Level 25 watts, DTMF Microphone Included (MH-15C8).
Mobile Mounting Bracket, DC Power Cord, shoulder strap, and
rubber duck included.

Paper work included. $375

3084. Re: Question re: SAT modes of operation

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@firstinter.net>
Message-ID: <34A13453.27BC@firstinter.net>
Source record: 17357

Scott Douglas wrote:
>
> Is there a way to tell what mode of operation a satellite is
> in?
>
> I have just started experimenting with the easy sat rs-12/13
> recently. I don't have an all-mode VHF rig so I workthe thing in the
> blind using an ICOM-730 split and hand switching between bands. It
> worked pretty well 'til the bird was switched to MODE A.
>
> How can you tell what mode a satellite is in without looking
> like an idiot calling CQ RS 12 on 20 meters 'til you're blue in the
> face?
>
> Thanks,
>
> Scott, WB5PBJ

Scott,
All current voice sats, except FO29 remain in the same mode all the
time. RS12 and RS15 are continuous mode A, FO20 Mode JA, AO13 Mode B.
FO29 is mode JA every fourth week, on a rotating basis with the digital
modes. I believe that it next goes into JA this Friday, Dec. 26th.

Have fun with the sats...

Rick T. W7RT

3085. STS-83 & STS-94 QSL's

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: harrymue@juno.COM
Message-ID: <19971224.101211.12135.2.harrymue@juno.com>
Source record: 17358

I would like to thank the Bergen Amateur Radio Association of Northern NJ
for their efforts in the QSL distribution. Mine was definatly a nice
Holiday present.

I am curious to know how many were processed?
Is there a list available that shows who got cards?
How does a club get picked for this task?

Sounds like the makings of an article!!! Hi :)

HAPPY HOLIDAYS!!!

de Harry - KC5TRB in Tulsa, Oklahoma

3086. just testing

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: Tim C <tconst@world.x.com>
Message-ID: <34A18F8D.3D8E@world.x.com>
Source record: 17359

```
Just testing
I had problems before
tim
wb1exg
```

3087. RS-15

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: n2icz@aol.com
Message-ID: <19971224235701.SAA22610@ladder01.news.aol.com>
Source record: 17360

Hello!! I'm very interested in working the RS-15 sat. I have worked the RS-10 in the past (I understand it is no longer operating) with very good success. I understand RS-15 is about 1000KM higher in orbit than the RS-10. Will I be able to reach the RS-15 with the following equipment:

1. 2M SSB (17 watts)
2. Ringo Ranger (3DB gain) Antenna
3. !0 meter receiver with 10M preamp...

...or am I stretching it?

Any thoughts on a good antenna would be aprpeciated as well.

73 and Happy Holidays.

Larry-N2ICZ

3088. Re: RS-15

Newsgroup: rec.radio.amateur.space
Date: 1997-12-24 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <67t10s$n93$1@news.bctel.net>
Source record: 17361

Larry,

It should be possible. I have worked on RS-15 with 25 watts and a horizontal omni (0 dBd). A good 10 m antenna will do wonders. The bird's RX is sensitive enough, but the downlink signal is on the weak side. You may find that CW works much better.

Hope to work you on RS-15.

73 $ Season's Greetings de VE7MDL ....Erik.

N2ICZ wrote in message <19971224235701.SAA22610@ladder01.news.aol.com>...
>Hello!! I'm very interested in working the RS-15 sat. I have worked the RS-10
>in the past (I understand it is no longer operating) with very good success. I
>understand RS-15 is about 1000KM higher in orbit than the RS-10. Will I be
>able to reach the RS-15 with the following equipment:
>
>1. 2M SSB (17 watts)
>2. Ringo Ranger (3DB gain) Antenna
>3. !0 meter receiver with 10M preamp...
>
>...or am I stretching it?
>
>Any thoughts on a good antenna would be aprpeciated as well.
>
>73 and Happy Holidays.
>
>Larry-N2ICZ
>
>

3089. RS-16

Newsgroup: rec.radio.amateur.space
Date: 1997-12-25 00:00:00 UTC
From: bob shafer <bshafer@kiski.net>
Message-ID: <34A2A3E5.7636@kiski.net>
Source record: 17362

Does anyone know when RS-16 will be operational?

3090. Re: Satellite Frequencies

Newsgroup: rec.radio.amateur.space
Date: 1997-12-25 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <34A32BE8.6F41@erols.com>
Source record: 17363

Mark Moulding wrote:
>
> Is there a place where I could download most if not all of the
> Frequencies that orbiting satellites are using?
>
> Tnx, Mark

Mark,

Check out http://www.launchspace.com/ref/home.html and click on Downlink Frequencies.

SPECIAL INTRODUCTORY PRICE ! SAVE 50%

The International Space Industry Report (ISIR) for 1 year (26 issues), the
latest on satellite systems, launch vehicles, space technologies, business
& markets. US$99 instead of US$199 (US), US$139 instead of US$249 (Rest of
the World). Made payable to Launchspace Publications, Inc. 7777 Leesburg Pike, Falls Church, VA-22043, United States.
Phone.....(703) 749-2324
Fax.....(703) 749-3177
Internet.....http://www.launchspace.com/isir/home.html
Email.....info@launchspace.com

3091. STS 83 & 94 QSL card

Newsgroup: rec.radio.amateur.space
Date: 1997-12-26 00:00:00 UTC
From: JohnK.McHugh@worldnet.ATt.NET
Message-ID: <34A3F577.16C7@worldnet.att.net>
Source record: 17364

> Date: 24 Dec 97 16:11:36 GMT
> From: harrymue@juno.COM
> Subject: STS-83 & STS-94 QSL's
>
> I would like to thank the Bergen Amateur Radio Association of Northern NJ
> for their efforts in the QSL distribution. Mine was definatly a nice
> Holiday present.
>
> I am curious to know how many were processed?
> Is there a list available that shows who got cards?
> How does a club get picked for this task?
>
> Sounds like the makings of an article!!! Hi :)
>
> HAPPY HOLIDAYS!!!
>
> de Harry - KC5TRB in Tulsa, Oklahoma

I would also like to say thank you, it's a great QSL card.
John, KU4GY
Sunny and Hot So. Florida

3092. Soundblaster WEFAX/FAX/SSTV/RTTY/CW

Newsgroup: rec.radio.amateur.space
Date: 1997-12-26 00:00:00 UTC
From: "Brian E. Cauchi" <briane@geocities.com>
Message-ID: <6811nr$t0v@news.keyworld.net>
Source record: 17365
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FTV is a software only package that can be used to receive images from
Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from radio
telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
signals. It can also transmit Amateur Radio FAX and SSTV. No external
hardware, other than a radio, is required, as all the necessary signal
processing is implemented in software.

The main features include:
WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
FAX operation supports APT signal recognition and scheduled reception.
No external decoder or converter box is required.
Signal analysis is provided on all modes.
Many parameters are adjustable while receiving.
Full recovery from wrong mode settings is possible.
Program works in real time (about 1 second 'DSP' time lag)

I have improved documentation considerably and an illustrated user's manual
is now
available. You may get more information or download a copy from my web site,
on http://www.geocities.com/SiliconValley/2504

Cheerio from Brian, 9H1JS

3093. Re: Soundblaster WEFAX/FAX/SSTV/RTTY/CW

Newsgroup: rec.radio.amateur.space
Date: 1997-12-27 00:00:00 UTC
From: Torbj&#65533;rn Morka <troll47@hotmail.com>
Message-ID: <01bd1301$7a993d40$LocalHost@nfwdmaxa>
Source record: 17366
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Runs under win95 ?
Autodetect soundcard ?
Autotune ?
Automatic mode-setting ?

Brian E. Cauchi <briane@geocities.com> skrev i artikkelen
<6811nr$t0v@news.keyworld.net>...
> FTV is a software only package that can be used to receive images from
> Weather
> Satellites and Terrestrial Facsimile Stations, text transmissions from
radio
> telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and
CW
> signals. It can also transmit Amateur Radio FAX and SSTV. No external
> hardware, other than a radio, is required, as all the necessary signal
> processing is implemented in software.
>
> The main features include:
> WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
> Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
> FAX operation supports APT signal recognition and scheduled
reception.
> No external decoder or converter box is required.
> Signal analysis is provided on all modes.
> Many parameters are adjustable while receiving.
> Full recovery from wrong mode settings is possible.
> Program works in real time (about 1 second 'DSP' time lag)
>
> I have improved documentation considerably and an illustrated user's
manual
> is now
> available. You may get more information or download a copy from my web
site,
> on http://www.geocities.com/SiliconValley/2504
>
> Cheerio from Brian, 9H1JS
>
>
>
>
>

3094. MIR repeater working?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-27 00:00:00 UTC
From: nungeste@sdd.hp.com
Message-ID: <883262678.510700@cs1.sdd.hp.com>
Source record: 17367

I am trying to make my first satellite QSO using MIR's FM voice repeater at 437.950 MHz downlink, 435.750 MHz uplink, 141.3 Hz CTCSS. During a near-overhead pass today, I heard nothing. I accounted for Doppler and was using a 35 Watt FM mobile rig and trunk-mount antenna.

Is the repeater working? Where can I get updates regarding MIR's amateur radio status?

3095. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: pokf4jrg@cheta.net
Message-ID: <34a6d005.14930679@news>
Source record: 17282

On 28 Dec 1997 05:54:15 GMT, "Geert PIRENS" <pass@glo.be> wrote:

>
>
>I need folowing weathersatellite frequenties:
>
>Noaa-12 (hrpt)
>Noaa-14 (hrpt)
>Pdus
>Seastar
>Seasat

Go to http://www.mindspring.com/~n2wwd/oscar.html

This is the Amateur Radio Sat page but I believe you will be able to
back track from this page and find the Weather Sat page.

Burton kf4jrg

3096. ANS-362 WEEKLY BULLETINS

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: BJ Arts <bjarts@the-bridge.net>
Message-ID: <686uf9$7ov$1@news3.mr.net>
Source record: 17283

BJ Arts, WT0N, Amsat News Service editor
Daniel (Dan) James, NN0DJ, Amsat News Service Assistant editor

SB SAT @ AMSAT $ANS-362.01
HAPPY NEW YEAR

HR AMSAT NEWS SERVICE BULLETIN 362.01 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.01

From the staff at the Amsat News Service and the folks at AMSAT-NA, we all wish you a very happy and prosperous 1998.

[ANS thanks Bill Tynan, W3XO, President AMSAT-NA and
BJ Arts, WT0N, Amsat News Service editor for this announcement.]

/EX

SB SAT @ AMSAT $ANS-362.02
SKN REMINDER

HR AMSAT NEWS SERVICE BULLETIN 362.02 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.02

Amateur radio operators worldwide are cordially invited to join in the 26th annual Straight Key Night on OSCAR, sponsored by AMSAT-NA for ham radio satellite enthusiasts.

According to Ray Soifer, W2RS, it's entirely unofficial with no rules, no scoring and no need to send in a log. Just call CQ SKN in the CW passband segment of any OSCAR satellite from 0000 to 2359 UTC on January 1, 1998, or answer a CQ SKN call from another station. OSCAR Zero (EME) contacts count too.

Of course, all SKN operating must be done with a straight hand key. Those participating are encouraged to nominate someone they worked for recognition as having the "best fist." To send in a "best fist" nomination, please send it to;

e-mail - w2rs@amsat.org

packet radio - W2RS @ WA2SNA or
W2RS @ GB7HSN

Regular mail can also be sent to the W2RS callbook address.
Those nominated will be featured in a bulletin sent to many of the
amateur radio publications and posted via ANS, packet radio and the
Internet in early February.

[ANS thanks Ray Soifer, W2RS, for this information]

/EX

SB SAT @ AMSAT $ANS-362.03
AMSAT- UK NEWS

HR AMSAT NEWS SERVICE BULLETIN 362.03 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.03

Amsat-UK has informed the ANS that RJC Broadbent, G3AAJ,
will retire from the position of Amsat-UK Secretary as of 31st December;
he continues as a member of the Amsat-UK Committee (BoD) as representative
to various worthy bodies such as IARU, ISS etc.

The demanding task of Honorary Secretary has been taken on by Fred
Southwell, G6ZRU, (g6zru@amsat.org). And Fred's beautiful XYL, Jenny,
G1LIT, has taken the position of Honorary Treasurer.

Consequently the telephone and fax numbers are changing.
AMSAT-UK's telephone number changes to +44 1273 495733
and Fax to +44 1273 492927.

Other changes to the Amsat-UK Committee can be found in the most recent
issue of Oscar News which members should have received before Christmas.
In particular, folks renewing their annual donation should note that it
should now be sent to Fred's address (or rather Jenny's - which is the
same):

F S Southwell G6ZRU
40 Downsview
Smalldole
Henfield
West Sussex BN5 9YB
United Kingdom

An announcement by G2UK in Oscar News (No 20) of January 1978 hailed G3AAJ's
arrival as Amsat-UK's first Secretary; the grapevine said he "did things to
light-houses" for a living.

The very next edition of Oscar News saw Ron taking us to task for various
matters; let it never be said that he doesn't start out as he means to carry
on.

That edition also announced that Amsat-UK's minimum donation would be three
pounds for the ensuing year. It is no small tribute to Ron that now, twenty
years on, the amount has only risen by a small amount (to fourteen pounds);
his ability to extract money for the amateur satellite program from all and

sundry has been nothing short of phenomenal.

Ron's efforts over the years led to him receiving the MBE three years ago; everyone is agreed that the award was well earned but, to Ron, someone saying "thanks for your hard work" and buying him a beer is appreciated almost as much.

[ANS thanks Richard W L Limebear, G3RWL, for this news.]

/EX

SB SAT @ AMSAT $ANS-362.04
ONLINE QSL CONTROVERSY

HR AMSAT NEWS SERVICE BULLETIN 362.04 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.04

Goran Fagerstrom, SM0DRD, informed the Amsat News Service that in ANS Bulletin 355.06 (December 21), which included an item on the DXCC admissibility of online QSLs from their Cuban expedition (using the call T49C on satellite), citing that 'they were easy to modify'. The issue is not new, it was discussed over several reflectors and in email to them since they started their QSL Server at SK0UX this summer. For those unfamiliar with the concept, it means that you may search for your QSOs on the Internet and then download your QSL as a file for printing on your local printer, thus bypassing SASEs, IRCs, green stamps and saving a lot of work, money, and speed.

The T49C team has consciously chosen the present technical solution instead of including 'unbreakable electronic seals', like check-sums, in the file representing the QSL which you may download and print. Some people have suggested such solutions to detect modification, but at present the T49C team feels they are overkill. The key idea is that any awards committee can verify a QSO *at any time* by looking up the QSO again. So this concept in fact offers *greater* proof against tampering than traditional QSLs, which hams have been known o falsify (isn't that amazing). They have emphasized this to the DXCC Advisory Committee in positive discussions.

Many hams have said that making cards available via the Internet is 'an idea long overdue' with huge potential gains. One U.S. ham has already received our source code and has set up a QSLs Online Server of his own.

Feel free to explore the concept at http://ham.te.hik.se/clubs/sk0ux (go to the 'QSLs Online by SK0UX' page and to the Cuba page)! Comments are very welcome (to goran@tjansteforbundet.se) and they feel that there is a lot to be gained by continuing the already ongoing collective brain-storming. Their implementation is not cast in stone.

Stay tuned to ANS for further information about this controversy.
[ANS thanks Goran Fagerstrom, SM0DRD, for this information.]

/EX

SB SAT @ AMSAT $ANS-362.05
VHF CONFERENCE

HR AMSAT NEWS SERVICE BULLETIN 362.05 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.05

The second annual Southeastern VHF Society Technical Conference will be held Friday and Saturday, April 3 and 4, 1998 in Atlanta, Georgia!

The dates and location of our inaugural Conference proved to be so popular that we are staying with the same weekend and location in 1998 - the Atlanta Marriott Northwest located between Atlanta and Marietta. A special Conference room rate of $69 per night plus tax is available to attendees. Fore reservations, please call the Marriott at 1-800-228-9290.

SVHFS Award: The Southeastern VHF Society will present the SVHFS Award annually in recognition of exceptional contributions and service to the Society or the VHF/UHF community in general. Presentation of the first SVHFS Award will take place at the Saturday evening banquet. For more information on the SVHFS Award, please contact Steve Adams, K4RF (ex-WS4F), SVHFS President at stevews4f@aol.com

Call for Papers: Program Chairman Bob Lear, K4SZ, has issued a call for papers. If you are interested in making a technical presentation or having a paper published in the Proceedings, please contact Bob at:
Bob Lear, K4SZ
P. O. Box 1269
Dahlonega, GA. 30533
706-864-6229
k4sz@stc.net

Antenna Measurements: Antennas will be measured Friday, April 3rd starting with 144 MHz and working up in frequency - amateur bands only, please! A maximum of two antennas per band per individual may be tested. Please supply a female N connector or SO-239. Please indicate the antennas you will be bringing on your registration form. Walk-ups will be tested as time and space permit, so please pre-register! For more information, or if you would like to test a commercial antenna, please contact Antenna measurements Chairman Dale baldwin, WB0QGH, at wb0qgh@mindspring.com

Noise Figure Testing: Noise figure testing will be conducted on Saturday, April 4th. Attendees will be assigned a time for testing based on receipt of their Conference registration form. For more information, contact Noise Figure Measurements Co-Chairmen Charles Osborne, WD4MBK, at cosborne@pipeline.com or Fred Runkle, K4KAZ, at engineer@rightmove.com

In addition to technical presentations, antenna measurements and noise figure testing, activities will include:
Friday evening flea market

Saturday evening banquet
SVHFS auction
Family program

Please make plans now to attend this fun event! We are determined to
make our second Conference even better than our first - with your help!
Register before March 14, 1998 and receive a discount!

For more information on the Southeastern VHF Society or our 1998
Conference, please visit our web site at
http://www.akorn.net/~ae6e/svhfs

[ANS thanks Tad Danley, K3TD, for the news about the conference.]

/EX

SB SAT @ AMSAT $ANS-362.06
NEW YEAR'S SOFTWARE TIP

HR AMSAT NEWS SERVICE BULLETIN 362.06 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.06

Richard W L Limebear G3RWL, gives ANS this software tip for 1998.
When the new year starts, so do the day-numbers in the keplers; and some
old tracking software refuses to cross between the years. A tactic to use
in this instance, until 1998 keplers arrive, is to deceive the software by
giving it a 1997 date; i.e. 2 January is 33 December etc.

Another problem comes in some software when the epoch in the keplers
contains spaces, i.e. "1998__4.xxxxx"; the tactic here is to edit the
kepler file before feeding it into the program so that the spaces are
replaced by zeros -extra zero's do *not* affect the checksum of 2-line
elements.

Some amateurs still use "old" tracking software which requires a sidereal
time offset and it is necessary to update it at the beginning of each year.
The number for 1997 was 0.27693880 and the number for 1998 is 0.27627570.

Of course, it would be better to buy new tracking software from your local
Amsat organization; all recent software calculates sidereal time routinely.

[ANS thanks Richard W L Limebear G3RWL, for this software tip.]

/EX

SB SAT @ AMSAT $ANS-362.07
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 362.07 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.07

MIR
MIREX chief Dave Larsen, N6CO, reports that an announced crossband ''experiment'' has been abandoned for now because of problems with the antenna on MIR. The crossband test was to have begun December 1 and was to have involved a 70 cm uplink and a 2-meter downlink. US astronaut Dave Wolf, KC5VPF, has been on 145.985 MHz FM simplex from the Russian space station, but only sporadically.

A space walk at the end of December will check and--if necessary--repair the 2-meter/70-cm antenna that might have been damaged during a space walk in November. The Kenwood TM-733 aboard Mir has been connected to the spacecraft's SAFEX repeater antenna.

The Russian MAREX team and North American based MIREX team are aware of the problem with the new TNC on Mir. They know exactly what the problem is, They just need to wait for the crew to have time to make the adjustments. Mirex has had detailed discussions with MAREX on which settings need to be changed to restore full operations. The MIREX team was informed that the crew was very busy and it may take a few days for them to make the changes. When they do have time, they will make the adjustments. So, everyone is asked to be patient in the meantime.
[ANS thanks the ARRL and MIREX team for this information]

SAFEX, MIR 70cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
The SAFEX activity is very intermittent.
[ANS thanks the MIREX team for this information]

RS-12
(Uplink, 145.91-145.95 MHz CW/SSB, Downlink 29.41-29.45 MHz)
Operational, now in mode A.

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.

RS-16
At this time only the beacons are on.
Transponder information on RS-16.
Uplink = 145.915 - 145.948 MHz
Downlink = 29.415 - 29.448 MHz
Beacons = 29.408 and 29.451 MHz
Pwr 29 MHz Down = 1.2 W /4 W

Beacon 1 = 435.504 MHz
Beacon 2 = 435.548 MHz
Pwr 435 MHz Beacons = 1.6 W

RS-17
Operational. 145.820 MHz
12/28/97 20:46 UTC
1360 Hz => 49.5C => 121F
[ANS thanks Glenn Bock for this report.

New Sputnik-40 QSL Address QSL Information is as follows:
QSL Information for SWL (Short Wave Listener)

Sergey Samburov (RV3DR)
P.O. Box 73
Korolev-10 City
141070, Russia
[ANS thanks the MIREX team for this information]

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.
Mark Fossum, N0NSV, reports he just completed a QSO with
VE7LKA at 0652z 12/27/97. AO-10 was at a
range of 37,981 from his location in Rugby ND (DN98).
AO-10 is still doing the job!
[ANS thanks Mark Fossum, N0NSV, for this update on AO-10.]

AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.
FO-20, like many Leo's is in a "sun synchronous" orbit. The precession in
the RAAN of its orbit due to the earth's oblateness matches the earth's
rotation around the sun so that FO-20 always has about 33 minutes of
eclipse time each orbit and the rest in sunshine. A sun synchronous orbit
is a retrograde LEO polar orbit with an inclination of about 98 degrees.
At this inclination RAAN precession = 360 degrees in 365 days. The
stability in temperature and solar energy is, needless to say, very
helpful. The ratio of eclipse to sunlight can be adjusted by varying
initial orbital elements. FO-29, for example, is virtually always in
sunlight, UO-11 has about 22 minutes of eclipse, most seem to run about 33
minutes eclipse per orbit.

This also means that FO-20 (and other sun synchronous sats) appear at your
location at about the same "sun time" every day. At my QTH FO-20 goes over
about 1:30 PM and 3:30 PM every day. UO-11, AO-16, DO-17, WO-18, LO-19,
UO-22, KO-25, AO-27, FO-29 etc are also in sun synchronous orbits. KO-23,
RS-12/13, RS-15, though in highly inclined orbits, are not sun synchronous.
[ANS thanks Stacey Mills, W4SM, and Kazu Sakamoto, JJ1WTK, for this report]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
Operational.

26 Dec. 07:42z JA
09 Jan. 07:14z JD 1200
16 Jan. 07:52z JD 9600
23 Jan. 08:30z JA
30 Jan. 07:24z JD 1200
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]
/EX

SB SAT @ AMSAT $ANS-362.08
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 362.08 FROM AMSAT HQ
SILVER SPRING, MD, DECEMBER 28, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-362.08

KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM,
9600 Baud FSK)
KO-23 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally.
The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is
transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but
telemetry indicates that it has partially failed, and delivering half
power. This beacon is a useful test source for those testing mode-S
converters, prior to the launch of P3-D. It is considerably weaker
than DOVE, which should be used for initial testing. Any reports of
reception on 2401 MHz. would be most welcome. Please e-mail
g3cwv@amsat.org.

The 435.025 MHz. beacon is normally OFF. However it can sometimes be
heard when the satellite is being commanded by ground control, ie.

within range of Guildford, UK. When the 435 beacon is transmitting, the 145 beacon is normally OFF. The data transmitted is mainly binary.

OSCAR-11 users are welcome to visit my web site. It contains some software for capturing data, and decoding ASCII telemetry and WOD. There is an archive of raw data (mainly WOD) for analysis, which is continually being expanded, as new data is captured. The URL is -

http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive Wallis, G3CWV, for this information]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally.
State of the batteries at the end of a nocturnal orbit
uptime is 1196/17:02:06. Time is Sat Dec 27 22:30:54 1997
Bat 1 V= 1.252 V Bat 2 V= 1.248 V
Bat 3 V= 1.254 V Bat 4 V= 1.257 V
Bat 5 V= 1.250 V Bat 6 V= 1.248 V
Bat 7 V= 1.253 V Bat 8 V= 1.279 V
Bat 1 Temp 6.654 D
Bat 2 Temp 6.654 D

Total Array C= 0.000 Bat Ch Cur=-0.458 Ifb= 0.182 I+10V= 0.299
TX:010C BCR:1E PWRC:59F BT: A WC:25 EDAC: C

Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

DO-17(DOVE)
(Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
Operational.
The DOVE S band beacon is on. The frequency is 2401.220 MHz. The 2 meter transmitter is also on, 145.825 MHz. Telemetry is being sent about every 30 seconds
A scanned image of the Dove's QSL at 425DXNews Web Site:
http://www-dx.deis.unibo.it/htdx/
[ANS thanks Jim White, WD0E, for this update]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
Bob Argyle, KB7KCL reports that WEBERSAT-OSCAR-18 is gathering and sending Whole Orbit Data. The PHOTO task is being uploaded and the command team hopes to have pictures and spectra by about the 12th of December. WO-18's return to service is suspected to be seasonal in nature. Bob sends thanks to all those who have sent telemetry received from WO-18.
[ANS thanks Bob Argyle, KB7KCL, and SpaceNews for this update.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88,
145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)
Operating normally.
State of the batteries at the end of a nocturnal orbit
uptime is 921/08:02:34. Time is Sat Dec 27 22:07:44 1997
Bat 1 V= 1.306 V Bat 2 V= 1.302 V
Bat 3 V= 1.316 V Bat 4 V= 1.308 V
Bat 5 V= 1.316 V Bat 6 V= 1.310 V
Bat 7 V= 1.312 V Bat 8 V= 1.302 V
Bat 1 Temp 4.057 D
Bat 2 Temp 4.057 D

Total Array C= 0.008 Bat Ch Cur=-0.270 Ifb= 0.119 I+10V= 0.158
TX:109 BCR:38 PWRC:333A31 BT:34 WC:35

General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM
9600 Baud FSK)
UO-22 is operating normally.
Roy Welch, W0SL, and Jerry Smyth, N8ULU, have been helping out a ham, Ron
Ross, KE6JAB, who has taken a trip to Antarctica. He is now active on UO-22
with his portable station. He plans on sending pictures when he can get his
digital camera going. If Ron gets the camera going, you should be able to
view at the following URL.
http://www.thistle.org

Chris Jackson, G7UPN/ZL2TPO, has reloaded the Store and Forward
communications task on the UO-22 On-Board Computer. This task includes
incremental checksums which should make uploading slightly faster.
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and
Operations Manager of UO-22, for this report]

IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz
SSB, 1200 Baud PSK)
No report at this time.

[Please send your Satellite or News reports to ANS Editor BJ Arts,
WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org]

/EX

--
BJ Arts
Amateur callsign: WT0N
ARMY MARS callsign: AAR5EL
Grid Square EN-37mk
Hibbing, Minnesota. U.S.A.
e-mail bjarts@the-bridge.net or wt0n@amsat.org

Amsat News Service Bulletin Editor

3097. Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bd1355$1973a880$36b530ce@default>
Source record: 17368
Cross-posted to: rec.radio.amateur.space,nl.radio.amateur,uk.radio.amateur,rec.radio.amateur,rec.radio.amateur.misc

I need folowing weathersatellite frequenties:

Noaa-12 (hrpt)
Noaa-14 (hrpt)
Pdus
Seastar
Seasat

Who will help me ?

Regards and nice hollydays wishing !!!!

Geert Pirens
---
vissit my multi interests homepage at:
-> http://user.glo.be/~pass <-

3098. KCT board and the HAM-IV rotor.

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: erikj@isa.dknet.dk
Message-ID: <34a60bd4.555286@news2.dknet.dk>
Source record: 17369

Can anybody help me how to get the KCT board to run with a HAM-IV rotor ??.

I have made all the necessary connections, and all is ok except for the HUM comming from the whiper placed in my HAM-IV. The AD/DA converters in the KCT board does not accept HUM.

If you have had the same problem and have cured it your help will be very much appreciated.

Thanks in advance.

De Erik OZ4KK oz4kk@amsat.org

3099. Webpage UPDATE !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: Albert AERTS <albertaerts@innet.be>
Message-ID: <34A631C6.A7E6DB03@innet.be>
Source record: 17370
Cross-posted to: rec.radio.amateur.space,tnn.radio.amateur,alabama.birmingham.radio.amateur,git.radio.amateur

The " ON6TS Fact Sheet " which is accessible through the
"Aerts Family Homepage" has been UPDATED.

http://www.club.innet.be/~pub01234

73's de Albert ON6TS

--
Amateur Radio Callsign: ON6TS
HF Pactor: 14076.5, 18106.5 or 21076.5 mark carrier
Email: albertaerts@innet.be
URL: http://www.club.innet.be/~pub01234

3100. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: lawrenceh@peverell.demon.co.uk
Message-ID: <34a93883.179052956@news.demon.co.uk>
Source record: 17371

I shall be posting wxsat frequencies here each month. Meanwhile:

For those interested in the weather satellites (wwxsats) the following
are operational:

Polar orbiters:
NOAA-12 picture data on 137.50MHz and beacon on 136.77MHz.
NOAA-14 picture data on 137.62MHz and beacon on 137.77MHz.
Meteor 3-5 picture data in sunlight only on 137.85MHz.

Geostationary:
reception depends on longitude:
WEFAX transmissions on 1691.0MHz
Meteosat-6 (also WEFAX on 1694.5MHz) at zero longitude.
Goes-8 75 degrees long.
Goes-9 135 degrees long.
GOMS at 76 degrees long.
GMS at 139 degrees long.
Fengyun-2 at 104 degrees long.

Lawrence Harris

3101. Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34a67214.2174587@news>
Source record: 17372
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

I have some 450 ohm ladder line which I would like to connect to a
10 meter dipole to receive the downlink signal of the RS-12 satellite.
I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
I have a receive tuner/preamp which can be connected between the
antenna and the receiver. It has both a SO 239 connector and 1/8"
phone jack for antenna connections. They are hooked together, not
switchable. The R-1000 also has both a SO 239 and a single wire clip
connector for an antenna, with a switch to select either one but not
both. Any suggestions would be appreciated.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

3102. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: lawrenceh@peverell.demon.co.uk
Message-ID: <34ad4068.181074331@news.demon.co.uk>
Source record: 17373

"Geert PIRENS" <pass@glo.be> wrote:

>
>
>I need folowing weathersatellite frequenties:
>
>Noaa-12 (hrpt)
>Noaa-14 (hrpt)
>Pdus
>Seastar
>Seasat
>

All this information is freely available via normal search engines.
Visit the NOAA sites. Meanwhile:

NOAA-12
APT PREDICT
122937 NOAA 12
APT 137.50 MHZ, HRPT 1698.0 MHZ, BCN DSB 136.77 MHZ. APT DAY/NIGHT
CH 2,4/3,4. VIS CH 2 /0.725 TO 1.0/ AND IR CH 4 /10.5 TO 11.5/ XMTD
DURING S/C DAY. IR CH 3 /3.55 TO 3.93/ AND IR CH 4 /10.5 TO 11.5/
XMTD DURING S/C NIGHT. DCS CLK YR/DAY/TIME 1994 185 69079.016
LAST TIP CLK CORR 12/31/95 CLK ERR AFTER CORR MINUS 0.1 SEC.
CLK ERR AS OF 12/15/97 PLUS 0.1 SEC. ERR RATE AS OF 12/01/97
MINUS 2 MS/DAY(ESTIMATED). NO CLK CORRECTION SCHEDULED.
NNNN

TBUS 2 KWBC
APT PREDICT
122938 NOAA 14
APT 137.62 MHZ, HRPT 1707.0 MHZ, BCN DSB 137.77 MHZ. APT DAY/NIGHT
2,4. VIS CH 2 /0.725 TO 1.0/ AND IR CH 4 /10.5 TO 11.5/ XMTD
DURING S/C DAY. IR CH3 /3ND IR CH 4 /10.5 TO 11.5/ XMTD
DURING S/C NIGHT. DCS CLK TIME YR/DA/TIM 1995 021 79186.656.
LAST TIP CLK CORR 10/28/97. CLK ERR AFTER CORR MINUS 1.10 SEC.
CLK ERR AS OF 12/15/97 MINUS 0.70 SEC. ERR RATE AS OF 12/01/97
PLUS 10 MS PER DAY. NEXT CLK CORR 03/24/98.
NNNN

PDUS from Meteosat-6 is on 1694.5MHz.

Regards
Lawrence Harris

3103. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34A68F65.4247@inreach.com>
Source record: 17374
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

orion@xyznycap.rr.com wrote:
>
> I have some 450 ohm ladder line which I would like to connect to a
> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
> I have a receive tuner/preamp which can be connected between the
> antenna and the receiver. It has both a SO 239 connector and 1/8"
> phone jack for antenna connections. They are hooked together, not
> switchable. The R-1000 also has both a SO 239 and a single wire clip
> connector for an antenna, with a switch to select either one but not
> both. Any suggestions would be appreciated.
>
> --
> Larry Gamache N2YMJ
>
> To reply, delete the
> xyz from my address.
A dipole has an impedance of around 75 ohms, wont match your line
without some mods.
Try a folded dipole, with a 450 ohm resistor connecting the folded parts
together. Check the ARRL antenna book for other dipole mods that get 450
ohm impedances.

3104. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: Keith Stein <kstein@erols.com>
Message-ID: <34A6B9CF.365B@erols.com>
Source record: 17375
Cross-posted to: rec.radio.amateur.space,nl.radio.amateur,uk.radio.amateur,rec.radio.amateur,rec.radio.amateur.misc

Geert PIRENS wrote:
>
> I need folowing weathersatellite frequenties:
>
> Noaa-12 (hrpt)
> Noaa-14 (hrpt)
> Pdus
> Seastar
> Seasat
>
> Who will help me ?
>
> Regards and nice hollydays wishing !!!!
>
> Geert Pirens
> ------------------------------
> vissit my multi interests homepage at:
> -> http://user.glo.be/~pass <-

Geert,

Click on the Downlink Frequency list found at;

http://www.launchspace.com/ref/home.html

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Phone.....(703) 749-2324
Fax.....(703) 749-3177
Internet.....http://www.launchspace.com/isir/home.html
Email.....info@launchspace.com

3105. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: "User Rdkeys Robert D. Keys" <rdkeys@seedlab1.cropsci.ncsu.edu>
Message-ID: <6869o5$1dk$3@uni00nw.unity.ncsu.edu>
Source record: 17376
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In rec.radio.amateur.antenna orion@xyznycap.rr.com wrote:
> I have some 450 ohm ladder line which I would like to connect to a
> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
> I have a receive tuner/preamp which can be connected between the
> antenna and the receiver. It has both a SO 239 connector and 1/8"
> phone jack for antenna connections. They are hooked together, not
> switchable. The R-1000 also has both a SO 239 and a single wire clip
> connector for an antenna, with a switch to select either one but not
> both. Any suggestions would be appreciated.

> --
> Larry Gamache N2YMJ

> To reply, delete the
> xyz from my address.

Practically, it does not make much difference, on reception.
Thus, you probably don't need to do much at all, on average reception.
But, if you want to optimize the match, then an impedance transformer
of some sort would be required to match the 450 ohm line to the
50 ohm line input (a 9:1 balun would do, or a 1/4 wave of 50/75/90
ohm coax at the frequency of use, or even an L network tuner).
For a quick and dirty fix, I would opt for a 1/4 wave of coax to
feed into the open wire line, and use a whole half wave or integral
multiples thereof of the open wire line to reach the antenna.
If I were more serious, I would build a small L network with a coil
of around 10 turns on a 1 inch form spaced to about 1 inch length,
and a 25-50pf variable capacitor. Put the HiZ side to the antenna line
and the loZ side to the receiver and tune for optimal signal strength.

Bob/NA4G

3106. Need Advice on Dual-band (Mode B/J) Satellite Antenna

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: dgravatt@falcon.cc.ukans.edu
Message-ID: <883343921.682622986@dejanews.com>
Source record: 17377
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Hello all, I am in the market for a single-connector, dualband antenna for use in mode B or J satellite work. This antenna must be a fixed unit (since I spent all my money on Christmas presents and can't afford an az/el rotator), and should be inexpensive, or fairly easy to build. I would like to be able to work the "easy sats" (Mir, Dove) as well as some of the less-easy ones (FO-29, AO-27, etc). I have looked at Arrow Antenna's dualband J-pole, which is certainly fixed and inexpensive. Does anyone out there have firsthand experience using this for satellite work? I'd appreciate any suggestions for antenna types, comments, or whatever. Thanks in advance, de Dan, N2PRC.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3107. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: Xsubmarine@airnet.netY
Message-ID: <34a6c471.132987022@news.airnet.net>
Source record: 17378
Cross-posted to: rec.radio.amateur.space,nl.radio.amateur,uk.radio.amateur,rec.radio.amateur,rec.radio.amateur.misc

On Sun, 28 Dec 1997 12:42:55 -0800, Keith Stein <kstein@erols.com>
wrote:

>Geert PIRENS wrote:
>>
>> I need folowing weathersatellite frequenties:
>>
>> Noaa-12 (hrpt)
>> Noaa-14 (hrpt)
>> Pdus
>> Seastar
>> Seasat
>>
>> Who will help me ?
>>
>> Regards and nice hollydays wishing !!!!
>>
>> Geert Pirens
>> ------------------------------
The internet has all satellite photo's. Why bother with that stuff?

3108. Re: Soundblaster WEFAX/FAX/SSTV/RTTY/CW

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: jshaffer@mail.csrlink.net
Message-ID: <34a58645.2536378@news.csrlink.net>
Source record: 17379
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

On 27 Dec 1997 21:09:37 GMT, "Torbjï¿½rn Morka" <troll47@hotmail.com> wrote:

>Runs under win95 ?
>Autodetect soundcard ?
>Autotune ?
>Automatic mode-setting ?

I can't speak for satellite WEFAX, but the only SoundBlaster HF FAX receiving software I've *ever* seen run successfully under Windows 95 is the new release of WXSAT, which despite the name does HFFAX now too. Thanks to Christian Bock for an excellent piece of software!

--
Do what thou wilt shall be the whole of the law.

3109. * SpaceNews 29-Dec-97 *

Newsgroup: rec.radio.amateur.space
Date: 1997-12-28 00:00:00 UTC
From: kd2bd@amsat.org
Message-ID: <$spc1229.1997@ampr.org>
Source record: 17380
Cross-posted to: rec.radio.amateur.space,rec.radio.info,sci.space.news

SB NEWS @ AMSAT $SPC1229
* SpaceNews 29-Dec-97 *

BID: $SPC1229

=========
SpaceNews
=========

MONDAY DECEMBER 29, 1997

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It
is published every week and is made available for non-commercial use.

* MIR NEWS *
============
MIREX president Dr. Dave Larsen, N6CO, reports that the previously announced
Mir crossband frequency experiment has been abandoned for now because of
problems with the amateur radio antenna on Mir. The crossband test was to
have started on 01-Dec-97 and lasted three months. It was to have involved
a 70-cm uplink to Mir along with a 2-meter downlink. US astronaut Dave Wolf,
KC5VPF, has been on 145.985 MHz FM simplex from Mir, but only sporadically.

A space walk at the end of December will check, and if necessary, repair the
2-meter/70-cm dual-band antenna on Mir. There is concern that the antenna
may have been damaged during a recent space walk that took place in November.
The Kenwood TM-733 transceiver aboard Mir has been connected to the
spacecraft's SAFEX repeater antenna for the time being.

The new packet radio TNC on-board is currently suffering from a problem that
is the result of improper parameters being entered into the TNC. The TNC is
not properly interpreting the DCD (data carrier detect) logic, and thinks
the uplink frequency is busy most of the time, even when it is clear. The
internal timers in the modem will periodically respond to packet data,
and dump the contents of the TNC's transmit buffer in a long transmission.

Groundstations are asked to refrain from using the Mir PMS until the crew
has time to correct the problem. This request also applies to those who,
despite repeated requests, continue to digipeat beacons and holiday greetings
via the Mir TNC.

The MIREX teams is hopeful that the problem with the TNC can be cleared up
before the end of the year.

In the meantime, here is a list of the commands interpreted by the new TNC
on Mir:

LL n LIST LAST n MESSAGES
LM(ine) LIST UNREAD MESSAGES ADDRESSED TO YOU
LO [+|-] LISTING ORDER
LT LIST TRAFFIC
LTn DISPLAY LOCATION TEXT n=1-4
K(ill) n DELETE MESSAGE NUMBER n
KM(ine) DELETE ALL READ MESSAGES ADDRESSED TO YOU
R(ead) n DISPLAY MESSAGE NUMBER n
RH n DISPLAY MESSAGE n WITH HEADERS
RM(ine) READ ALL MESSAGES ADDRESSED TO YOU
S(end) call SEND MESSAGE TO callsign
S[B|P|T] call SEND BULLETIN, PRIVATE, or TRAFFIC

[Info via the AMSAT News Service, WF1F, and CT1EAT]

* HINTS FOR THE NEW YEAR *
==========
Richard, G3RWL, reminds satellite users that when the new year starts, so do the day numbers in the Keplerian elements used by satellite tracking and orbital prediction software, and some old tracking software refuses to cross between the years. A tactic to use in this instance (until 1998 keplers arrive) is to deceive the software by giving it a 1997 date; i.e. 02-Jan-98 is 33-Dec-97, etc.

Another problem comes in some software when the epoch in the keplers contains spaces, i.e. "1998__4.xxxxx". The tactic here is to edit the kepler file before feeding it into the program so that the spaces are replaced by zeros. Extra zero's do *not* affect the checksum of 2-line elements.

Some amateurs still use "old" tracking software that requires a sidereal time constant for the current year. The siderial time constant for 1997 was 0.27693880 and the value for 1998 is 0.27627570.

* SpaceNews ANNIVERSARY NEWS *
==========
In celebration of the 10th anniversary of SpaceNews, a special anniversary graphic has been uploaded to the AMSAT-OSCAR-16 and KITSAT-OSCAR-25 digital communication satellites. Watch for it!

* THANKS! *
==========
Thanks to all who sent messages of appreciation to SpaceNews, especially:

KA2DRV AA6AE KH6ABA VK8KTC TG9IKE

and students at Huntington Park High School, Los Angeles, California who receive SpaceNews via the AMSAT-OSCAR-16 digital communication satellite.

All the best wishes to everyone for a healthy and happy New Year!

* FEEDBACK/INPUT WELCOMED *
==========
Comments and input for SpaceNews should be directed to the editor (John, KD2BD) via any of the paths listed below:

WWW : http://www.njin.net/~magliaco/
PACKET : KD2BD @ KS4HR.NJ.USA.NA
INTERNET : kd2bd@amsat.org, magliaco@email.njin.net
SATELLITE : AMSAT-OSCAR-16, LUSAT-OSCAR-19, KITSAT-OSCAR-25

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.732.224.2948
Satellite : AO-16, LO-19, KO-25 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco/
Video : 426.250 MHz/439.250 MHz | FAX : +1.732.224.2060
-=-=-=-=-=-=-=-= Linux: An OS That Doesn't Break Like Glass -=-=-=-=-=-=-=-=-

3110. Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: smokey@win.bright.net
Message-ID: <34A756B3.4A52313@win.bright.net>
Source record: 17284
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Hi,

Im a 14 yr old kid who likes astronomy. Right now im heavily into optical astronomy. I would like to get into radio astronomy. Im sure some people will say im crazy, but I would like a nice system that I could use to search for extraterestrial lifeforms. As of now I know nothing about radio astronomy. I would like someone so recomend a system for me, please be very specific. I dont have a whole lot of money so it cant be too much. Please let me know what it would cost. Also please tell me why the system you recomend would be good. Thanks a bunch.

Dereck

3111. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <34a7a731.3106436@news.crosslink.net>
Source record: 17285
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

On Sun, 28 Dec 1997 17:47:54 GMT, Bill <whagen@inreach.com> wrote:

>orion@xyznycap.rr.com wrote:
>>
>> I have some 450 ohm ladder line which I would like to connect to a
>> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
>> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
>> I have a receive tuner/preamp which can be connected between the
>> antenna and the receiver. It has both a SO 239 connector and 1/8"
>> phone jack for antenna connections. They are hooked together, not
>> switchable. The R-1000 also has both a SO 239 and a single wire clip
>> connector for an antenna, with a switch to select either one but not
>> both. Any suggestions would be appreciated.
>>
>> --
>> Larry Gamache N2YMJ
>>
>> To reply, delete the
>> xyz from my address.
>A dipole has an impedance of around 75 ohms, wont match your line
>without some mods.
>Try a folded dipole, with a 450 ohm resistor connecting the folded parts
>together. Check the ARRL antenna book for other dipole mods that get 450
>ohm impedances.

Seems to me that these responses are making a mountain out of a
molehill.

If the dipole's impedance really is 72 ohms, and I'm not suggesting
that it is, why not just use 75 ohm coax of any length directly to the
receiver. If the dipole is 72 ohms, then the mismatch at the 50 ohm
receiver would be very moderate.

73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

3112. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: joe <jedent@jedavisent.com>
Message-ID: <34A7AF1C.5BD5@jedavisent.com>
Source record: 17286
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

smokey@win.bright.net wrote:
>
> Hi,
>
> Im a 14 yr old kid who likes astronomy. Right now im heavily into
> optical astronomy. I would like to get into radio astronomy. Im sure
> some people will say im crazy, but I would like a nice system that I
> could use to search for extraterestrial lifeforms. As of now I know
> nothing about radio astronomy. I would like someone so recomend a
> system for me, please be very specific. I dont have a whole lot of
> money so it cant be too much. Please let me know what it would cost.
> Also please tell me why the system you recomend would be good. Thanks a
> bunch.
>
> Dereck
Dereck, congrats on being 14 and interested in science. I don't know
much about radio astronomy, so I can't be of much help, but I can
give you encrouagement. I think most work in this field is being
done with LARGE dish antennas and very high quality receivers. But
I bet you there is info out there that will help you get started
with a low budget setup.
I started in HAM radio at about 12 or 14 (I'm 59.5 now) by reading
mags and books on radio construction. Been building all kinds of
stuff ever sense. I learn so much reaserching a project and building
it. Taking old throw away radios and TVs and making them into something
I can use in the hobby is my hobby in a hobby. I've built several
telescopes over the years, (back when lenses were inexpenseve) got
most of my stuff from Edmonson, but their prices have gone out of
my range for experimentation.
A foot note to all this is that my wife gave me a Jason 675 X 4.5"
reflector scope Model 518s for Xmas. It's the first polor mount I've
ever owned. (now this is a learning experence).
Enough babble from an ol man, keep up the good work Dereck.
joe d

3113. Re: Please help a beginner

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: Glenn <glennmiller@worldnet.att.net>
Message-ID: <688kbs$4l4@bgtnsc02.worldnet.att.net>
Source record: 17287
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Dereck,
Here's a good starting point for finding the kind of information you're looking for:

http://www.nitehawk.com/rasmit/ws1_4.html

Good luck,
Glenn/AA5PK

3114. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: Tim Hynde <hynde@flash.net>
Message-ID: <34A7BD5E.7F9E5F91@flash.net>
Source record: 17288
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

smokey@win.bright.net wrote:

> Hi,
>
> Im a 14 yr old kid who likes astronomy. Right now im heavily into
> optical astronomy. I would like to get into radio astronomy. Im sure
> some people will say im crazy, but I would like a nice system that I
> could use to search for extraterestrial lifeforms. As of now I know
> nothing about radio astronomy. I would like someone so recomend a
> system for me, please be very specific. I dont have a whole lot of
> money so it cant be too much. Please let me know what it would cost.
> Also please tell me why the system you recomend would be good. Thanks a
> bunch.
>
> Dereck

Well Dereck, the best way to get started is to get a vhf or uhf reciever and point a directional antenna toward the sky over time you can monitor galactic noise and you'll see a peak when you pass by the center of the galaxy. You can also build a downconverter and use an HF or shortwave radio. Even the most basic system will cost you at least $100 assuming you have a good shortwave reciever. Plus you need some fair experience with radio and RF to get the thing going.

If your looking to actually monitor 'signals' from pulsars etc you'll need equipment in the thousands of dollars, check out the book Radio Astronomy by John Potter Shields, Its an old SAMS publication but a good primer for you.

Tim

3115. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: Ken Edwards <kedwards@mindspring.com>
Message-ID: <34A7F00D.469F@mindspring.com>
Source record: 17289
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Dereck:

You may want to check out the page:
http://www.astro.ufl.edu/radio/

This is the planetary radio group at the University of Florida, and has
some recordings on the page of Jupiter.

It may give you some additional thoughts on radio astronomy.

Good luck!
--Ken

3116. Re: Need weather satellite frequenties !

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: Laura Halliday <ve7ldh@direct.ca>
Message-ID: <34A7F8A4.2879E20B@direct.ca>
Source record: 17290
Cross-posted to: rec.radio.amateur.space,nl.radio.amateur,uk.radio.amateur,rec.radio.amateur,rec.radio.amateur.misc

CRT wrote:

> The internet has all satellite photo's. Why bother with that stuff?

People have asked me exactly the same question when they see
the APT pictures I receive (NOAA-12, NOAA-14 and Meteor 3-5).

Why do I do it? Because I'm curious. Because I like to tinker
with radio and electronics. The pictures, while neat, are
merely a byproduct - it's the pleasure of taking a pile of bits
and using them to receive signals from space that really matters.

I'm currently improving my setup, and considering HRPT. S53MV's
article in VHF Communications 3/97 was most inspiring...
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

3117. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: 106051.1144@compuserve.com
Message-ID: <34a804bf.10782491@news.compuserve.com>
Source record: 17291

On Mon, 29 Dec 1997 08:09:32 -0600, joe <jedent@jedavisent.com> wrote:

>smokey@win.bright.net wrote:
>>
>> Hi,
>>
>> Im a 14 yr old kid who likes astronomy. Right now im heavily into
>> optical astronomy. I would like to get into radio astronomy..........
>>
Hi,

I'm not into radio astronomy but if your interested in the search for
ET then the SETI organisation maybe of interest to you. The following
are taken from a magazine artical published in the UK.

SETI web site http://www.setileague.org/

postal address:-

The SETI League Inc,
PO Box 555,
Little Ferry,
NJ 07643
USA

They have designs for RX equipment that I would imagine is detailed in
their technical manual, ISBN 0-9650707-2-7, available for $10.

MikeT

3118. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: 106051.1144@compuserve.com
Message-ID: <34a8103a.13721033@news.compuserve.com>
Source record: 17292

>smokey@win.bright.net wrote:
>>
>> Hi,
>>
>> Im a 14 yr old kid who likes astronomy. Right now im heavily into
>> optical astronomy. I would like to get into radio astronomy.....
>>
Hi,

I'm not into radio astronomy but if your interested in the search for
ET then the SETI organisation maybe of interest to you. The following
are taken from a magazine artical published in the UK.

SETI web site http://www.setileague.org/

postal address:-

The SETI League Inc,
PO Box 555,
Little Ferry,
NJ 07643
USA

They have designs for RX equipment that I would imagine is detailed in
their technical manual, ISBN 0-9650707-2-7, available for $10.

MikeT

3119. NORAD Two-Line Orbital Element Sets (TLE116)

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: tkelso@afit.af.mil
Message-ID: <6896eb$6b8$1@blackbird.afit.af.mil>
Source record: 17293

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial WWW:

http://www.grove.net/~tkelso/

and are updated daily (when possible). Documentation and tracking software are also available on this system.

Element sets (also updated daily) and some documentation and software are available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

As a service to the satellite user community, the most current of these elements are uploaded weekly to sci.space.news and rec.radio.amateur.space. This week's elements are provided below.

****

- Current Two-Line Element Sets #116 -
Alouette 1
1 00424U 62049A 97360.20986143 .00000062 00000-0 62808-4 0 3416
2 00424 80.4643 94.1178 0023732 42.8920 317.4078 13.67912466758497
ATS 1
1 02608U 66110A 97355.18249367 .00000089 00000-0 10000-3 0 508
2 02608 14.4000 346.8767 0006189 130.0790 229.9897 1.00334901 30406
ATS 3
1 03029U 67111A 97363.23917954 -.00000104 00000-0 10000-3 0 7312
2 03029 14.8357 353.7478 0013059 277.7061 167.0149 1.00272800110380
Starlette
1 07646U 75010A 97362.57882773 -.00000285 00000-0 -11314-3 0 1116
2 07646 49.8284 101.2566 0206432 278.1450 79.6073 13.82192938156331
LAGEOS
1 08820U 76039A 97360.53883955 .00000026 00000-0 00000+0 0 3423
2 08820 109.8202 216.9277 0044389 8.6324 351.5249 6.38664442249420
GOES 2
1 10061U 77048A 97360.30811135 .00000069 00000-0 10000-3 0 9305
2 10061 13.0345 30.8680 0010298 151.2157 208.8478 1.00294519 20036
IUE
1 10637U 78012A 97354.07695339 -.00000240 00000-0 10000-3 0 4216
2 10637 36.3499 74.7844 1378849 72.1331 302.2837 1.00080751 25457
GOES 3
1 10953U 78062A 97359.13573962 -.00000079 00000-0 00000+0 0 8861
2 10953 12.0695 33.9885 0004387 214.5123 145.4534 1.00277855 24635
SeaSat 1
1 10967U 78064A 97363.22773138 .00000002 00000-0 44942-4 0 6298
2 10967 108.0010 253.7430 0001928 257.8082 102.2840 14.38218608 21967

```
Nimbus 7
1 11080U 78098A 97362.08942229 -.00000041 00000-0 20000-7 0 7190
2 11080 98.8782 201.1013 0008307 261.4463 98.5815 13.83677126968469
GOES 5
1 12472U 81049A 97361.05546302 -.00000268 00000-0 10000-3 0 373
2 12472 9.0495 44.7818 0004513 116.8070 243.1896 1.00301718 18691
Cosmos 1383
1 13301U 82066A 97360.25656858 .00000042 00000-0 31414-4 0 6361
2 13301 82.9318 85.3528 0028202 141.8543 218.4620 13.68089677773546
LandSat 4
1 13367U 82072A 97360.93714977 .00000120 00000-0 36231-4 0 1265
2 13367 98.0006 38.3921 0005950 196.0384 164.0625 14.57217168821761
DMSP B5D2-1
1 13736U 82118A 97362.58709142 .00000041 00000-0 35401-4 0 3821
2 13736 98.6171 187.9057 0008298 189.9105 170.1913 14.25883580780787
IRAS
1 13777U 83004A 97362.53025526 -.00000053 00000-0 -64148-5 0 8677
2 13777 98.9748 182.3944 0013509 353.5280 6.5715 13.99295001431592
Cosmos 1447
1 13916U 83021A 97359.86739140 .00000091 00000-0 80164-4 0 7301
2 13916 82.9442 139.2991 0039114 41.9499 318.4643 13.74366027740200
TDRS 1
1 13969U 83026B 97363.08550287 -.00000287 00000-0 10000-3 0 8227
2 13969 9.7487 38.4344 0008628 212.8651 187.9994 1.00265773 27007
GOES 6
1 14050U 83041A 97357.22254746 .00000015 00000-0 10000-3 0 7649
2 14050 7.9149 48.6111 0002562 145.6332 214.3167 1.00315024111757
AO-10
1 14129U 83058B 97356.44373445 -.00000214 00000-0 10000-3 0 5230
2 14129 26.5084 110.8211 6020107 178.2366 185.7256 2.05882072 81262
LandSat 5
1 14780U 84021A 97361.17534323 -.00000389 00000-0 -76102-4 0 6718
2 14780 98.2623 62.5687 0002996 19.1654 340.9652 14.57084466735210
UO-11
1 14781U 84021B 97362.96718877 .00000224 00000-0 45539-4 0 265
2 14781 97.8568 336.6578 0012812 97.6990 262.5671 14.69641685739860
Cosmos 1574
1 15055U 84062A 97360.84168754 .00000004 00000-0 -11960-4 0 9305
2 15055 82.9554 194.6599 0026268 228.1059 131.7854 13.73658106677543
Cosmos 1602
1 15331U 84105A 97362.23624953 .00000431 00000-0 47600-4 0 6134
2 15331 82.5312 309.1736 0018669 264.0089 95.8982 14.85025131715930
ERBS
1 15354U 84108B 97362.86746951 -.00000014 00000-0 20394-4 0 3286
2 15354 56.9956 301.2613 0009561 119.8408 240.3576 14.95124277720545
NOAA 9
1 15427U 84123A 97362.98788242 .00000026 00000-0 37289-4 0 4112
2 15427 98.8802 72.1699 0015031 163.4718 196.6949 14.13906924672738
Mir
1 16609U 86017A 97357.06356258 .00018135 00000-0 21446-3 0 1080
```

```
2 16609 51.6558 216.0141 0007906 116.3397 243.8644 15.61322839676517
SPOT 1
1 16613U 86019A 97357.26262669 -.00000044 00000-0 00000+0 0 1485
2 16613 98.7717 68.3023 0002132 88.8682 271.2738 14.20002351298948
Cosmos 1766
1 16881U 86055A 97361.07961160 .00000324 00000-0 35985-4 0 5285
2 16881 82.5189 7.7914 0018278 301.5973 58.3455 14.83952788616571
EGP
1 16908U 86061A 97360.22630401 -.00000083 00000-0 10000-3 0 2335
2 16908 50.0141 84.4241 0011387 350.1457 9.9153 12.44417897185766
NOAA 10
1 16969U 86073A 97363.01612561 .00000046 00000-0 37941-4 0 3391
2 16969 98.5581 351.1018 0012987 155.4180 204.7621 14.25075763586336
MOS-1
1 17527U 87018A 97361.21332036 -.00000043 00000-0 00000+0 0 6154
2 17527 98.8593 54.7094 0018449 223.3152 136.6563 14.00447714553093
GOES 7
1 17561U 87022A 97363.22385706 -.00000128 00000-0 10000-3 0 4407
2 17561 4.1400 65.7218 0002493 225.7053 148.5392 1.00266586 22923
Kvant-1
1 17845U 87030A 97362.95200879 .00008411 00000-0 10267-3 0 2558
2 17845 51.6536 186.3544 0008201 136.7716 223.4265 15.61374059611548
DMSP B5D2-3
1 18123U 87053A 97363.00954077 .00000139 00000-0 93439-4 0 1715
2 18123 98.7576 189.8752 0015340 96.0367 264.2556 14.15506620543690
RS-10/11
1 18129U 87054A 97359.77073190 .00000045 00000-0 32331-4 0 4363
2 18129 82.9254 97.1293 0013135 52.4028 307.8323 13.72387600526510
Meteor 2-16
1 18312U 87068A 97359.30376268 .00000073 00000-0 51885-4 0 6136
2 18312 82.5537 270.9681 0013634 96.0145 264.2569 13.84111775523105
Meteor 2-17
1 18820U 88005A 97363.23266227 .00000001 00000-0 -12543-4 0 4512
2 18820 82.5401 321.5677 0016752 148.5611 211.6566 13.84786461501033
DMSP B5D2-4
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2 19165 65.4801 66.9827 0001893 211.7965 148.2444 2.13101525 74758
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2 19215 4.3486 64.8611 0008444 154.5622 205.2608 0.96948337 22530
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Meteor 3-2
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2 19503 65.3419 305.8153 0008531 154.8536 205.1635 2.13101696 72259
NOAA 11
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2 19531 99.1307 40.1876 0012584 107.0343 253.2212 14.13160062477519
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2 19548 3.5841 68.8430 0002867 161.9420 179.6560 1.00274904 21122
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2 19749 65.4645 66.5292 0006509 253.9406 106.0654 2.13101266 69741
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2 19750 65.4691 66.7141 0005497 257.7081 102.2760 2.13101622 69703
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2 19822 75.0700 156.4785 3694510 40.3629 341.9786 8.02549297211199
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MOP-1
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2 19876 3.1058 70.3852 0016067 281.2991 78.1604 0.97110909 12013
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2 19883 1.0080 85.6031 0005082 193.7259 89.5855 1.00274002204635
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2 20061 53.8562 263.2857 0144514 223.8174 135.0330 2.00563780 62665
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2 20103 82.9603 56.0610 0036400 296.8181 62.9253 13.73885616425503
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2 20185 55.4319 88.7026 0010019 8.0165 352.0232 2.00573010 61256
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2 20217 2.8893 72.2849 0000626 311.2515 231.3030 1.00270732 31028
INTERCOSMOS 24
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2 20261 82.5968 273.2068 1240419 208.8442 143.8286 12.47493228375681
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2 20302 53.1328 203.2195 0030542 162.2758 192.0751 2.00559571 59898
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2 20322 98.9219 13.6968 0008373 280.9287 79.0931 14.03476922415387
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2 20437 98.5056 78.6499 0011642 2.6052 357.5157 14.29989286413811
AO-16
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GPS BII-06
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2 20452 54.1229 143.9924 0066792 96.6211 264.1111 2.00549707 58019
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2 20510 82.5260 66.0087 0017311 290.5958 69.3397 14.78816107422346
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HST
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1 20788U 90081A 97362.56122875 .00000297 00000-0 22500-3 0 6005
2 20788 98.8257 355.1733 0016708 22.6507 337.5392 14.01409408374442
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AO-21
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Nadezhda 3
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2 21152 82.9247 92.7738 0040720 230.7763 128.9775 13.73557026340298
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Glonass 52
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NOAA 12
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2 21577 98.2731 54.4022 0007366 37.9953 322.1753 14.36574283338380
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Meteor 3-5
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Glonass 55
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GPS BIIA-13
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Glonass 56
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GPS BIIA-18
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2 22700 54.0867 205.5679 0069106 15.7665 344.5269 2.00557320 32933
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Meteor 2-21
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UFO F2
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SPOT 3
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AO-27
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1 25089U 97079B 97343.72960990 .99999999 77297-5 46663-2 0 58
2 25089 64.9565 220.5942 0099433 69.1526 295.6486 16.36106420 56
1997072C
1 25091U 97072C 97352.72462531 .01204044 00000-0 33227-3 0 376
```

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2 25091 82.3320 217.2337 0011502 44.5450 315.7482 16.27816011 972
1997072D
1 25092U 97072D 97348.09845193 .03251057 -12103-5 10114-2 0 102
2 25092 82.3414 222.7087 0009943 97.4661 262.7760 16.26507621 172
1997072E
1 25093U 97072E 97349.88768135 .09272606 -59046-6 99459-2 0 107
2 25093 82.3383 220.7516 0106836 337.8436 26.8040 15.99209916 369
1997072F
1 25094U 97072F 97352.69070048 .17349408 -60346-6 49501-2 0 157
2 25094 82.3190 217.5121 0044977 320.8267 39.1255 16.24632098 818
Cosmos 2348
1 25095U 97080A 97362.88775580 .00482210 57487-5 15631-3 0 296
2 25095 67.1424 261.2738 0137586 65.3664 296.1787 16.06618542 2131
1997080B
1 25096U 97080B 97354.64279487 .59326761 62467-5 18150-3 0 382
2 25096 67.1245 288.8975 0023101 124.5075 237.8860 16.58661317 814
1997058D
1 25100U 97058D 97360.90269254 .00015236 00000-0 17895-3 0 91
2 25100 51.6578 196.6576 0007847 132.3921 227.7880 15.61654423 1494
Progress M-37
1 25102U 97081A 97362.95200879 .00008411 00000-0 10267-3 0 154
2 25102 51.6536 186.3544 0008201 136.7716 223.4265 15.61374059 1355
1997081B
1 25103U 97081B 97356.92783922 .51648857 12838-4 23494-3 0 130
2 25103 51.5999 215.7409 0010256 89.0001 271.3255 16.55635270 422
Iridium
1 25104U 97082A 97362.24186928 -.04513244 00000-0 -78127+0 0 186
2 25104 86.5802 346.8338 0002663 193.4448 166.6699 14.73358924 1132
Iridium
1 25105U 97082B 97363.19756320 -.00057658 00000-0 -10281-1 0 177
2 25105 86.5750 346.4359 0002183 123.0030 237.1433 14.67509288 1276
Iridium
1 25106U 97082C 97362.92701466 -.00052125 00000-0 -89981-2 0 188
2 25106 86.5785 346.5530 0002184 184.6035 175.5155 14.68907880 1239
Iridium
1 25107U 97082D 97361.63260996 -.07258249 00000-0 -13831+1 0 196
2 25107 86.5639 347.1079 0002133 175.6778 174.7089 14.70060588 1045
Iridium
1 25108U 97082E 97363.20298695 -.00029806 00000-0 -51717-2 0 206
2 25108 86.5784 346.4413 0001125 140.6860 219.4449 14.68549274 1278
1997082F
1 25109U 97082F 97361.93088000 .00094746 10065-5 57519-3 0 96
2 25109 83.6057 344.0076 0265124 325.2137 33.2014 15.42070428 1136
Intelsat 804
1 25110U 97083A 97357.02112269 .00002383 00000-0 10000-2 0 79
2 25110 6.9556 270.0037 7277043 179.7527 98.3234 2.27913036 12
1997083B
1 25111U 97083B 97356.71712842 -.00561219 27420-6 -29017-1 0 32
2 25111 6.8963 271.4116 7373784 178.1569 188.7540 2.19912433 10
Orbcomm A1
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1 25112U 97084A 97359.81397430 -.00000137 00000-0 00000+0 0 56
2 25112 45.0549 169.1544 0004680 268.6683 91.3563 14.21842974 286
Orbcomm A2
1 25113U 97084B 97361.85136117 -.00000137 00000-0 00000+0 0 79
2 25113 45.0191 159.7455 0005971 262.6511 97.3656 14.21950932 579
Orbcomm A3
1 25114U 97084C 97361.85185417 -.00000633 00000-0 -22395-3 0 74
2 25114 45.0220 159.7479 0005774 259.9419 100.0780 14.21773884 575
Orbcomm A4
1 25115U 97084D 97361.78131525 -.00000137 00000-0 00000+0 0 59
2 25115 45.0228 160.0701 0005783 256.0431 103.9771 14.21873305 569
Orbcomm A5
1 25116U 97084E 97360.86777265 -.00000137 00000-0 00000+0 0 44
2 25116 45.0179 164.2894 0005886 242.1792 117.8464 14.21933645 437
Orbcomm A6
1 25117U 97084F 97359.88514425 -.00000137 00000-0 00000+0 0 20
2 25117 45.0225 168.8339 0005997 268.8803 91.1356 14.21230656 295
Orbcomm A7
1 25118U 97084G 97359.88507471 -.00000137 00000-0 00000+0 0 57
2 25118 45.0216 168.8351 0006372 264.6099 95.4026 14.21278124 292
Orbcomm A8
1 25119U 97084H 97360.86905701 -.00000137 00000-0 00000+0 0 34
2 25119 45.0204 164.2984 0005259 277.8304 82.1943 14.21331743 434
1997084J
1 25120U 97084J 97361.52945870 .00049409 86517-5 60156-3 0 73
2 25120 44.9681 158.4095 0315759 153.0789 208.6887 15.18925141 566
1997084K
1 25121U 97084K 97362.55657727 .00003984 00000-0 22081-3 0 69
2 25121 42.6770 151.7448 0298526 225.7898 131.8068 14.84347982 706
EarlyBird
1 25123U 97085A 97361.89884980 .00003982 00000-0 15144-3 0 72
2 25123 97.2990 77.7049 0006283 100.9811 259.2135 15.27328156 517
1997085B
1 25124U 97085B 97362.68400869 .00015641 00000-0 57847-3 0 106
2 25124 97.3029 78.5026 0006162 152.9114 207.3913 15.27765927 637
1997085C
1 25125U 97085C 97363.20784163 .00001994 00000-0 76177-4 0 102
2 25125 97.2991 78.9846 0005345 94.7451 265.4252 15.27768289 712
Asiasat 3
1 25126U 97086A 97362.56658882 -.00000997 00000-0 -15234-2 0 143
2 25126 51.0611 91.3775 7252646 1.5569 359.8356 2.25600615 86
1997086B
1 25127U 97086B 97360.97680933 .46964348 12881-4 18417-3 0 181
2 25127 51.5849 81.3009 0016762 274.6412 85.2519 16.56380026 333
1997086C
1 25128U 97086C 97359.69801134 .17371302 12154-4 22806-3 0 97
2 25128 51.6085 88.5264 0037403 231.5488 128.8163 16.45033169 126
1997086D
1 25129U 97086D 97362.56099203 .00000982 00000-0 56749-3 0 62
2 25129 51.5139 91.4030 7287510 1.5135 359.8317 2.26246746 79
```

--
Dr TS Kelso
Adjunct Professor of Space Operations
Air Force Institute of Technology
E-Mail: tkelso@afit.af.mil

3120. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd1400$76448740$0c8a92d0@bitnet.bit-net.com>
Source record: 17294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Make the dipole out of 300 ohm flat tv antenna wire (the cheap plastic brown stuff is fine).
Cut a length 16 1/2 feet long, trim back the wires at the ends a little, twist them together (if you have a soldering iron, solder them) then cover them up with electrical tape.
At the exact center, cut only one of the wires, peel back enough so they are about as far apart as width of the 450 feedline, then connect one wire each to the two ends of the 450 wire.
Get a 4 to 1 balun and connect the other end (in the house) of the 450 wire to the high impedence ("4") side.
Then connect a short piece of coax (inexpensive cable 75 ohm tv coax is fine) to the other side of the balun (the low impedence ("1") side).
Then connect a PL259 male connector (matches the SO239) to the other end of the coax and plug it in!

There are a number of other options, but this will work well and will be a good learning experience.

What you have created is a 10 meter folded dipole (with the tv 300 ohm flat line), then you've converted the 300 ohms to 75 ohms using the balun transformer. I would guess the receiver will be 'happy' with anything from 30-100ohms (the manual will tell you). You are providing about 75 ohms which is close enough, even if it prefers 50 ohms.

Go for it! 73, DavidC AA1FA

orion@xyznycap.rr.com wrote in article <34a67214.2174587@news>...
> I have some 450 ohm ladder line which I would like to connect to a
> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
> I have a receive tuner/preamp which can be connected between the
> antenna and the receiver. It has both a SO 239 connector and 1/8"
> phone jack for antenna connections. They are hooked together, not
> switchable. The R-1000 also has both a SO 239 and a single wire clip
> connector for an antenna, with a switch to select either one but not
> both. Any suggestions would be appreciated.
> Larry Gamache N2YMJ

3121. Re: Please help a begginer

Newsgroup: rec.radio.amateur.space
Date: 1997-12-29 00:00:00 UTC
From: "Doug, N0LKK" <dougy@ruraltel.net>
Message-ID: <34A7C5DA.6E1A@ruraltel.net>
Source record: 17295
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Hello,
I recall QST having features on the SETI project in the past year or
so, they may have something to offer. Otherwise you my want to visit.
http://irsociety.com/sara.html the Society of Amteur Radio Astronomers,
I learned of thst froup grom an Nuts & Volts magazine article.
--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net
==========
Ken Edwards wrote:
>
> Dereck:
>
> You may want to check out the page:
> http://www.astro.ufl.edu/radio/
>
> This is the planetary radio group at the University of Florida, and has
> some recordings on the page of Jupiter.
>
> It may give you some additional thoughts on radio astronomy.
>
> Good luck!
> --Ken

3122. RS12

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: codefifty@aol.com
Message-ID: <19971230000701.TAA22674@ladder01.news.aol.com>
Source record: 17296

So, is the 15 meter uplink shutdown for RS 12? Please reply in email. Thanks.

3123. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34A85D39.18A5@inreach.com>
Source record: 17297
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Robert Lay wrote:
>
> On Sun, 28 Dec 1997 17:47:54 GMT, Bill <whagen@inreach.com> wrote:
>
> >orion@xyznycap.rr.com wrote:
> >>
> >> I have some 450 ohm ladder line which I would like to connect to a
> >> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
> >> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
> >> I have a receive tuner/preamp which can be connected between the
> >> antenna and the receiver. It has both a SO 239 connector and 1/8"
> >> phone jack for antenna connections. They are hooked together, not
> >> switchable. The R-1000 also has both a SO 239 and a single wire clip
> >> connector for an antenna, with a switch to select either one but not
> >> both. Any suggestions would be appreciated.
> >>
> >> --
> >> Larry Gamache N2YMJ
> >>
> >> To reply, delete the
> >> xyz from my address.
> >A dipole has an impedance of around 75 ohms, wont match your line
> >without some mods.
> >Try a folded dipole, with a 450 ohm resistor connecting the folded parts
> >together. Check the ARRL antenna book for other dipole mods that get 450
> >ohm impedances.
>
> Seems to me that these responses are making a mountain out of a
> molehill.
>
> If the dipole's impedance really is 72 ohms, and I'm not suggesting
> that it is, why not just use 75 ohm coax of any length directly to the
> receiver. If the dipole is 72 ohms, then the mismatch at the 50 ohm
> receiver would be very moderate.
>
> 73 de Bob, W9DMK
> [Change "nobody" to "w9dmk" for direct replies]

This would work fine except a 1:1 balun would be needed at the antenna
end of the coax because the dipole is balanced and the coax is not,
prevents the line from radiating, but the original question was how to
do it with the 450 ohm line. This also could be done with the
appropriate impedance transformer.

3124. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34af83cf.49443492@news>
Source record: 17298
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

On Sun, 28 Dec 1997 17:47:54 GMT, Bill <whagen@inreach.com> wrote:

>orion@xyznycap.rr.com wrote:
>>
>> I have some 450 ohm ladder line which I would like to connect to a
>> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
>> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
>> I have a receive tuner/preamp which can be connected between the
>> antenna and the receiver. It has both a SO 239 connector and 1/8"
>> phone jack for antenna connections. They are hooked together, not
>> switchable. The R-1000 also has both a SO 239 and a single wire clip
>> connector for an antenna, with a switch to select either one but not
>> both. Any suggestions would be appreciated.

Thanks to all who responded. I received a lot of good information both
here and by e-mail.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

3125. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <34a8fbe2.4324236@news.crosslink.net>
Source record: 17299
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

On Tue, 30 Dec 1997 02:38:41 GMT, Bill <whagen@inreach.com> wrote:

>Robert Lay wrote:
>>
>> On Sun, 28 Dec 1997 17:47:54 GMT, Bill <whagen@inreach.com> wrote:
>>
>> >orion@xyznycap.rr.com wrote:
>> >>
>> >> I have some 450 ohm ladder line which I would like to connect to a
>> >> 10 meter dipole to receive the downlink signal of the RS-12 satellite.
>> >> I'm not sure how to connect this line to my receiver. (Kenwood R-1000)
>> >> I have a receive tuner/preamp which can be connected between the
>> >> antenna and the receiver. It has both a SO 239 connector and 1/8"
>> >> phone jack for antenna connections. They are hooked together, not
>> >> switchable. The R-1000 also has both a SO 239 and a single wire clip
>> >> connector for an antenna, with a switch to select either one but not
>> >> both. Any suggestions would be appreciated.
>> >>
>> >> --
>> >> Larry Gamache N2YMJ
>> >>
>> >> To reply, delete the
>> >> xyz from my address.
>> >A dipole has an impedance of around 75 ohms, wont match your line
>> >without some mods.
>> >Try a folded dipole, with a 450 ohm resistor connecting the folded parts
>> >together. Check the ARRL antenna book for other dipole mods that get 450
>> >ohm impedances.
>>
>> Seems to me that these responses are making a mountain out of a
>> molehill.
>>
>> If the dipole's impedance really is 72 ohms, and I'm not suggesting
>> that it is, why not just use 75 ohm coax of any length directly to the
>> receiver. If the dipole is 72 ohms, then the mismatch at the 50 ohm
>> receiver would be very moderate.
>>
>> 73 de Bob, W9DMK
>> [Change "nobody" to "w9dmk" for direct replies]
>
>This would work fine except a 1:1 balun would be needed at the antenna
>end of the coax because the dipole is balanced and the coax is not,
>prevents the line from radiating, but the original question was how to

>do it with the 450 ohm line. This also could be done with the
>appropriate impedance transformer.

Au contrair. I don't believe there is an issue here that requires a balun to prevent antenna currents on the feedline, because it was my understanding that this is a receive-only installation. I also do not accept the idea that it was originally a question of how to do it with ladder line. If you saw someone doing something in an awkward or inappropriate way, would you help him do it that way or would you offer to enlighten him as to a better way to do it. That was my intention, and I think that it's a sad commentary that not one single post responding to the original article suggested to him that he do it in the more rational way.
73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

3126. WinOrbit install problem/workaround

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: nojunkspam.k8cg@amsat.org
Message-ID: <34A90988.74B0@amsat.org>
Source record: 17300

Recently a number of folks have complained about problems installing "WinOrbit" (versions 3.3 and later). I believe these are mostly new Win 95 systems (Santa Claus has been around recently....). The symptom is a message "Sub or Function Not Defined", after which the program quits. Here's what I have been telling people (and several users have reported that the workaround is successful):

"I suspect you will find a file "DIBAPI.DLL" on your system in addition to the one distributed with WinOrbit. Unfortunately, it is a different file, but since it was there first, the system tries to use it instead of the correct file.

You can rename or hide the old file temporarily (don't delete it - you may have other software that needs it.)

In the next release of WinOrbit, I will rename my file to avoid this conflict. The beta version with the fix will be available next week (5 Jan 98) at the WinOrbit web site (http://www.sat-net.com/winorbit)."

I post this here since this seems to be a widespread (but not universal) problem.

73!
de K8CG
Carl

3127. Help With QuickTrack 4.0

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <68b929$b4p@sjx-ixn7.ix.netcom.com>
Source record: 17301

Howdy All,

I am preparing an article on a minimalist satellite station that can easily be carried along on most any trip.

Part of the station for orbital predictions and packet is an HP200lx running QT40. I have discovered the hard way several quirks with this combonation but one problem still eludes me.

The date/time format that QT40 Keplerian elements use is not the same as found with current Keps'. My question is: What is the format used and how do you convert either AMSAT or NASA data to the QT40 format?

Thanks for any light you can shed on this problem.

73 Jerry KK5YY

3128. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34ad3185.7596327@news>
Source record: 17302
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

>> Seems to me that these responses are making a mountain out of a
>> molehill.
>>
>> If the dipole's impedance really is 72 ohms, and I'm not suggesting
>> that it is, why not just use 75 ohm coax of any length directly to the
>> receiver. If the dipole is 72 ohms, then the mismatch at the 50 ohm
>> receiver would be very moderate.
>>
>> 73 de Bob, W9DMK
>> [Change "nobody" to "w9dmk" for direct replies]

I neglected to mention in my original post the reason I wanted to use
the 450 ohm ladder line. Someone gave me 100' of the stuff, and I was
simply trying to find a use for it. I knew the impedance was wrong for
a dipole, but I thought someone might have a way to do it.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

3129. Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Paul Garcia <prg22@ix.netcom.com>
Message-ID: <68bolh$f08@dfw-ixnews8.ix.netcom.com>
Source record: 17303

I have a technician license, and a 2m/440 ht, and I want to work AO-27. I am on a limited budget and I want to know if anybody has any advice, or can help me get plans for a 2m/440 hand held yagi for working the satellite. Thank You.

KF6MVO
Paul Garcia
prg22@ix.netcom.com

3130. Re: FS;TR751e Kenwood 2m/multi

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: steve100@sodoff.dircon.co.uk
Message-ID: <34ab7e7f.23174167@news.dircon.co.uk>
Source record: 17304
Cross-posted to: alt.radio,alt.radio.amateur.club.clarc,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

On Sat, 27 Dec 97 14:43:37 GMT, Dave@omen.softnet.co.uk wrote:

>mint condition ,Kenwood TR751e 2 m/mutlmode.
>with all manuals box,mobile mic,voice syntherseizer,(reads out frequency)
>mobile bracket...
>
>425.00 or nearest offer
>i am located in the southwales area of the uk..
>
>please reply to e-mail address direct

Just another post I saw in a ham newsgroup, who, is ripping off who ?

>>TR751E 2 metre multimode, 25w, very good condition.

>>ï¿½165 Phil G6GIY (NW Eng)

3131. Re: FS;TR751e Kenwood 2m/multi

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Eizy <cjeizen@bright.net>
Message-ID: <68c2usaqr1@cletus.bright.net>
Source record: 17305
Cross-posted to: alt.radio,alt.radio.amateur.club.clarc,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

Help me on this... How much is Phil wanting in US Dollar??? I think I paid $350 back a year plus ago, from someone local and wanting out for a new hobby... Then I added the tone board from someone else who never installed it for (I think) $50... It is the American version, did I do OK??? It makes a great radio and I'm happy. I haven't looked to see what the stores are wanting for a used unit...

Steve. wrote in message <34ab7e7f.23174167@news.dircon.co.uk>...
>On Sat, 27 Dec 97 14:43:37 GMT, Dave@omen.softnet.co.uk wrote:
>
>>mint condition ,Kenwood TR751e 2 m/mutlmode.
>>with all manuals box,mobile mic,voice syntherseizer,(reads out frequency)
>>mobile bracket...
>>
>>425.00 or nearest offer
>
>Just another post I saw in a ham newsgroup, who, is ripping off who ?
>
>>>TR751E 2 metre multimode, 25w, very good condition.
>
>>>>165 Phil G6GIY (NW Eng)
>

3132. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: David <kb5ylg@airmail.net>
Message-ID: <29ADE03AF211849A.40C557DF46D280E2.C3622C219E2D0C14@library-proxy.airnews.net>
Source record: 17306

I have heard that just aboout any 2 meter antenna will work, but the 440 antenna needs to
have gain and directional. I saw plans on Compuserve's HAMNET for an OSCAR 27 quad.

I wonder if anybody has plans for a 2m/440 dual band 2 element quad? That would be great!

Hope it helps. I have not yet successfully worked AO-27.

David

Paul Garcia wrote:

> I have a technician license, and a 2m/440 ht, and I want to work AO-27. I
> am on a limited budget and I want to know if anybody has any advice, or can
> help me get plans for a 2m/440 hand held yagi for working the satellite.
> Thank You.
>
> KF6MVO
> Paul Garcia
> prg22@ix.netcom.com

3133. Launching Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Lode Vermeiren <lodev@innet.be>
Message-ID: <34A93D89.C1210F30@innet.be>
Source record: 17307
Cross-posted to:
fido.belg.satellite,rec.video.satellite.misc,rec.video.satellite.europe,sci.space.tech,sci.space.policy,rec.radio.amateur.space

Hello,

I've got a few questions about satellites and launching them.

* What is needed to launch a satellite ?
* Who can launch a satellite?
* How much does it cost to produce and launch a small satellite ?
* Who controls the amount and which satellites that are launched into
space ?
* Are there any laws involving the use of the space for this purposes ?

Thanks in advance,

Lode Vermeiren

++
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+No Animals were harmed and no Microsoft +
+products were used during the creation +
+of this message +
++
+Love,+peace,+and+cookies+in+the+world!!!+
++

3134. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Bob Parkin <icable@hotmail.com>
Message-ID: <68cdu4jam1@mentor.telis.org>
Source record: 17308

Check out the dual band yagi antenna at
http://members.aol.com/Arrow146/index.html I have it and it works very well
with AO-27. If your on a major limited budget try a better handheld
antenna, I am using a MFJ-1717 it's 1/2 wave at 440 and 1/4 at 2m, It works
on the passes that go right over head. With your low power station you
would have better luck on weeday's instead of the weekend's and remember the
sat. is only on during the day.
73
Trent

Email tdrenon@telis.org
Packet kf6buy@kk6wd.nca.ca.usa.na
Student @ Burney High School
Next time you wave at me, use more than one finger, please.

Paul Garcia wrote in message <68bolh$f08@dfw-ixnews8.ix.netcom.com>...
>I have a technician license, and a 2m/440 ht, and I want to work AO-27. I
>am on a limited budget and I want to know if anybody has any advice, or can
>help me get plans for a 2m/440 hand held yagi for working the satellite.
>Thank You.
>
>KF6MVO
>Paul Garcia
>prg22@ix.netcom.com
>
>
>

3135. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-30 00:00:00 UTC
From: Stacey Kirkpatrick <Up2Somthng@aoll.com>
Message-ID: <68cs88$b74@snews1.zippo.com>
Source record: 17309

As hard as it is to believe I have worked this satellite with a HT with only it's standard "rubber duckie" antenna running 2.0 watts out. Even I was impressed. I have found that it is easier to work it with my HT than my mobile, I suspect this is because the antenna on the mobile is fixed while with the HT I kind of move around and "capture" the signal. One pitfall to watch out for is the Doppler shift of the downlink. If you are a couple of minutes into the pass be sure to check below 436.80 - along these same lines make sure that the tuning step (how much higher or lower each click of the tuning knob or push of the button represents) is set as low as it can go (.005 on my alinco DJ580). And finally make sure you are listening at the right time, for the first couple of months I actually had my software set up 1 hour off and just kept missing the bird.

Good Luck, maybe we will chat on the satellite.

Stacey Kirkpatrick
KB7YYY

Paul Garcia wrote in message <68bolh$f08@dfw-ixnews8.ix.netcom.com>...
>I have a technician license, and a 2m/440 ht, and I want to work AO-27. I
>am on a limited budget and I want to know if anybody has any advice, or can
>help me get plans for a 2m/440 hand held yagi for working the satellite.
>Thank You.
>
>KF6MVO
>Paul Garcia
>prg22@ix.netcom.com
>
>
>

3136. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bd157c$1be89fc0$6a60b6cd@cbx-nt>
Source record: 17310

Purchase this months QST. It has an article with a individual working AO-27
with a FT-50R and a whip.

Now I am thinking of picking up a FT-50R!

Christopher Cox

Paul Garcia <prg22@ix.netcom.com> wrote in article
<68bolh$f08@dfw-ixnews8.ix.netcom.com>...
> I have a technician license, and a 2m/440 ht, and I want to work AO-27.
I
> am on a limited budget and I want to know if anybody has any advice, or
can
> help me get plans for a 2m/440 hand held yagi for working the satellite.
> Thank You.
>
> KF6MVO
> Paul Garcia
> prg22@ix.netcom.com
>
>
>
>

3137. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: George Edwards <gedwards@onramp.net>
Message-ID: <01bd159d$0e92ea80$53e532ce@708714231>
Source record: 17311

Paul....in working AO-27....the downlink is on 436.800 FM....hopefully your 2m/440ht will receive and operate below 440. I
bought a "satellite" rig only to find out that my 440 band....was exactly that....440 to 449.99!
The ARRL antenna book has a chapter on antennas for these bands and many of the examples are for "portable" situations.

George/K5VUU

Paul Garcia <prg22@ix.netcom.com> wrote in article
<68bolh$f08@dfw-ixnews8.ix.netcom.com>...
> I have a technician license, and a 2m/440 ht, and I want to work AO-27. I
> am on a limited budget and I want to know if anybody has any advice, or can
> help me get plans for a 2m/440 hand held yagi for working the satellite.
> Thank You.
>
> KF6MVO
> Paul Garcia
> prg22@ix.netcom.com
>
>
>
>

3138. Re: Help With QuickTrack 4.0

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: ka0yos@aol.com
Message-ID: <19971231042601.XAA16500@ladder02.news.aol.com>
Source record: 17312

There should be a program bundled with QT4.0 called qk.exe. That is Quik Kep. In DOS at the command prompt type qk <File name containing Keps><return> You will then be asked whjat kind of kep file you are using to update. The two "NASA" type works fine. I do it every week. If you need more details feel free to email me.

73,
Joe
ka0yos@amsat.org

3139. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34aa5270.85299514@news.atl.bellsouth.net>
Source record: 17313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

On Tue, 30 Dec 1997 14:46:22 GMT, nobody@crosslink.net (Robert Lay) wrote:
>On Tue, 30 Dec 1997 02:38:41 GMT, Bill <whagen@inreach.com> wrote:
>>Robert Lay wrote:
>>> Seems to me that these responses are making a mountain out of a
>>> molehill.
>>>
>>> If the dipole's impedance really is 72 ohms, and I'm not suggesting
>>> that it is, why not just use 75 ohm coax of any length directly to the
>>> receiver. If the dipole is 72 ohms, then the mismatch at the 50 ohm
>>> receiver would be very moderate.

Good to see that qualifier. Except for an infinitely thin wire in free space,
a dipole won't be 72 ohms. For a horizontal wire of finite thickness above
Earth, it is more likely to be near 50 ohms.

>>This would work fine except a 1:1 balun would be needed at the antenna
>>end of the coax because the dipole is balanced and the coax is not,
>>prevents the line from radiating, but the original question was how to
>>do it with the 450 ohm line. This also could be done with the
>>appropriate impedance transformer.
>
>Au contrair. I don't believe there is an issue here that requires a
>balun to prevent antenna currents on the feedline, because it was my
>understanding that this is a receive-only installation.

Antenna systems are reciprocal. If a balun is required for transmit, it
is also required for reception. The effect of the imbalance on reception
is to alter the receive pattern of the antenna (same thing it does on
transmit). That may or may not be significant in a particular case, just
as it may or may not be significant in the transmit case. The main effect
for reception is to reduce the antenna pattern nulls. This could be bad if
you are using the nulls to reject an interfering station. (You don't face
the "hot shack" problem with a receive only setup, but the effect on
pattern remains.)

>I also do not
>accept the idea that it was originally a question of how to do it with
>ladder line. If you saw someone doing something in an awkward or
>inappropriate way, would you help him do it that way or would you
>offer to enlighten him as to a better way to do it. That was my
>intention, and I think that it's a sad commentary that not one single
>post responding to the original article suggested to him that he do it
>in the more rational way.

Well, he says he wants to use ladder line because he has some.
That may not be the greatest reason in the world, but if that's what
he wants to do, I don't see anything wrong with it. If he does use the
ladder line, he won't need a balun at the antenna since the feeder is
also balanced. But he will need a tuner at the receiver end to provide
a conjugate match, and to provide the balun function for the receiver.
Just using coax feed with a balun at the antenna would be simpler
at the frequency where the antenna is resonant, but at all other
frequencies, he'll need the tuner anyway, so he might as well use
the lower loss feedline he already has instead of hunting up some
coax.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3140. Re: FS;TR751e Kenwood 2m/multi

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: Ernie Stedman <n2ojq@worldnet.att.net>
Message-ID: <68dtnr$psh@mtinsc05.worldnet.att.net>
Source record: 17314
Cross-posted to: alt.radio,alt.radio.amateur.club.clarc,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.space

```
you did ok-
these go for $425 - $500 used.
```

Eizy wrote in message <68c2usaqr1@cletus.bright.net>...
>Help me on this... How much is Phil wanting in US Dollar??? I think I
>paid $350 back a year plus ago, from someone local and wanting out for a
new
>hobby... Then I added the tone board from someone else who never installed
>it for (I think) $50... It is the American version, did I do OK??? It
>makes a great radio and I'm happy. I haven't looked to see what the stores
>are wanting for a used unit...
>
>Steve. wrote in message <34ab7e7f.23174167@news.dircon.co.uk>...
>>On Sat, 27 Dec 97 14:43:37 GMT, Dave@omen.softnet.co.uk wrote:
>>
>>>mint condition ,Kenwood TR751e 2 m/mutlmode.
>>>with all manuals box,mobile mic,voice syntherseizer,(reads out frequency)
>>>mobile bracket...
>>>
>>>425.00 or nearest offer
>>
>>Just another post I saw in a ham newsgroup, who, is ripping off who ?
>>
>>>>TR751E 2 metre multimode, 25w, very good condition.
>>
>>>>>>165 Phil G6GIY (NW Eng)
>>
>
>

3141. Re: Dipole with ladder line

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34aec125.16161380@news>
Source record: 17315
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

On Wed, 31 Dec 1997 14:25:20 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>>I also do not
>>accept the idea that it was originally a question of how to do it with
>>ladder line. If you saw someone doing something in an awkward or
>>inappropriate way, would you help him do it that way or would you
>>offer to enlighten him as to a better way to do it. That was my
>>intention, and I think that it's a sad commentary that not one single
>>post responding to the original article suggested to him that he do it
>>in the more rational way.
>
>Well, he says he wants to use ladder line because he has some.
>That may not be the greatest reason in the world, but if that's what
>he wants to do, I don't see anything wrong with it. If he does use the
>ladder line, he won't need a balun at the antenna since the feeder is
>also balanced. But he will need a tuner at the receiver end to provide
>a conjugate match, and to provide the balun function for the receiver.
>Just using coax feed with a balun at the antenna would be simpler
>at the frequency where the antenna is resonant, but at all other
>frequencies, he'll need the tuner anyway, so he might as well use
>the lower loss feedline he already has instead of hunting up some
>coax.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

Thanks, Gary. As usual, your explanation is easy to understand and to
the point. I didn't mean to start an argument with the original post.
I just had the ladder line sitting around collecting dust and wanted
to see if it was worth using in this manner.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

3142. Re: .

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: cute@radiotelephone.net.ham
Message-ID: <34aaca99.2895505@news.total.net>
Source record: 17316

On 31 Dec 97 18:45:16 GMT, KB0WZI@aol.COM (KB0WZI) wrote:

>unsubsribe

unsubscribe what ??

Gar&#65533;on Mignon (&#65533;galement connu comme M@S@)
Indicatif d'appel de radioamateur: VA2QRU & VE7JPN
&#65533;tudient @ Informatique et Math&#65533;matiques d'Universit&#65533; McGill
Montr&#65533;al, Qu&#65533;bec, Canada
Mail-Electronique: cute@radiotelephone.net.ham
URL : http://www.radiotelephone.net (Universel)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (Universit&#65533; McGill)

Enlevez l' " .ham " pour r&#65533;pondre.
ATTENTION: Je n'ach&#65533;terai pas ou r&#65533;ponse aucun produit des C&#65533;S non sollicit&#65533;s!!

3143. Re: MIR repeater working?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mbtxxx8c3.fsf@spinner.ecofe.com>
Source record: 17317

I am trying to make my first satellite QSO using MIR's FM voice repeater at 437.950 MHz downlink, 435.750 MHz uplink, 141.3 Hz CTCSS. During a near-overhead pass today, I heard nothing. I accounted for Doppler and was using a 35 Watt FM mobile rig and trunk-mount antenna.

Is the repeater working? Where can I get updates regarding MIR's amateur radio status?

It just came back on-line in the past day or two. I worked another California station, and had an incomplete contact with W0IOH. I also heard N7SFI make a contact with an Indiana station, and so you will probably find me trying for most decent Pacific passes from CM97, at least in the few days if it's still operating. I've had trouble getting into MIR/ SAFEX with a 5 KHz step-size on my mobile rig, so don't be surprised if you're in solid some of the time and inaudible other times, 'cause that's what happening to me right now.

Also, be aware that a terrestrial gain omni, such as a nice dual-band mobile antenna, may not work well for satellites. Given its "pancake pattern", which is what causes it to have gain, it does not work well skywards. So a pass close to the horizon may have a better chance for you than one that is directly overhead!

They were talking about doing a cross-band 2M/70cm experiment with the packet/voice station on MIR, with the uplink frequency too close to the SAFEX repeater to permit both to operate. That was postponed at last word, and i'm hoping that when they retry that experiment, they are able to use an uplink frequency for packet/voice that's low enough in the 70cm satellite sub-band that both cross-band packet and SAFEX can operate at the same time.

MIR status is routinely given in AMSAT News, and changes are also noted in SpaceNews. Both often posted here and are archived at AMSAT's FTP site, which usually includes the most recent edition as well.

-- KD6PAG ("Networking Old-Timer, RF newbie")

http://qsl.net/kd6pag/MIR.html
http://qsl.net/kd6pag/AO-27.html

3144. Re: Help me work AO-27

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m7m8kyfta.fsf@spinner.ecofe.com>
Source record: 17318

I tried on a couple of good (60+ deg Max El) passes last weekend
with a DJ-580 and a Premier AL-800 long whip. I could hear the
sat just fine, but I couldn't hit it. I suspect that I'm suffering
from "tree attenuation", since I couldn't hear the sat until it
was well into its pass, but oh, the things I heard! Standing in
my driveway (Merrimack, NH) I heard Jacksonville, FL, Toronto,
North Dakota, and Texas! It was quite frustrating to not be able
to hit the bird. I kept the RX tuned to 436.795 throughout, so
maybe I need to tune around a bit to correct for doppler, too.

One of the things about AO-27 is that if you can hear it, you can
generally work it. It gets awfully crowded on weekends and holidays,
and that's probably your problem.

Last night, I assembled a Cushcraft A270-6S yagi. It's a little
under a yard long, and it has 3 elements on 2M and 3 elements on
70cm. It cost $59.95 at HRO, and it's reasonably light enough to
hand-hold (at least for me.) I'm hoping that the ~8dBd of gain
will be enough to get me into AO-27 without having to resort to
a power amp and pre-amp.

If you've heard it already, i would expect you'll do great with this.
I'm on most transcontinental passes and i hope to work you someday
from California. I've gotten MA and VT confirmed, so there's a decent
chance on low elevation passes you'll hear me if there aren't hills or
mountains to the west of you.

I wasn't aware that AO-27 is available on weekdays. All of the
info I've seen (mostly web pages that haven't been updated in
several months) says weekends only, with weekdays and nights on an
ad-hoc basis. Are we in the middle of an "ad-hoc?" Where can I
go to find the latest info?

It's on everyday for about 17 minutes, last time i checked, in the
northern hemisphere when it's in sunlight. So, when i can't use it in
the evenings in California, someone in Eastern Europe can instead.

http://www.umbra.com

contains current Information on AO-27.

Tomorrow's daytime passes are a bit low for me (MEL of 48.5 at 1006
and 23.5 at 1146 EST), but I may go outside and wave the beam around
just to see if I can hear anything. I get a couple more low ones on
Friday morning, a 66 deg MEL at 1052 EST on Saturday, and a nice, high
73.1 at 1025 EST Sunday. Maybe you'll finally hear me!

I find a 25 degree pass to be a good height, and you may be surprised how close to the horizon you can get when and where it's quiet. My biggest problem is noise modulated by 60 Hz harmonics in urbanized areas. I seem to do better in large areas with underground utilities.

With RS-12 switched into Mode A, AO-27 is the only satellite I can work with my current equipment. Does anyone know of any other bird running Mode K (15M up/10M down) so I can try to wear out the band switch on my IC-730 HF Transceiver? ;-) Maybe I'll try mic-keying to put an ugly CW signal into RS-12...

If you try that, pick a time/place where it's not busy. The problem is that the VFO is synthesized, and must rapidly switch frequencies between transmit and receive, so it has lots of phase noise and probably isn't very stable by CW/SSB standards. If you *must* attempt that hack, try putting a conventional key in series with a resistor of approximating the microphone impedance in place of the microphone, using with RG-174 or other shielded wire, so the transmitted is largely modulated internal noise in the rig rather than room noise. *Sigh* The transceiver's VCO is going to have to shift at least 10.7 MHz in a very short time (if it is to be any good at packet), so it's going to be ragged at best. If you were able to set the offset to the IF frequency and set it to receive on 156.700 and transmit on 146.000, then you could eliminate the shift, but there's still the phase noise problem. I can do this with my mobile rig, but not might HT as its firmware prevents that.

A homebrew 2 meter CW transmitter ought not be that hard to build if one is only trying to cover the satellite sub-band.

73 de WA1VHT
Scott

73's and good luck.
-- KD6PAG (Networking Old-Timer, RF newbie)

3145. mir uhf repeater ?

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: The Marlin Family <marlins@ocracoke.net>
Message-ID: <34AB4254.2857@ocracoke.net>
Source record: 17319

Heard the safex repeater on the MIR today in coastal North Carolina
is it back on or was it a mirage....

3146. Re: Launching Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: Ian Stirling <000034A9C6A1.NO_UCE@mauve.demon.co.uk>
Message-ID: <000034A9C6A1.NO_UCE@mauve.demon.co.uk>
Source record: 17320
Cross-posted to:
fido.belg.satellite,rec.video.satellite.misc,rec.video.satellite.europe,sci.space.tech,sci.space.policy,rec.radio.amateur.space

In sci.space.tech Lode Vermeiren <lodev@innet.be> wrote:
: Hello,

: I've got a few questions about satellites and launching them.

: * What is needed to launch a satellite ?

Damn big firework,
Money to build/buy space on one,
Permission to launch it.

: * Who can launch a satellite?
Anyone with the money.
: * How much does it cost to produce and launch a small satellite ?

Depends, it can be done mostly free, using donated labor, parts, ...
however, it's likely to be fairly costly.

: * Who controls the amount and which satellites that are launched into
: space ?

No-one. (well, goverments of the country you are in, or are a citezen of
may have a role.)

: * Are there any laws involving the use of the space for this purposes ?

What purposes?

: Thanks in advance,

: Lode Vermeiren

: ++
: +© 1997 by Vermeiren Internet Productions+
: +All Rights Reserved, Lefts too +
: +No Animals were harmed and no Microsoft +
: +products were used during the creation +
: +of this message +
: ++
: +Love,+peace,+and+cookies+in+the+world!!!+
: ++

--
Ian Stirling. Designing a linux PDA, see http://www.mauve.demon.co.uk/
----- ******* If replying by email, check notices in header ******* -----
Two parrots sitting on a perch. One asks the other, "Can you smell fish?"

3147. Re: Launching Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: jlg@a-ko.enteract.com
Message-ID: <68dde7$q26@eve.enteract.com>
Source record: 17321
Cross-posted to:
fido.belg.satellite,rec.video.satellite.misc,rec.video.satellite.europe,sci.space.tech,sci.space.policy,rec.radio.amateur.space

Alot of answers can be found at www.hcisat.com
The next generation satellite is going to use
an ion engine for stationkeeping. How about
that! :)

3148. Re: Launching Satellites

Newsgroup: rec.radio.amateur.space
Date: 1997-12-31 00:00:00 UTC
From: Anvil <Anvil@spacebbs.com>
Message-ID: <34AA8818.13DB@spacebbs.com>
Source record: 17322
Cross-posted to:
fido.belg.satellite,rec.video.satellite.misc,rec.video.satellite.europe,sci.space.tech,sci.space.policy,rec.radio.amateur.space

Lode Vermeiren wrote:
>
> I've got a few questions about satellites and launching them.
>
> * What is needed to launch a satellite ?

A launch vehicle, launch site, ground contol, insurance, and the
licensing/
permits.

> * Who can launch a satellite?

Any individual, company, or government with the licence/permits for both
the launch and payload.

> * How much does it cost to produce and launch a small satellite ?

Too many variables, low for goverment assisted educational programs
(MIR's
hand lob of a intenational student built satellite) to something in the
$20
million range (USD).

> * Who controls the amount and which satellites that are launched into
> space ?

The UN with major influence by US, Russia, EC, NATO,...

> * Are there any laws involving the use of the space for this purposes ?

Many.

The UN has some under: International Agreements and Principles on Outer
Space
(sorry for not having the locations), The US lists quite a few on it's
federal
register, EC has laws along with each member nation, ... For books a
search at
Amazon books http://www.amazon.com using "Space Law" will turn up a good
list
(also the Library of Congress / US). Gather the ISBN numbers of interest
and
pay a visit to the library. It may take an inter-library loan or a visit
to a
college that teaches law to track down what you're looking for.

There are alot of laws there already with more being added. The Near
Earth
Asteroid Prospector (NEAP) a commercial exploration program and any
X-Prize
launches (non-government manned launch) are sure to cause many more.

> Thanks in advance,
>
You're welcome,

Ray